

ThinkCentre | ThinkPad | TopSeller™

Product Specifications Reference

Type-model	Processor	Memory	Wide-screen display	Multi-touch	Camera	Disk SATA	Backlit key	M.2 Card	WLAN	SSU	Smart card reader	Finger print	ext battery	Intel vPro	OS	Ann. Date
20AR000JUS	i7-4300U	4+4GB	14.0" FHD		720p	128G SSD	Backlit	7260 ac upg	None	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR000VUS	i5-4300U	4+4GB	14.0" HD+		720p	128G SSD	Backlit	7260 ac upg	None	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR000WUS	i5-4300U	4GB	14.0" FHD		720p	128G SSD	Backlit	7260 ac upg	None	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR0013US	i5-4300U	4GB	14.0" HD+		None	500G 7200	None	7260 ac upg	16GB	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR0014US	i5-4300U	4GB	14.0" HD+		720p	500G 7200	Backlit	7260 ac upg	16GB	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR0015US	i7-4300U	4GB	14.0" FHD MT		720p	500G 7200	Backlit	7260 ac upg	16GB	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR0017US	i7-4600U	4GB	14.0" FHD		720p	500G 7200	Backlit	7260 ac upg	16GB	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR0018US	i7-4600U	4+4GB	14.0" FHD		720p	256G SSD	Backlit	7260 ac upg	None	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR0019US	i7-4600U	4+4GB	14.0" FHD MT		720p	256G SSD	Backlit	7260 ac upg	None	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR0110US	i5-4300U	4GB	14.0" HD+		720p	500G 7200	Backlit	7260 ac upg	16GB	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR0111US	i5-4300U	4GB	14.0" FHD		720p	256G SSD	Backlit	7260 ac upg	None	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR0112US	i5-4300U	4GB	14.0" HD+		720p	128G SSD	Backlit	7260 ac upg	None	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR0113US	i5-4300U	4GB	14.0" HD+		720p	256G SSD	Backlit	7260 ac upg	None	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR0114US	i5-4300U	4+4GB	14.0" HD+		720p	500G 7200	Backlit	7260 ac upg	16GB	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR001MUS	i5-4300U	4GB	14.0" HD+		720p	29G SSD	Backlit	7260 ac upg	None	None	Finger 3	vPro	G	Win8 Pro64	09/13	
20AR001GUS	i5-4300U	4+4GB	14.0" HD+		720p	256G SSD	Backlit	7260 ac upg	None	None	Finger 3	vPro	G	Win8 Pro64	09/13	

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- E Series
- S Series

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Summary of Changes

This section describes the technical changes made in this edition.

This edition might also include minor corrections and editorial changes which are not identified.

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Additions in this update

▶ **New product(s)**

None

▶ **New model(s)**

ThinkPad L450 new models announced February 2015

ThinkPad 11e new models announced February 2015

▶ **Others**

None

Changes in this update

▶ **None**

Withdrawals in this update

▶ **Withdrawn product(s)**

None



Lenovo® ThinkPad L440



Lenovo ThinkPad L440



Lenovo ThinkPad L440



Lenovo ThinkPad L440



Lenovo ThinkPad L440

ThinkPad L440 Platform Specifications

Product Specifications Reference (PSREF)

Positioning	Mainstream value performance; two spindles							WLAN ⁴	<p>One of the following, configurable by model:</p> <ul style="list-style-type: none"> ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Centrino[®] Advanced-N 6235, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card
Processor	Intel [®] Celeron [®] Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor							WWAN (optional)	<p>One of the following, configurable by model (mutually exclusive with M.2 SSD):</p> <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Sierra Wireless EM7355, Qualcomm[®] Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) Wireless WAN, Ericsson[®] N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models)
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	
	Cel 2950M	2	4	2 GHz	-	2MB	DDR3L-1600	Intel HD Graphics	
	i3-4000M			2.4 GHz	-	3MB			
	i5-4200M			2.5 GHz	3.1 GHz	3MB			
	i5-4210M			2.6 GHz	3.2 GHz	3MB			
	i5-4300M			2.6 GHz	3.3 GHz	3MB			
	i5-4330M			2.8 GHz	3.5 GHz	3MB			
	i7-4600M			2.9 GHz	3.6 GHz	4MB			
	i7-4702MQ	4	8	2.2 GHz	3.2 GHz	6MB		Intel HD Graphics 4600	
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets							SIM card (optional)	<p>One of the following, configurable by model:</p> <ul style="list-style-type: none"> AT&T[®] or Verizon[®] LTE (4G), contract required with service provider (US models) Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models) User selectable, contract required with service provider
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: SSHD with 8GB NAND flash memory Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card							Bluetooth™ Ethernet	<p>Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter HM86 model: Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)</p>
M.2 SSD								Security Security chip vPro (optional) Fingerprint reader	<p>Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology Optional: Fingerprint reader on the keyboard bezel, swipe sensor</p>
Widescreen display	Some: 14.0" (355mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 500:1 contrast ratio							Limited warranty ¹²	<p>One of the following, configurable by model:</p> <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷)
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus							Preload	<p>Windows[®] 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit</p> <ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update Lenovo Cloud Storage by SugarSync PC Device Stage Nitro Pro Evernote[®] Skype™ Microsoft[®] Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) Cyberlink PowerDVD Cyberlink Power2Go Cyberlink PowerProducer <p>Some: Windows 8 / 8.1 64-bit Some: Windows 8 / 8.1 Pro 64-bit</p> <ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support Lenovo Companion ThinkVantage System Update Lenovo Reach (Windows 8.1 model) Hightail - Metro (Windows 8.1 model) Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model) Lenovo Cloud Storage by SugarSync (Windows 8 model) PC Device Stage AccuWeather Amazon Kindle Nitro Pro Evernote Skype Rara Streaming Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) Cyberlink PowerDVD Cyberlink Power2Go Cyberlink PowerProducer
Graphics	Intel HD Graphics 4600 in processor, supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports dual independent display; Max resolution: 3840x2160@30Hz (DP via mDP cable); 1920x1200@60Hz (VGA)							Environment	EPEAT™ Gold; ENERGY STAR [®] 6.0; RoHS-compliant
Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys TrackPoint [®] pointing device and Mylar surface touchpad, integrated five buttons, multi-touch								
ThinkLight™	None								
Dimensions ³ Weight ²	14.0W" (WxDxH): 13.54" x 9.41" x 1.14-1.35"; 344mm x 239mm x 29.0-34.25mm								
	Models	6-cell 48Wh		6-cell 56Wh		9-cell 99.9Wh			
	Weight	4.96 lb / 2.25kg		5.0 lb / 2.27kg		5.36 lb / 2.43kg			
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic								
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication								
Max battery life ¹⁰	Models	6-cell 48Wh		6-cell 56Wh		9-cell 99.9Wh			
	Win7 (MobileMark [®] 2007)	10 hr		11 hr		21 hr			
	Win8 (MobileMark 2012)	6.2 hr		7.5 hr		13 hr			
AC adapter	65-watt AC adapter								
Chipset	Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset								
ExpressCard	HM86 model: One slot (ExpressCard/34, ExpressCard/54)								
Smart card reader	Optional: Smart card reader								
Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)								
Ports	One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector								
Audio support	HD Audio, Realtek [®] ALC3232 codec, Dolby [®] Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack								

ThinkPad L440 20AT (TopSeller)

Model	Processor	vPro	Graphics	Chipset	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Fingerprint reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AT0042US	Cel 2950M	No	HD 4600	HM86	4GBx1	14" HD	500G 7200	7260 ac+BT	EM7355	Select	None	Exp/54	720p	None	6(56wh)	65W	Win8.1 DG Win7	1-depot	No	03/14
20AT0043US	Cel 2950M	No	HD 4600	HM86	2GBx1	14" HD	500G 7200	11b/g/n+BT	EM7355	Select	None	Exp/54	720p	None	6(56wh)	65W	Win8.1 DG Win7	1-depot	No	03/14
20AT001YUS	i3-4000M	No	HD 4600	HM86	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AT0020US	i5-4200M	No	HD 4600	HM86	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AT0021US	i5-4200M	No	HD 4600	HM86	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	None	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AT002AUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	None	720p	None	6(56wh)	65W	Win8 DG Win7	1-depot	No	11/13
20AT002MUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	11/13
20AT002NUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	Smart	None	720p	Finger	9	65W	Win8 DG Win7	1-depot	No	11/13
20AT002SUS	i5-4330M	vPro	HD 4600	QM87	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	Smart	None	720p	None	6(56wh)	65W	Win8 DG Win7	1-depot	No	11/13
20AT002XUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	11/13
20AT0027US	i7-4702MQ	No	HD 4600	HM86	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	09/13
20AT0028US	i7-4702MQ	No	HD 4600	HM86	4GBx1	14" HD+	1T 5400	7260 ac+BT	16GB	None	None	Exp/54	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	09/13
20AT0029US	i7-4702MQ	No	HD 4600	HM86	4GBx1	14" HD+	256G SSD Opal	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	09/13
20AT002BUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	11/13
20AT002CUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD+	128G SSD	7260 ac+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	11/13
20AT002DUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13
20AT002EUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD+	180G SSD Opal	6235 a/b/g/n+BT	Upg	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	10/13
20AT002FUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD+	180G SSD Opal	6235 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	10/13
20AT002GUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD+	256G SSD Opal	7260 ac+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	11/13
20AT002HUS	i7-4600M	vPro	HD 4600	QM87	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13

• For detailed platform specifications, please see [ThinkPad L440 Platform Specifications](#) sheet

Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor	Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch																																						
	<table border="1"> <thead> <tr> <th>Processor</th> <th># of Cores</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Speed</th> </tr> </thead> <tbody> <tr> <td>Cel 2950M</td> <td rowspan="6">2</td> <td>2 GHz</td> <td>-</td> <td>2MB</td> <td rowspan="6">DDR3L-1600</td> </tr> <tr> <td>i3-4000M</td> <td>2.4 GHz</td> <td>-</td> <td>3MB</td> </tr> <tr> <td>i5-4200M</td> <td>2.5 GHz</td> <td>3.1 GHz</td> <td>3MB</td> </tr> <tr> <td>i5-4300M</td> <td>2.6 GHz</td> <td>3.3 GHz</td> <td>3MB</td> </tr> <tr> <td>i5-4330M</td> <td>2.8 GHz</td> <td>3.5 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-4600M</td> <td>2.9 GHz</td> <td>3.6 GHz</td> <td>4MB</td> </tr> <tr> <td>i7-4702MQ</td> <td>4</td> <td>2.2 GHz</td> <td>3.2 GHz</td> <td>6MB</td> <td></td> </tr> </tbody> </table>	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Cel 2950M	2	2 GHz	-	2MB	DDR3L-1600	i3-4000M	2.4 GHz	-	3MB	i5-4200M	2.5 GHz	3.1 GHz	3MB	i5-4300M	2.6 GHz	3.3 GHz	3MB	i5-4330M	2.8 GHz	3.5 GHz	3MB	i7-4600M	2.9 GHz	3.6 GHz	4MB	i7-4702MQ	4	2.2 GHz	3.2 GHz	6MB		ThinkLight™	None
Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed																																				
Cel 2950M	2	2 GHz	-	2MB	DDR3L-1600																																				
i3-4000M		2.4 GHz	-	3MB																																					
i5-4200M		2.5 GHz	3.1 GHz	3MB																																					
i5-4300M		2.6 GHz	3.3 GHz	3MB																																					
i5-4330M		2.8 GHz	3.5 GHz	3MB																																					
i7-4600M		2.9 GHz	3.6 GHz	4MB																																					
i7-4702MQ	4	2.2 GHz	3.2 GHz	6MB																																					
		Chipset	Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset																																						
		ExpressCard	<i>HM86 model:</i> One slot (ExpressCard/34, ExpressCard/54) <i>Optional:</i> Smart card reader																																						
		Smart card reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																																						
		Multicard reader	One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort,																																						
		Ports	Ethernet (RJ-45), Dock connector																																						
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	WLAN ⁴	<i>11b/g/n+BT:</i> ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card <i>7260 b/g/n+BT:</i> Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>6235 a/b/g/n+BT:</i> Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT, M.2 card <i>7260 a/b/g/n+BT:</i> Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 ac+BT:</i> Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card																																						
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS <i>Some:</i> SSHD with 8GB NAND flash memory	WWAN (optional)	<i>Upg:</i> Wireless WAN upgradable <i>EM7355:</i> Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS																																						
M.2 SSD	<i>Some:</i> M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card	SIM card (optional)	<i>AT&T / Verizon:</i> AT&T® / Verizon® LTE (4G), contract required with service provider <i>Select:</i> User selectable, contract required with service provider																																						
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768) , 200 nits, 500:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) , 250 nits, 500:1 contrast ratio	Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																																						
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus	Ethernet	<i>HM86 model:</i> Intel Ethernet Connection I217-V (Clarkville) <i>QM87 model:</i> Intel Ethernet Connection I217-LM (Clarkville)																																						
Graphics	Intel HD Graphics 4600 in processor	Security	Power-on password, hard disk password, supervisor password, security keyhole																																						
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.14-1.35"; 344mm x 239mm x 29.0-34.25mm	Security chip	Trusted Platform Module, TCG 1.2-compliant																																						
Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>6-cell 48Wh</th> <th>6-cell 56Wh</th> <th>9-cell 99.9Wh</th> </tr> </thead> <tbody> <tr> <td>Weight</td> <td>4.96 lb / 2.25kg</td> <td>5.0 lb / 2.27kg</td> <td>5.36 lb / 2.43kg</td> </tr> </tbody> </table>	Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh	Weight	4.96 lb / 2.25kg	5.0 lb / 2.27kg	5.36 lb / 2.43kg	vPro (optional)	Intel vPro Technology																														
Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh																																						
Weight	4.96 lb / 2.25kg	5.0 lb / 2.27kg	5.36 lb / 2.43kg																																						
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic	Fingerprint reader	<i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor																																						
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication	Preload	<i>Win8 / 8.1 DG Win7:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit <i>Win8 / 8.1 64:</i> Windows 8 / 8.1 64-bit <i>Win8 / 8.1 P64:</i> Windows 8 / 8.1 Pro 64-bit																																						
Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>6-cell 48Wh</th> <th>6-cell 56Wh</th> <th>9-cell 99.9Wh</th> </tr> </thead> <tbody> <tr> <td><i>Win7 (MobileMark® 2007)</i></td> <td>10 hr</td> <td>11 hr</td> <td>21 hr</td> </tr> <tr> <td><i>Win8 (MobileMark 2012)</i></td> <td>6.2 hr</td> <td>7.5 hr</td> <td>13 hr</td> </tr> </tbody> </table>	Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh	<i>Win7 (MobileMark® 2007)</i>	10 hr	11 hr	21 hr	<i>Win8 (MobileMark 2012)</i>	6.2 hr	7.5 hr	13 hr	Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite																										
Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh																																						
<i>Win7 (MobileMark® 2007)</i>	10 hr	11 hr	21 hr																																						
<i>Win8 (MobileMark 2012)</i>	6.2 hr	7.5 hr	13 hr																																						
AC adapter	65-watt AC adapter																																								
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack																																								

See footnotes for more detailed information

ThinkPad L440 20AT (TopSeller) - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Chipset	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AT002JUS	i7-4600M	vPro	HD 4600	QM87	4GBx1	14" HD+	1T 5400	7260 ac+BT	16GB	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13
20AT002KUS	i7-4600M	vPro	HD 4600	QM87	4GBx1	14" HD+	256G SSD Opal	7260 ac+BT	Upg	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13
20AT002LUS	i7-4600M	vPro	HD 4600	QM87	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	Smart	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13
20AT002PUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD+	500G 7200	7260 ac+BT	EM7355	Select	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	11/13
20AT002QUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	14" HD+	180G SSD Opal	6235 a/b/g/n+BT	EM7355	Select	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	10/13
20AT002RUS	i7-4600M	vPro	HD 4600	QM87	4GBx1	14" HD+	500G 7200	7260 ac+BT	EM7355	Select	Smart	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13
20AT002TUS	i5-4330M	vPro	HD 4600	QM87	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	11/13
20AT002UUS	i5-4330M	vPro	HD 4600	QM87	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	Smart	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13
20AT002VUS	i5-4330M	vPro	HD 4600	QM87	4GBx1	14" HD+	180G SSD Opal	6235 a/b/g/n+BT	Upg	None	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	10/13
20AT002WUS	i5-4330M	vPro	HD 4600	QM87	4GBx1	14" HD+	256G SSD Opal	7260 ac+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	11/13

• For detailed platform specifications, please see [ThinkPad L440 Platform Specifications sheet](#)

Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor						Keyboard	6-row, spill-resistant, multimedia Fn keys UltraNav™ TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch												
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	ThinkLight™	None												
	Cel 2950M	2	2 GHz	-	2MB	DDR3L-1600	Chipset	Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset												
	i3-4000M		2.4 GHz	-	3MB		ExpressCard	<i>HM86 model:</i> One slot (ExpressCard/34, ExpressCard/54)												
	i5-4200M		2.5 GHz	3.1 GHz	3MB		Smart card reader	Optional: Smart card reader												
	i5-4300M		2.6 GHz	3.3 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)												
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Ports	One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector												
	i7-4600M		2.9 GHz	3.6 GHz	4MB															
	i7-4702MQ	4	2.2 GHz	3.2 GHz	6MB															
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 6235 a/b/g/n+BT: Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card												
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						WWAN (optional)	Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS												
M.2 SSD	Some: 14.0" (355mm) HD (1366x768), 200 nits, 500:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 500:1 contrast ratio						SIM card (optional)	AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider												
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 500:1 contrast ratio						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter												
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Ethernet	<i>HM86 model:</i> Intel Ethernet Connection I217-V (Clarkville) <i>QM87 model:</i> Intel Ethernet Connection I217-LM (Clarkville)												
Graphics	Intel HD Graphics 4600 in processor						Security	Power-on password, hard disk password, supervisor password, security keyhole												
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.14-1.35"; 344mm x 239mm x 29.0-34.25mm						Security chip	Trusted Platform Module, TCG 1.2-compliant												
Weight ²	Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh			vPro (optional)	Intel vPro Technology												
	Weight	4.96 lb / 2.25kg	5.0 lb / 2.27kg	5.36 lb / 2.43kg			Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor												
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit												
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication						Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite												
Max battery life ¹⁰	Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh																
	Win7 (MobileMark® 2007)	10 hr	11 hr	21 hr																
	Win8 (MobileMark 2012)	6.2 hr	7.5 hr	13 hr																
AC adapter	65-watt AC adapter																			
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack																			

See footnotes for more detailed information

(OS1-2) © Lenovo



Lenovo® ThinkPad L450



Lenovo ThinkPad L450



Lenovo ThinkPad L450



Lenovo ThinkPad L450



Lenovo ThinkPad L450

ThinkPad L450 Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor	Dimensions ³	14.0" (WxDxH): 13.34" x 9.23" x 0.95"; 339mm x 235mm x 24.3mm																				
Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell</th> <th>6-cell</th> </tr> </thead> <tbody> <tr> <td>Integrated</td> <td>4.25 lb / 1.93 kg</td> <td>4.43 lb / 2.01 kg</td> </tr> <tr> <td>Discrete</td> <td>4.30 lb / 1.95 kg</td> <td>4.50 lb / 2.04 kg</td> </tr> </tbody> </table>			Models	3-cell	6-cell	Integrated	4.25 lb / 1.93 kg	4.43 lb / 2.01 kg	Discrete	4.30 lb / 1.95 kg	4.50 lb / 2.04 kg			
Models	3-cell	6-cell																					
Integrated	4.25 lb / 1.93 kg	4.43 lb / 2.01 kg																					
Discrete	4.30 lb / 1.95 kg	4.50 lb / 2.04 kg																					
i5-4300U	2	4	1.9 GHz	2.9 GHz	3MB	DDR3L-1600	Intel HD Graphics 4400	Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic														
i3-5005U			2 GHz	-	3MB		Intel HD Graphics 5500	Smart card reader	Optional: Smart card reader														
i5-5200U			2.2 GHz	2.7 GHz	3MB			Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)														
i5-5300U			2.3 GHz	2.9 GHz	3MB			Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)														
i7-5500U			2.4 GHz	3 GHz	4MB																		
Graphics	Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and AMD Radeon™ R5 M240, 2GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 1920x1200@60Hz (VGA)							Camera (optional)	HD720p resolution, low light sensitive, fixed focus														
Chipset	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets							Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack														
Memory								Keyboard	6-row, spill-resistant, multimedia Fn keys														
Display	<i>Some:</i> 14.0" (355mm) HD (1366x768), anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS							UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch														
Multi-touch	None							Security	Power-on password, hard disk password, supervisor password, security keyhole														
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> SSHD with 8GB NAND flash memory M.2 Solid State Drive (SSD), via M.2 card slot							Security chip	Trusted Platform Module, TCG 1.2-compliant														
M.2 SSD (opt)	None							ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures														
Optical	None							vPro (optional)	Intel vPro Technology														
Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I218-V (Clarkville) <i>vPro model:</i> Intel Ethernet Connection I218-LM (Clarkville)							Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor														
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter							Battery type	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)														
WLAN ⁴	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card 							Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell 23Wh</th> <th>6-cell 48Wh</th> <th>6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Integrated</td> <td>5.2 hr</td> <td>10.7 hr</td> <td>16 hr</td> </tr> <tr> <td>Discrete</td> <td>5.1 hr</td> <td>10.6 hr</td> <td>15.9 hr</td> </tr> </tbody> </table>			Models	3-cell 23Wh	6-cell 48Wh	6-cell 72Wh	Integrated	5.2 hr	10.7 hr	16 hr	Discrete	5.1 hr	10.6 hr	15.9 hr
Models	3-cell 23Wh	6-cell 48Wh	6-cell 72Wh																				
Integrated	5.2 hr	10.7 hr	16 hr																				
Discrete	5.1 hr	10.6 hr	15.9 hr																				
WWAN (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card 							AC adapter	45W AC adapter or 65W AC adapter														
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider							Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center Lenovo SHAREit Lenovo Companion ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update PC Device Stage Adobe® Reader® Evernote® Skype™ Maxthon Cloud Browser Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) 														
								Limited warranty ¹²	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 														
								Environment	EPEAT™ Gold; ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant														

ThinkPad L450 20DT (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20DT000WUS	i3-5005U	No	HD 5500	4GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DT000QUS	i5-5200U	No	HD 5500	4GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DT000RUS	i5-5200U	No	HD 5500	8GBx1	14" HD	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DT000TUS	i5-5200U	No	HD 5500	8GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DT0010US	i5-5200U	No	HD 5500	4GBx1	14" HD	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DT000SUS	i5-5200U	No	HD 5500	8GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	3-depot	No	01/15
20DT000YUS	i5-5200U	No	HD 5500	4GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	3-depot	No	01/15
20DT001AUS	i5-4300U	vPro	HD 4400	4GBx1	14" HD	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	02/15
20DT001BUS	i5-4300U	vPro	HD 4400	8GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	02/15
20DT001CUS	i5-4300U	vPro	HD 4400	4GBx1	14" HD	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	02/15
20DT001DUS	i5-4300U	vPro	HD 4400	8GBx1	14" HD	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	45W	Win8.1 DG Win7	1-depot	No	02/15

• For detailed platform specifications, please see [ThinkPad L450 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor	Dimensions ³ Weight ²	14.0" (WxDxH): 13.34" x 9.23" x 0.95"; 339mm x 235mm x 24.3mm <table border="1"> <thead> <tr> <th>Models</th> <th>3-cell</th> <th>6-cell</th> </tr> </thead> <tbody> <tr> <td>Integrated</td> <td>4.25 lb / 1.93 kg</td> <td>4.43 lb / 2.01 kg</td> </tr> <tr> <td>Discrete</td> <td>4.30 lb / 1.95 kg</td> <td>4.50 lb / 2.04 kg</td> </tr> </tbody> </table>	Models	3-cell	6-cell	Integrated	4.25 lb / 1.93 kg	4.43 lb / 2.01 kg	Discrete	4.30 lb / 1.95 kg	4.50 lb / 2.04 kg																			
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Processor	<table border="1"> <thead> <tr> <th>Processor</th> <th># of Cores</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Speed</th> </tr> </thead> <tbody> <tr> <td>i5-4300U</td> <td rowspan="6">2</td> <td>1.9 GHz</td> <td>2.9 GHz</td> <td>3MB</td> <td rowspan="6">DDR3L-1600</td> </tr> <tr> <td>i3-5005U</td> <td>2 GHz</td> <td>-</td> <td>3MB</td> </tr> <tr> <td>i5-5200U</td> <td>2.2 GHz</td> <td>2.7 GHz</td> <td>3MB</td> </tr> <tr> <td>i5-5300U</td> <td>2.3 GHz</td> <td>2.9 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-5500U</td> <td>2.4 GHz</td> <td>3 GHz</td> <td>4MB</td> </tr> </tbody> </table>	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	i5-4300U	2	1.9 GHz	2.9 GHz	3MB	DDR3L-1600	i3-5005U	2 GHz	-	3MB	i5-5200U	2.2 GHz	2.7 GHz	3MB	i5-5300U	2.3 GHz	2.9 GHz	3MB	i7-5500U	2.4 GHz	3 GHz	4MB	Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic
Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed																										
i5-4300U	2	1.9 GHz	2.9 GHz	3MB	DDR3L-1600																										
i3-5005U		2 GHz	-	3MB																											
i5-5200U		2.2 GHz	2.7 GHz	3MB																											
i5-5300U		2.3 GHz	2.9 GHz	3MB																											
i7-5500U		2.4 GHz	3 GHz	4MB																											
Graphics		Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and AMD Radeon™ R5 M240, 2GB memory	Smart card reader	Optional: Smart card reader																											
Chipset	Intel SoC (System on Chip) platform	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																												
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)																												
Display	Some: 14.0" (355mm) HD (1366x768), 220 nits, 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 220 nits, 700:1 contrast ratio, IPS	Camera (optional)	HD720p resolution, low light sensitive, fixed focus																												
Multi-touch	None	Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack																												
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory	Keyboard	6-row, spill-resistant, multimedia Fn keys																												
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot	UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch																												
Optical	None	Security	Power-on password, hard disk password, supervisor password, security keyhole																												
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)	Security chip	Trusted Platform Module, TCG 1.2-compliant																												
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	vPro (optional)	Intel vPro Technology																												
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card	Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor																												
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card	Battery type	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)																												
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider	Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell 23Wh</th> <th>6-cell 48Wh</th> <th>6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Integrated</td> <td>5.2 hr</td> <td>10.7 hr</td> <td>16 hr</td> </tr> <tr> <td>Discrete</td> <td>5.1 hr</td> <td>10.6 hr</td> <td>15.9 hr</td> </tr> </tbody> </table>	Models	3-cell 23Wh	6-cell 48Wh	6-cell 72Wh	Integrated	5.2 hr	10.7 hr	16 hr	Discrete	5.1 hr	10.6 hr	15.9 hr																
Models	3-cell 23Wh	6-cell 48Wh	6-cell 72Wh																												
Integrated	5.2 hr	10.7 hr	16 hr																												
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		AC adapter	45W AC adapter or 65W AC adapter																												
		Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit																												
		Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS																												

See footnotes for more detailed information

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ThinkPad L450 20DT (Discrete) - TopSeller

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20DT000PUS	i7-5500U	No	R5 M240	8GBx2	14" FHD IPS	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DT000XUS	i7-5500U	No	R5 M240	4GBx1	14" FHD IPS	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DT0011US	i7-5500U	No	R5 M240	8GBx1	14" FHD IPS	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DT000UUS	i7-5500U	No	R5 M240	4GBx1	14" FHD IPS	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20DT000VUS	i7-5500U	No	R5 M240	8GBx1	14" FHD IPS	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Finger	6(48wh)	65W	Win8.1 DG Win7	3-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad L450 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor						Dimensions ³ Weight ²	14.0" (WxDxH): 13.34" x 9.23" x 0.95"; 339mm x 235mm x 24.3mm						
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Models	3-cell	6-cell				
	i5-4300U	2	1.9 GHz	2.9 GHz	3MB	DDR3L-1600		Integrated	4.25 lb / 1.93 kg	4.43 lb / 2.01 kg				
	i3-5005U		2 GHz	-	3MB			Discrete	4.30 lb / 1.95 kg	4.50 lb / 2.04 kg				
	i5-5200U		2.2 GHz	2.7 GHz	3MB			Case material PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic						
	i5-5300U		2.3 GHz	2.9 GHz	3MB			Smart card reader	Optional: Smart card reader					
i7-5500U	2.4 GHz		3 GHz	4MB	Multicard reader		4-in-1 reader (MMC, SD, SDHC, SDXC)							
Graphics							Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)						
Chipset						Camera (optional)	HD720p resolution, low light sensitive, fixed focus							
Memory						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack							
Display						Keyboard	6-row, spill-resistant, multimedia Fn keys							
Multi-touch						UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch							
Storage						Security	Power-on password, hard disk password, supervisor password, security keyhole							
M.2 SSD (opt)						Security chip	Trusted Platform Module, TCG 1.2-compliant							
Optical						vPro (optional)	Intel vPro Technology							
Ethernet						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor							
Bluetooth™						Battery type	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)							
WLAN ⁴						Max battery life ¹⁰	Models	3-cell 23Wh	6-cell 48Wh	6-cell 72Wh				
11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						Integrated	5.2 hr	10.7 hr	16 hr					
						Discrete	5.1 hr	10.6 hr	15.9 hr					
						WWAN (optional)						AC adapter	45W AC adapter or 65W AC adapter	
Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit							
						SIM card (opt)						Win8.1 64: Windows 8.1 64-bit		
						AT&T® or Verizon® LTE (4G), contract required with service provider						Win8.1 P64: Windows 8.1 Pro 64-bit		
						Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS							

See footnotes for more detailed information

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Lenovo® ThinkPad L540



Lenovo ThinkPad L540



Lenovo ThinkPad L540



Lenovo ThinkPad L540



Lenovo ThinkPad L540

ThinkPad L540 Platform Specifications

Product Specifications Reference (PSREF)

Positioning	Mainstream business performance; two spindles			WLAN ⁴	<p>One of the following, configurable by model:</p> <ul style="list-style-type: none"> ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card 																																																	
Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor			WWAN (optional)	<p>One of the following, configurable by model (mutually exclusive with M.2 SSD):</p> <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models) 																																																	
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i7-4600M	4	8	2.9 GHz	3.6 GHz	4MB	Intel HD Graphics 4600																																																
i7-4702MQ			2.2 GHz	3.2 GHz	6MB																																																	
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets			SIM card (optional)	<p>One of the following, configurable by model:</p> <ul style="list-style-type: none"> AT&T® or Verizon® LTE (4G), contract required with service provider (US models) Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models) User selectable, contract required with service provider 																																																	
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: SSHD with 8GB NAND flash memory Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card			Bluetooth™ Ethernet	<p>Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter HM86 model: Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)</p>																																																	
M.2 SSD				Security Security chip vPro (optional) Fingerprint reader	<p>Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology Optional: Fingerprint reader on the palm rest, swipe sensor</p>																																																	
Widescreen display	Some: 15.6" (396mm) HD (1366x768), anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio			Limited warranty ¹²	<p>One of the following, configurable by model:</p> <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 																																																	
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus			Preload	<p>Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit</p> <ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update Lenovo Cloud Storage by SugarSync PC Device Stage Nitro Pro Evernote® Skype™ Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) Cyberlink PowerDVD Cyberlink Power2Go Cyberlink PowerProducer <p>Some: Windows 8 / 8.1 64-bit Some: Windows 8 / 8.1 Pro 64-bit</p> <ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support Lenovo Companion ThinkVantage System Update Lenovo Reach (Windows 8.1 model) Hightail - Metro (Windows 8.1 model) Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model) Lenovo Cloud Storage by SugarSync (Windows 8 model) PC Device Stage AccuWeather Amazon Kindle Nitro Pro Evernote Skype Rara Streaming Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) Cyberlink PowerDVD Cyberlink Power2Go Cyberlink PowerProducer 																																																	
Graphics	Intel HD Graphics 4600 in processor, supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports dual independent display; Max resolution: 3840x2160@30Hz (DP via mDP cable); 1920x1200@60Hz (VGA)																																																					
Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch																																																					
ThinkLight™	None																																																					
Dimensions ³	HD (WxDxH): 14.84" x 9.72" x 1.13-1.34"; 377mm x 247mm x 28.8-34.05mm FHD (WxDxH): 14.84" x 9.72" x 1.22-1.43"; 377mm x 247mm x 31.0-36.25mm																																																					
Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>6-cell 48Wh</th> <th>6-cell 56Wh</th> <th>9-cell 99.9Wh</th> </tr> </thead> <tbody> <tr> <td>HD</td> <td>5.54lb / 2.52kg</td> <td>5.60lb / 2.54kg</td> <td>5.95lb / 2.70kg</td> </tr> <tr> <td>FHD</td> <td>5.68lb / 2.58kg</td> <td>5.73lb / 2.60kg</td> <td>6.08lb / 2.76kg</td> </tr> </tbody> </table>			Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh	HD	5.54lb / 2.52kg	5.60lb / 2.54kg	5.95lb / 2.70kg	FHD	5.68lb / 2.58kg	5.73lb / 2.60kg	6.08lb / 2.76kg																																							
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Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic																																																					
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication																																																					
Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>6-cell 48Wh</th> <th>6-cell 56Wh</th> <th>9-cell 99.9Wh</th> </tr> </thead> <tbody> <tr> <td>Win7 (MobileMark® 2007)</td> <td>9 hr</td> <td>11 hr</td> <td>19 hr</td> </tr> <tr> <td>Win8 (MobileMark 2012)</td> <td>6 hr</td> <td>7 hr</td> <td>12 hr</td> </tr> </tbody> </table>			Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh	Win7 (MobileMark® 2007)	9 hr	11 hr	19 hr	Win8 (MobileMark 2012)	6 hr	7 hr	12 hr																																							
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Win7 (MobileMark® 2007)	9 hr	11 hr	19 hr																																																			
Win8 (MobileMark 2012)	6 hr	7 hr	12 hr																																																			
AC adapter	65-watt AC adapter																																																					
Chipset	Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset																																																					
ExpressCard	HM86 model: One slot (ExpressCard/34, ExpressCard/54)																																																					
Smart card reader	Optional: Smart card reader																																																					
Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																																																					
Ports	One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector																																																					
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack																																																					
Environment	EPEAT™ Gold; ENERGY STAR® 6.0; RoHS-compliant																																																					

ThinkPad L540 20AV (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Chipset	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AV0024US	i3-4000M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AV0025US	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AV0026US	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	None	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AV002VUS	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" HD	500G 7200	11b/g/n+BT	Upg	None	None	Exp/54	720p	None	6(56wh)	65W	Win8 DG Win7	1-depot	No	09/13
20AV0027US	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	None	720p	None	6(56wh)	65W	Win8 DG Win7	1-depot	No	11/13
20AV002FUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" HD	500G 7200	6235 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	1-depot	No	11/13
20AV0028US	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	09/13
20AV0029US	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	09/13
20AV002AUS	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" FHD	180G SSD Opal	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	10/13
20AV002BUS	i5-4200M	No	HD 4600	HM86	4GBx1	15.6" FHD	256G SSD Opal	7260 ac+BT	Upg	None	None	Exp/54	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	09/13
20AV002GUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	11/13
20AV002HUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" HD	128G SSD	7260 ac+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	11/13
20AV002JUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13
20AV002KUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" HD	180G SSD Opal	6235 a/b/g/n+BT	Upg	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	10/13
20AV002LUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	180G SSD Opal	6235 a/b/g/n+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	10/13
20AV002MUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	256G SSD Opal	7260 ac+BT	Upg	None	None	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	11/13
20AV002NUS	i7-4600M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	Upg	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13
20AV002PUS	i7-4600M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	1T 5400	7260 ac+BT	16GB	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13
20AV002QUS	i7-4600M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	256G SSD Opal	7260 ac+BT	Upg	None	None	None	720p	Finger	9	65W	Win8 DG Win7	3-depot	No	11/13

• For detailed platform specifications, please see [ThinkPad L540 Platform Specifications](#) sheet

Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor						Audio support		HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack																							
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard UltraNav™	ThinkLight™	Chipset ExpressCard Smart card reader Multicard reader Ports	Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset HM86 model: One slot (ExpressCard/34, ExpressCard/54) Optional: Smart card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector																						
	Cel 2950M	2	2 GHz	-	2MB	DDR3L-1600																										
	i3-4000M		2.4 GHz	-	3MB																											
	i5-4200M		2.5 GHz	3.1 GHz	3MB																											
	i5-4300M		2.6 GHz	3.3 GHz	3MB																											
	i5-4330M		2.8 GHz	3.5 GHz	3MB																											
	i7-4600M		2.9 GHz	3.6 GHz	4MB																											
i7-4702MQ	4	2.2 GHz	3.2 GHz	6MB																												
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 6235 a/b/g/n+BT: Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card																							
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						WWAN (optional)		Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE / HSPA+/EVDO/GSM/GPRS/EDGE, GPS																							
M.2 SSD	Some: 15.6" (396mm) HD (1366x768), 220 nits, 500:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Camera (optional) HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						SIM card (optional)		AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider																							
Widescreen display	Some: 15.6" (396mm) HD (1366x768), 220 nits, 500:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Camera (optional) HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Bluetooth™		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter HM86 model: Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)																							
Graphics	Intel HD Graphics 4600 in processor						Ethernet		Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology Optional: Fingerprint reader on the palm rest, swipe sensor																							
Dimensions ³	HD (WxDxH): 14.84" x 9.72" x 1.13-1.34"; 377mm x 247mm x 28.8-34.05mm FHD (WxDxH): 14.84" x 9.72" x 1.22-1.43"; 377mm x 247mm x 31.0-36.25mm						Security chip (optional)		Preload																							
Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>6-cell 48Wh</th> <th>6-cell 56Wh</th> <th>9-cell 99.9Wh</th> </tr> </thead> <tbody> <tr> <td>HD</td> <td>5.54lb / 2.52kg</td> <td>5.60lb / 2.54kg</td> <td>5.95lb / 2.70kg</td> </tr> <tr> <td>FHD</td> <td>5.68lb / 2.58kg</td> <td>5.73lb / 2.60kg</td> <td>6.08lb / 2.76kg</td> </tr> </tbody> </table>						Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh	HD	5.54lb / 2.52kg	5.60lb / 2.54kg	5.95lb / 2.70kg	FHD	5.68lb / 2.58kg	5.73lb / 2.60kg	6.08lb / 2.76kg	Fingerprint reader		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit											
Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh																													
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FHD	5.68lb / 2.58kg	5.73lb / 2.60kg	6.08lb / 2.76kg																													
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic						Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit																							
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication						Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit																							
Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>6-cell 48Wh</th> <th>6-cell 56Wh</th> <th>9-cell 99.9Wh</th> </tr> </thead> <tbody> <tr> <td>Win7 (MobileMark® 2007)</td> <td>9 hr</td> <td>11 hr</td> <td>19 hr</td> </tr> <tr> <td>Win8 (MobileMark 2012)</td> <td>6 hr</td> <td>7 hr</td> <td>12 hr</td> </tr> </tbody> </table>						Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh	Win7 (MobileMark® 2007)	9 hr	11 hr	19 hr	Win8 (MobileMark 2012)	6 hr	7 hr	12 hr	Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit											
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AC adapter	65-watt AC adapter						Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit																							
Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite																																

See footnotes for more detailed information

(PD1-1) © Lenovo

ThinkPad L540 20AV (TopSeller) - II

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Chipset	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Fingerprint reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AV002RUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	EM7355	Select	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	11/13
20AV002SUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	128G SSD	7260 ac+BT	EM7355	Select	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	11/13
20AV002TUS	i7-4600M	vPro	HD 4600	QM87	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	EM7355	Select	Smart	None	720p	Finger	6(56wh)	65W	Win8 DG Win7	3-depot	No	11/13
20AV002UUS	i5-4300M	vPro	HD 4600	QM87	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	Smart	None	None	Finger	6(48wh)	65W	Win8 DG Win7	3-depot	No	11/13

• For detailed platform specifications, please see [ThinkPad L540 Platform Specifications sheet](#)

Processor	Intel® Celeron® Processor or 4th Generation Intel Core™ i3 / i5 / i7 Processor						Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard UltraNav™ ThinkLight™ Chipset ExpressCard Smart card reader Multicard reader Ports	Mobile Intel QM87 (vPro model) or HM86 (Non-vPro model) Express Chipset HM86 model: One slot (ExpressCard/34, ExpressCard/54) Optional: Smart card reader 4-in-1 reader (MMC, SD, SDHC, SDXC) One Always On USB 3.0, three USB 2.0, VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector				
	Cel 2950M	2	2 GHz	-	2MB	DDR3L-1600						
	i3-4000M		2.4 GHz	-	3MB							
	i5-4200M		2.5 GHz	3.1 GHz	3MB							
	i5-4300M		2.6 GHz	3.3 GHz	3MB							
	i5-4330M		2.8 GHz	3.5 GHz	3MB							
	i7-4600M		2.9 GHz	3.6 GHz	4MB							
i7-4702MQ	4	2.2 GHz	3.2 GHz	6MB								
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 6235 a/b/g/n+BT: Intel Centrino® Advanced-N 6235, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card				
Optical Storage	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						WWAN (optional)	Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS				
M.2 SSD	Some: 15.6" (396mm) HD (1366x768) , 220 nits, 500:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080) , 300 nits, 500:1 contrast ratio Camera (optional) HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						SIM card (optional)	AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider				
Widescreen display	Some: 15.6" (396mm) HD (1366x768) , 220 nits, 500:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080) , 300 nits, 500:1 contrast ratio						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter HM86 model: Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)				
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Ethernet	Intel Ethernet Connection I217-V (Clarkville) QM87 model: Intel Ethernet Connection I217-LM (Clarkville)				
Graphics	Intel HD Graphics 4600 in processor						Security	Power-on password, hard disk password, supervisor password, security keyhole				
Dimensions ³	HD (WxDxH): 14.84" x 9.72" x 1.13-1.34"; 377mm x 247mm x 28.8-34.05mm FHD (WxDxH): 14.84" x 9.72" x 1.22-1.43"; 377mm x 247mm x 31.0-36.25mm						Security chip vPro (optional)	Trusted Platform Module, TCG 1.2-compliant Intel vPro Technology				
Weight ²	Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh				Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor			
Case material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic						Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit				
	HD	5.54lb / 2.52kg	5.60lb / 2.54kg	5.95lb / 2.70kg				Win8 / 8.1 64: Windows 8 / 8.1 64-bit				
	FHD	5.68lb / 2.58kg	5.73lb / 2.60kg	6.08lb / 2.76kg				Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit				
Battery type	Li-Ion 6-cell (48Wh or 56Wh) or 9-cell (99.9Wh), HW Authentication						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite					
Max battery life ¹⁰	Models	6-cell 48Wh	6-cell 56Wh	9-cell 99.9Wh								
AC adapter	Win7 (MobileMark® 2007)	9 hr	11 hr	19 hr								
	Win8 (MobileMark 2012)	6 hr	7 hr	12 hr								

See footnotes for more detailed information

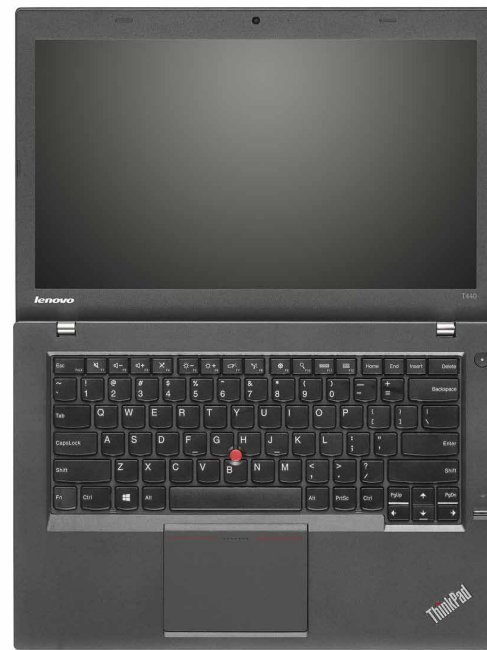
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Lenovo® ThinkPad T440



Lenovo ThinkPad T440



Lenovo ThinkPad T440



Lenovo ThinkPad T440



Lenovo ThinkPad T440

ThinkPad T440 Platform Specifications

Product Specifications Reference (PSREF)

Positioning	Mainstream Ultrabook™ or Thinbook; one spindle							Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch	
Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor							ThinkLight™	None	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	WLAN ⁴ <i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card 	
	i3-4010U	2	4	1.7 GHz	-	3MB	DDR3L-1600	Intel HD graphics 4400	WWAN (optional) <i>One of the following, configurable by model (mutually exclusive with M.2 SSD):</i> <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models) 	
	i3-4030U			1.9 GHz	-	3MB				
	i5-4200U			1.6 GHz	2.6 GHz	3MB				
	i5-4210U			1.7 GHz	2.7 GHz	3MB				
	i5-4300U			1.9 GHz	2.9 GHz	3MB				
	i7-4500U			1.8 GHz	3 GHz	4MB				
	i7-4600U	2.1 GHz	3.3 GHz	4MB						
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)							SIM card (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> AT&T® or Verizon® LTE (4G), contract required with service provider (US models) Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models) User selectable, contract required with service provider 	
Optical Storage	None <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> SSHD with 8GB NAND flash memory							Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
M.2 SSD	<i>Some:</i> Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader <i>Some:</i> Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card							Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I218-V (Clarkville) <i>vPro model:</i> Intel Ethernet Connection I218-LM (Clarkville) <i>Optional:</i> Near Field Communication	
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 350:1 contrast ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio							NFC	Near Field Communication	
Multi-touch	<i>Some:</i> Capacitive-type multi-touch, supports 10-finger gesture							Security chip	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant	
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus							vPro (optional)	Intel vPro Technology	
Graphics	Intel HD Graphics 4400 in processor only, or Intel HD Graphics 4400 in processor and NVIDIA GeForce® GT 720M, PCI Express® x8, 1GB memory, NVIDIA® Optimus™ technology; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; <i>Max external resolution:</i> 1920x1200@60Hz (VGA); 3840x2160@30Hz (DisplayPort via Mini DisplayPort cable on integrated models); 2560x1600@60Hz (DisplayPort via Mini DisplayPort cable on optimus models)							Fingerprint reader	<i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor	
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm							Limited warranty ¹²	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service)¹⁷ 	
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell				Preload		<i>Some:</i> Windows 8 / 8.1 64-bit <i>Some:</i> Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support Lenovo Companion ThinkVantage System Update Lenovo Reach (Windows 8.1 model) Hightail - Metro (Windows 8.1 model) Lenovo Cloud Storage by SugarSync Lenovo Cloud Storage - Metro (Windows 8 model) Lenovo Cloud Storage by SugarSync (Windows 8 model) PC Device Stage AccuWeather Amazon Kindle Nitro Pro Evernote Skype Rara Streaming Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions)
	Integrated Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg				Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
	Integrated MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg				<ul style="list-style-type: none"> Lenovo Solution Center ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update Lenovo Cloud Storage by SugarSync PC Device Stage Adobe® Reader® Nitro Pro Evernote® Skype™ Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) 		
	Optimus Non-MultiTouch	3.73 lb / 1.69kg		4.04 lb / 1.83kg						
	Optimus MultiTouch	3.97 lb / 1.80kg		4.33 lb / 1.97kg						
	Case material	Glass-Fiber Reinforced Plastic								
Internal battery	<i>Optional:</i> Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication									
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication									
Max battery life ¹⁰	Models	3-cell + 3-cell		3-cell + 6-cell 47.5Wh		3-cell + 6-cell 72Wh				
	Integrated	8.6 hr		12.9 hr		17.2 hr				
	Optimus	7.7 hr		11.6 hr		15.4 hr				
AC adapter	Integrated models: 45-watt AC adapter; Optimus models: 65-watt AC adapter									
Chipset	Intel SoC (System on Chip) platform									
Smart card reader	<i>Optional:</i> Smart card reader, exclusive with M.2 SSD									
Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)									
Ports	Two USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)									
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack							Environment	EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant	

ThinkPad T440 20B6 (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory (soldered +DIMM)	Multi-Display touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)		
20B6009TUS	i3-4030U	No	HD 4400	0+4GB	14" HD	No	500G 7200	7260 b/g/n+BT	Upp	None	None	720p	None	Finger	None	3+3	45W	Win8.1 DG Win7	1-depot	No	09/14
20B60057US	i5-4200U	No	HD 4400	0+4GB	14" HD	No	500G 7200	7260 b/g/n+BT	Upp	None	16GB	720p	None	None	None	3+3	45W	Win8 DG Win7	1-depot	No	09/13
20B6005FUS	i5-4200U	No	HD 4400	0+4GB	14" HD	No	500G 7200	7260 b/g/n+BT	Upp	None	None	720p	None	None	None	No+6(47.5wh)	45W	Win8 DG Win7	1-depot	No	09/13
20B6006CUS	i5-4200U	No	HD 4400	0+4GB	14" HD	No	500G 7200	7260 ac+BT	Upp	None	None	720p	None	Finger	None	3+3	45W	Win8 DG Win7	1-depot	No	11/13
20B6008EUS	i5-4200U	No	HD 4400	4+0GB	14" HD	No	500G 7200	7260 ac+BT	Upp	None	None	720p	None	Finger	None	3+3	45W	Win8 DG Win7	1-depot	No	03/14
20B60058US	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	500G 7200	7260 ac+BT	Upp	None	16GB	720p	None	None	None	3+3	45W	Win8 DG Win7	1-depot	No	09/13
20B6005GUS	i5-4300U	No	HD 4400	0+4GB	14" HD	No	500G 7200	7260 b/g/n+BT	Upp	None	None	720p	None	None	None	No+6(47.5wh)	45W	Win8 DG Win7	1-depot	No	09/13
20B6005RUS	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	500G 7200	7260 ac+BT	Upp	None	None	720p	None	Finger	None	3+3	45W	Win8 DG Win7	1-depot	No	09/13
20B6008CUS	i5-4200U	No	HD 4400	4+0GB	14" HD+	MT	500G 7200	7260 ac+BT	Upp	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	No	03/14
20B60059US	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	500G 7200	7260 ac+BT	Upp	None	16GB	720p	None	None	None	3+3	45W	Win8 DG Win7	3-depot	No	09/13
20B6005AUS	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	500G 7200	7260 ac+BT	Upp	None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	09/13
20B6005BUS	i5-4300U	vPro	HD 4400	0+4GB	14" HD+	No	500G 7200	7260 ac+BT	Upp	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	09/13
20B6005CUS	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	500G 7200	7260 ac+BT	Upp	None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	09/13
20B6005DUS	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	500G 7200	7260 ac+BT	Upp	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	09/13
20B6005HUS	i5-4300U	vPro	HD 4400	0+4GB	14" HD+	No	180G SSD Opal	7260 ac+BT	Upp	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	10/13
20B6005JUS	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	180G SSD Opal	7260 ac+BT	Upp	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	10/13
20B6005KUS	i5-4300U	vPro	HD 4400	0+8GB	14" HD+	No	256G SSD eDrive	7260 ac+BT	Upp	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	09/13
20B6005LUS	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	500G 7200	7260 ac+BT	Upp	None	None	720p	None	Finger	None	No+6(47.5wh)	45W	Win8 DG Win7	3-depot	No	09/13
20B6005MUS	i5-4300U	vPro	HD 4400	0+4GB	14" HD	No	500G 7200	7260 ac+BT	Upp	None	None	720p	None	None	None	No+6(47.5wh)	45W	Win8 DG Win7	3-depot	No	09/13

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch					
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	ThinkLight™	None					
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	Chipset	Intel SoC (System on Chip) platform					
	i3-4030U		1.9 GHz	-	3MB		Smart card reader	Optional: Smart card reader					
	i5-4200U		1.6 GHz	2.6 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)					
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Ports	Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector					
	i7-4500U		1.8 GHz	3 GHz	4MB		Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack					
	i7-4600U		2.1 GHz	3.3 GHz	4MB		WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card					
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)						WWAN (optional)	Upp: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS					
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						SIM card (optional)	AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider					
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio						Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville)					
Multi-touch	Some: Capacitive-type multi-touch, supports 10-finger gesture						NFC	Optional: Near Field Communication					
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Security	Power-on password, hard disk password, supervisor password, security keyhole					
Graphics	Intel HD Graphics 4400 in processor						Security chip	Trusted Platform Module, TCG 1.2-compliant					
Dimensions ³	14.0W" (WxDxH):		13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm			vPro (optional)	Intel vPro Technology						
Weight ²	14.0W" MultiTouch (WxDxH):		13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm			Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor						
	Models	3-cell + 3-cell		3-cell + 6-cell		Preload	Win8 / 8.1 DG Win7:		Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit				
	Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg			Win8 / 8.1 64:		Windows 8 / 8.1 64-bit				
	MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg			Win8 / 8.1 P64:		Windows 8 / 8.1 Pro 64-bit				
Case material	Glass-Fiber Reinforced Plastic						Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite					
Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication												
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication												
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell		3-cell + 6-cell 47.5Wh		3-cell + 6-cell 72Wh							
	Battery life	8.6 hr		12.9 hr		17.2 hr							
AC adapter	45-watt AC adapter												

See footnotes for more detailed information

(CB1-1) © Lenovo

ThinkPad T440 20B6 (TopSeller) - II

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory (soldered +DIMM)	Multi-Display touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20B6006AUS	i5-4300U	vPro HD 4400	0+4GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	No+6(47.5wh)	45W	Win8 DG Win7	3-depot	No	11/13
20B6009MUS	i5-4300U	vPro HD 4400	4+4GB 14" HD+	No	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	No	07/14
20B6008FUS	i5-4300U	vPro HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	03/14
20B6008GUS	i5-4300U	vPro HD 4400	4+4GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	03/14
20B6008HUS	i5-4300U	vPro HD 4400	4+0GB 14" HD+	No	500G 7200 Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	03/14
20B6009NUS	i7-4600U	vPro HD 4400	4+4GB 14" HD+	No	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	No	07/14
20B6005EUS	i7-4600U	vPro HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	09/13
20B6005NUS	i7-4600U	vPro HD 4400	4+0GB 14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	10/13
20B6005PUS	i7-4600U	vPro HD 4400	4+0GB 14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	09/13
20B6006BUS	i7-4600U	vPro HD 4400	4+4GB 14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	11/13
20B6006DUS	i7-4600U	vPro HD 4400	4+4GB 14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	11/13
20B6006EUS	i7-4600U	vPro HD 4400	4+4GB 14" HD+	No	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	11/13
20B6008DUS	i7-4600U	vPro HD 4400	4+0GB 14" HD	No	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	03/14
20B6008JUS	i7-4600U	vPro HD 4400	4+4GB 14" HD+	No	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	03/14

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	ThinkLight™	None	
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	Chipset	Intel SoC (System on Chip) platform	
	i3-4030U		1.9 GHz	-	3MB		Smart card reader	Optional: Smart card reader	
	i5-4200U		1.6 GHz	2.6 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Ports	Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector	
	i7-4500U		1.8 GHz	3 GHz	4MB		Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
	i7-4600U		2.1 GHz	3.3 GHz	4MB		WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card	
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)						WWAN (optional)	Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS	
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						SIM card (optional)	AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider	
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio						Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville)	
Multi-touch	Some: Capacitive-type multi-touch, supports 10-finger gesture						NFC	Optional: Near Field Communication	
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Security	Power-on password, hard disk password, supervisor password, security keyhole	
Graphics	Intel HD Graphics 4400 in processor						Security chip	Trusted Platform Module, TCG 1.2-compliant	
Dimensions ³	14.0W" (WxDxH):		13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm			vPro (optional)	Intel vPro Technology		
Weight ²	14.0W" MultiTouch (WxDxH):		13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm			Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor		
	Models	3-cell + 3-cell		3-cell + 6-cell		Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
	Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg			Win8 / 8.1 64: Windows 8 / 8.1 64-bit		
Case material	MultiTouch		4.03 lb / 1.83kg		4.33 lb / 1.97kg			Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
	Glass-Fiber Reinforced Plastic						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		
	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication								
Internal battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication								
External battery									
Max battery life ¹⁰	Battery configuration		3-cell + 3-cell		3-cell + 6-cell 47.5Wh		3-cell + 6-cell 72Wh		
	Battery life		8.6 hr		12.9 hr		17.2 hr		
AC adapter	45-watt AC adapter								

See footnotes for more detailed information

(CB1-2) © Lenovo

ThinkPad T440 20B6 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory (soldered +DIMM)	Multi-Display touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)	
20B60076US	i5-4200U	No HD	4400	0+4GB 14" HD+	MT	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	None	None	3+3	45W	Win8.1 P64	1-depot	No	01/14
20B60077US	i5-4300U	vPro HD	4400	0+4GB 14" HD+	MT	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	01/14
20B60078US	i5-4300U	vPro HD	4400	0+4GB 14" HD+	MT	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	01/14
20B60079US	i5-4300U	vPro HD	4400	0+4GB 14" HD+	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	01/14
20B6002AUS	i5-4300U	vPro HD	4400	0+4GB 14" HD+	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	09/13
20B6002BUS	i5-4300U	vPro HD	4400	0+4GB 14" HD+	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	09/13
20B6008KUS	i5-4300U	vPro HD	4400	4+0GB 14" HD+	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	03/14
20B6007AUS	i7-4600U	vPro HD	4400	4+0GB 14" HD+	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	01/14
20B6007BUS	i7-4600U	vPro HD	4400	4+0GB 14" HD+	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	01/14
20B6009PUS	i7-4600U	vPro HD	4400	4+4GB 14" HD+	MT	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	07/14
20B6002CUS	i7-4600U	vPro HD	4400	4+0GB 14" HD+	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	09/13
20B6002DUS	i7-4600U	vPro HD	4400	4+0GB 14" HD+	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	09/13

• For detailed platform specifications, please see [ThinkPad T440 Platform Specifications](#) sheet

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch					
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	ThinkLight™	None					
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	Chipset	Intel SoC (System on Chip) platform					
	i3-4030U		1.9 GHz	-	3MB		Smart card reader	Optional: Smart card reader					
	i5-4200U		1.6 GHz	2.6 GHz	3MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)					
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Ports	Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector					
	i7-4500U		1.8 GHz	3 GHz	4MB		Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack					
	i7-4600U		2.1 GHz	3.3 GHz	4MB		WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card					
Memory	8GB or 12GB* max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable*, 4GB memory soldered to systemboard on selected models, one 204-pin SO-DIMM socket (*for the models with 4GB on-board memory)						WWAN (optional)	Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS					
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						SIM card (optional)	AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider					
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card						Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio						Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville)					
Multi-touch	Some: Capacitive-type multi-touch, supports 10-finger gesture						NFC	Optional: Near Field Communication					
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Security	Power-on password, hard disk password, supervisor password, security keyhole					
Graphics	Intel HD Graphics 4400 in processor						Security chip	Trusted Platform Module, TCG 1.2-compliant					
Dimensions ³	14.0W" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0W" MultiTouch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm						vPro (optional)	Intel vPro Technology					
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell		Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor						
	Non-MultiTouch	3.79 lb / 1.72kg		4.10 lb / 1.86kg		Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit						
	MultiTouch	4.03 lb / 1.83kg		4.33 lb / 1.97kg		Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite						
Case material	Glass-Fiber Reinforced Plastic												
Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication												
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication												
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell		3-cell + 6-cell 47.5Wh		3-cell + 6-cell 72Wh							
	Battery life	8.6 hr		12.9 hr		17.2 hr							
AC adapter	45-watt AC adapter												

See footnotes for more detailed information

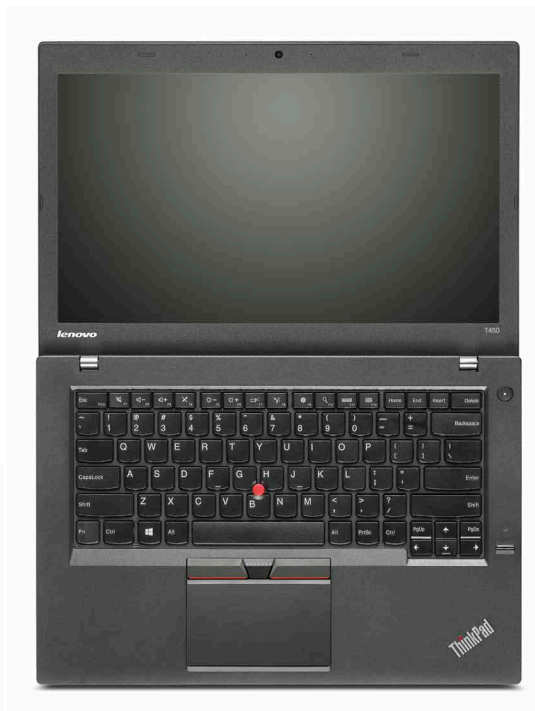
(CB1-3) © Lenovo



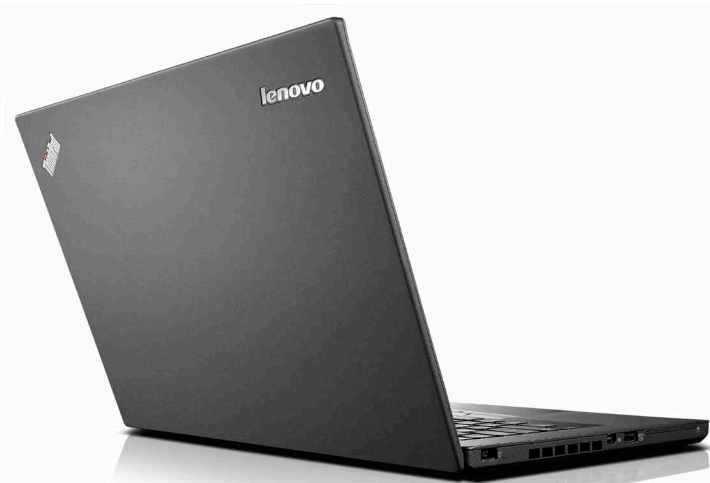
Lenovo® ThinkPad T450



Lenovo ThinkPad T450



Lenovo ThinkPad T450



Lenovo ThinkPad T450



Lenovo ThinkPad T450

ThinkPad T450 Platform Specifications

Product Specifications Reference (PSREF)

Processor	<p>4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor</p> <table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Speed</th> <th>Processor Graphics</th> </tr> </thead> <tbody> <tr> <td>i5-4300U</td> <td rowspan="6">2</td> <td rowspan="6">4</td> <td>1.9 GHz</td> <td>2.9 GHz</td> <td>3MB</td> <td rowspan="6">DDR3L-1600</td> <td>Intel HD Graphics 4400</td> </tr> <tr> <td>i3-5010U</td> <td>2.1 GHz</td> <td>-</td> <td>3MB</td> <td rowspan="5">Intel HD Graphics 5500</td> </tr> <tr> <td>i5-5200U</td> <td>2.2 GHz</td> <td>2.7 GHz</td> <td>3MB</td> </tr> <tr> <td>i5-5300U</td> <td>2.3 GHz</td> <td>2.9 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-5500U</td> <td>2.4 GHz</td> <td>3 GHz</td> <td>4MB</td> </tr> <tr> <td>i7-5600U</td> <td>2.6 GHz</td> <td>3.2 GHz</td> <td>4MB</td> </tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	i5-4300U	2	4	1.9 GHz	2.9 GHz	3MB	DDR3L-1600	Intel HD Graphics 4400	i3-5010U	2.1 GHz	-	3MB	Intel HD Graphics 5500	i5-5200U	2.2 GHz	2.7 GHz	3MB	i5-5300U	2.3 GHz	2.9 GHz	3MB	i7-5500U	2.4 GHz	3 GHz	4MB	i7-5600U	2.6 GHz	3.2 GHz	4MB	<p>Smart card reader <i>Optional</i>: Smart card reader</p> <p>Multicard reader Ports 4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)</p> <p>Camera HD720p resolution, low light sensitive, fixed focus</p> <p>Audio support HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack</p> <p>Keyboard 6-row, spill-resistant, multimedia Fn keys, optional LED backlight</p> <p>UltraNav™ TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch</p> <p>Security Power-on password, hard disk password, supervisor password, security keyhole</p> <p>chip Trusted Platform Module, TCG 1.2-compliant</p> <p>ThinkEngine Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures</p> <p>vPro <i>(optional)</i> Intel vPro Technology</p> <p>Fingerprint reader <i>Optional</i>: Fingerprint reader on the keyboard bezel, swipe sensor</p>
Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics																																
i5-4300U	2	4	1.9 GHz	2.9 GHz	3MB	DDR3L-1600	Intel HD Graphics 4400																																
i3-5010U			2.1 GHz	-	3MB		Intel HD Graphics 5500																																
i5-5200U			2.2 GHz	2.7 GHz	3MB																																		
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i7-5500U			2.4 GHz	3 GHz	4MB																																		
i7-5600U			2.6 GHz	3.2 GHz	4MB																																		
Graphics	<p>Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 1920x1200@60Hz (VGA)</p>	<p>Internal battery <i>Optional</i>: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)</p> <p>External battery Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)</p> <table border="1"> <thead> <tr> <th>Models</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 48Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Integrated</td> <td>10.08 hr</td> <td>14.78 hr</td> <td>19.78 hr</td> </tr> <tr> <td>Discrete</td> <td>9.51 hr</td> <td>13.94 hr</td> <td>18.66 hr</td> </tr> </tbody> </table>	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	Integrated	10.08 hr	14.78 hr	19.78 hr	Discrete	9.51 hr	13.94 hr	18.66 hr																									
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Chipset Memory	<p>Intel SoC (System on Chip) platform 16GB max⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets</p>	<p>AC adapter 45W AC adapter, 65W Slim AC adapter, or 65W AC adapter</p>																																					
Display	<p><i>Some</i>: 14.0" (355mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 350:1 contrast ratio</p> <p><i>Some</i>: 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio</p>	<p>Preload Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit</p> <ul style="list-style-type: none"> Lenovo Solution Center Lenovo SHAREit ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update PC Device Stage Adobe® Reader® Evernote® Skype™ Maxthon Cloud Browser Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) <p><i>Some</i>: Windows 8.1 64-bit</p> <p><i>Some</i>: Windows 8.1 Pro 64-bit</p> <ul style="list-style-type: none"> Lenovo Solution Center Lenovo SHAREit Lenovo Companion ThinkVantage System Update PC Device Stage Weather Channel Evernote Maxthon Cloud Browser Bing Translator Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) 																																					
Multi-touch <i>(opt)</i>	<p>Capacitive-type multi-touch, supports 10-finger gesture, 212.5 nits</p>	<p>Limited warranty¹² <i>One of the following, configurable by model:</i></p> <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 																																					
Storage	<p><i>Some</i>: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable</p> <p><i>Some</i>: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™</p> <p><i>Some</i>: SSHD with 8GB NAND flash memory</p>	<p>Environment EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant</p>																																					
M.2 SSD <i>(opt)</i> Optical	<p>Single-sided M.2 SSD, via M.2 card slot</p> <p>None</p>	<p>Environment EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant</p>																																					
Ethernet	<p><i>Non-vPro model</i>: Intel Ethernet Connection I218-V (Clarkville)</p> <p><i>vPro model</i>: Intel Ethernet Connection I218-LM (Clarkville)</p>	<p>Environment EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant</p>																																					
Bluetooth™	<p>Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter</p>	<p>Environment EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant</p>																																					
WLAN ⁴	<p><i>One of the following, configurable by model:</i></p> <ul style="list-style-type: none"> 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card 	<p>Environment EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant</p>																																					
WWAN <i>(optional)</i>	<p><i>One of the following, configurable by model:</i></p> <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card 	<p>Environment EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant</p>																																					
SIM card <i>(opt)</i>	<p>AT&T® or Verizon® LTE (4G), contract required with service provider</p>	<p>Environment EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant</p>																																					
Dimensions ³	<p>14.0" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm</p> <p>14.0" Touch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm</p>	<p>Environment EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant</p>																																					
Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>No + 3-cell</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell</th> </tr> </thead> <tbody> <tr> <td>Integrated Non-touch</td> <td>3.58 lb / 1.63 kg</td> <td>3.81 lb / 1.73 kg</td> <td>4.21 lb / 1.91 kg</td> </tr> <tr> <td>Integrated Multi-touch</td> <td>3.89 lb / 1.76 kg</td> <td>4.11 lb / 1.87 kg</td> <td>4.52 lb / 2.05 kg</td> </tr> <tr> <td>Discrete Non-touch</td> <td>3.60 lb / 1.63 kg</td> <td>3.82 lb / 1.73 kg</td> <td>4.22 lb / 1.92 kg</td> </tr> <tr> <td>Discrete Multi-touch</td> <td>3.90 lb / 1.77 kg</td> <td>4.12 lb / 1.87 kg</td> <td>4.53 lb / 2.05 kg</td> </tr> </tbody> </table>	Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell	Integrated Non-touch	3.58 lb / 1.63 kg	3.81 lb / 1.73 kg	4.21 lb / 1.91 kg	Integrated Multi-touch	3.89 lb / 1.76 kg	4.11 lb / 1.87 kg	4.52 lb / 2.05 kg	Discrete Non-touch	3.60 lb / 1.63 kg	3.82 lb / 1.73 kg	4.22 lb / 1.92 kg	Discrete Multi-touch	3.90 lb / 1.77 kg	4.12 lb / 1.87 kg	4.53 lb / 2.05 kg	<p>Environment EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant</p>																	
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Discrete Multi-touch	3.90 lb / 1.77 kg	4.12 lb / 1.87 kg	4.53 lb / 2.05 kg																																				
Case material	<p><i>Display cover</i>: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model);</p> <p><i>Bottom</i>: Glass-Fiber Reinforced Plastic</p>	<p>Environment EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant</p>																																					

ThinkPad T450 20BV (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit keyboard	Fingerprint reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BV0007US	i3-5010U	No	HD 5500	4GBx1	14" HD	No	500G 7200	None	11b/g/n+BT	Upg	None	None	720p	None	Finger	3+3	45W	Win8.1 DG Win7	1-depot	No	01/15
20BV0005US	i5-5200U	No	HD 5500	4GBx1	14" HD	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	None	Finger	3+3	45W	Win8.1 DG Win7	1-depot	No	01/15
20BV0000CUS	i5-5300U	vPro	HD 5500	4GBx1	14" HD	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	None	Finger	3+3	45W	Win8.1 DG Win7	1-depot	No	01/15
20BV0001US	i5-5300U	vPro	HD 5500	4GBx1	14" HD+	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20BV0002US	i5-5300U	vPro	HD 5500	8GBx1	14" HD+	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20BV0009US	i5-5300U	vPro	HD 5500	8GBx1	14" HD+	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20BV0000AUS	i5-5300U	vPro	HD 5500	8GBx1	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20BV0000EUS	i5-5300U	vPro	HD 5500	4GBx1	14" HD+	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20BV0003US	i7-5600U	vPro	HD 5500	8GBx1	14" HD+	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20BV0000DUS	i7-5600U	vPro	HD 5500	8GBx1	14" HD+	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad T450 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 or 5th Generation Intel Core i3 / i5 / i7 Processor	Dimensions ³	14.0" (WxDxH): 13.35" x 9.15" x 0.83"; 339mm x 232.5mm x 21mm 14.0" Touch (WxDxH): 13.35" x 9.15" x 0.91"; 339mm x 232.5mm x 23mm																																																				
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Graphics	Intel HD Graphics 4400 or 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory	Case material	Display cover: GFRP (non-touch model) or CFRP (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic																																																				
Chipset	Intel SoC (System on Chip) platform	Smart card reader	Optional: Smart card reader																																																				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Multi-card reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																																																				
Display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 350:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio	Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)																																																				
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 212.5 nits	Camera	HD720p resolution, low light sensitive, fixed focus																																																				
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory	Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack																																																				
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot	Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight																																																				
Optical	None	UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch																																																				
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)	Security	Power-on password, hard disk password, supervisor password, security keyhole																																																				
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	Security chip	Trusted Platform Module, TCG 1.2-compliant																																																				
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card	vPro (optional)	Intel vPro Technology																																																				
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card	Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor																																																				
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider	Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)																																																				
		External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)																																																				
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		Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS																																																				

See footnotes for more detailed information

(CB2-1) © Lenovo

ThinkPad T450 20BV (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Multi-Display	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit keyboard	Fingerprint reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BV0006US	i7-5600U	vPro	HD 5500	8GBx1	14" HD+ MT	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad T450 Platform Specifications sheet](#)

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Chipset	Intel SoC (System on Chip) platform	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																																																				
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)																																																				
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Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory	Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight																																																				
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot	UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch																																																				
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Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	vPro (optional)	Intel vPro Technology																																																				
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card	Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor																																																				
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card	Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)																																																				
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider	External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)																																																				
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		Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS																																																				

See footnotes for more detailed information

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Lenovo® ThinkPad T440p



Lenovo ThinkPad T440p



Lenovo ThinkPad T440p



Lenovo ThinkPad T440p



Lenovo ThinkPad T440p

ThinkPad T440p Platform Specifications

Product Specifications Reference (PSREF)

Positioning	<i>Mainstream performance; two spindles</i>								Chipset	Mobile Intel QM87 Express Chipset																													
Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor								Smart card reader	Optional: Smart card reader																													
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																													
	i3-4000M	2	4	2.4 GHz	-	3MB	DDR3L-1600	Intel HD Graphics 4600	Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector																													
	i3-4100M			2.5 GHz	-	3MB			WLAN ⁴	<i>One of the following, configurable by model:</i>																													
	i5-4200M			2.5 GHz	3.1 GHz	3MB				<ul style="list-style-type: none"> ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card 																													
	i5-4210M			2.6 GHz	3.2 GHz	3MB				WWAN (optional)	<i>One of the following, configurable by model (mutually exclusive with M.2 SSD):</i>																												
	i5-4300M			2.6 GHz	3.3 GHz	3MB					<ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models) 																												
	i5-4330M			2.8 GHz	3.5 GHz	3MB					SIM card (optional)	<i>One of the following, configurable by model:</i>																											
	i7-4600M	2.9 GHz	3.6 GHz	4MB	<ul style="list-style-type: none"> AT&T® or Verizon® LTE (4G), contract required with service provider (US models) Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models) User selectable, contract required with service provider 																																		
	i7-4700MQ	2.4 GHz	3.4 GHz	6MB	Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																																	
	i7-4710MQ	2.5 GHz	3.5 GHz	6MB		Ethernet						Intel Ethernet Connection I217-LM (Clarkville)																											
	i7-4800MQ	2.7 GHz	3.7 GHz	6MB								NFC	<i>Optional:</i> Near Field Communication																										
	i7-4900MQ	2.8 GHz	3.8 GHz	8MB									Security chip	Power-on password, hard disk password, supervisor password, security keyhole																									
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets													vPro (optional)	Trusted Platform Module, TCG 1.2-compliant																								
Optical	DVD burner, 9.5mm Ultrabay slim, removable														Fingerprint reader	<i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor																							
UltraBay	One modular bay for removable devices (right side, cold swap), 9.5mm high, bottom access								Limited warranty ¹²							<i>One of the following, configurable by model:</i>																							
Storage	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high															Preload	Windows® 7 Professional 64																						
	<i>Some:</i> Hard Disk Drive (HDD) / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™									Environment							preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit																						
M.2 SSD	<i>All:</i> removable, upgradable, supports the second disk, Shock Mounted																PEPAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant	<ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 																					
	<i>Some:</i> M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card										Keyboard							<ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support Lenovo Companion ThinkVantage System Update Lenovo Reach (Windows 8.1 model) Hightail - Metro (Windows 8.1 model) Lenovo Cloud Storage by SugarSync Lenovo Cloud Storage - Metro (Windows 8 model) Lenovo Cloud Storage by SugarSync (Windows 8 model) PC Device Stage AccuWeather Amazon Kindle Nitro Pro Evernote Skype Rara Streaming Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) Cyberlink PowerDVD (DVD±RW) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) 																					
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio																	UltraNav™	<ul style="list-style-type: none"> ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update Lenovo Cloud Storage by SugarSync PC Device Stage Adobe® Reader® Nitro Pro Evernote® Skype™ Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) Cyberlink PowerDVD (DVD±RW) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) 																				
	<i>Some:</i> 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 or 500:1 contrast ratio																		ThinkLight™	None																			
	<i>Some:</i> 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS																			Dimensions ³	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18"; 335mm x 229.1mm x 27.9-29.95mm																		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus											Weight ²									<table border="1"> <thead> <tr> <th>Models</th> <th>6-cell</th> <th>9-cell</th> </tr> </thead> <tbody> <tr> <td>Integrated</td> <td>4.70 lb / 2.14kg</td> <td>4.92 lb / 2.23kg</td> </tr> <tr> <td>Optimus</td> <td>4.77 lb / 2.16kg</td> <td>5.10 lb / 2.31kg</td> </tr> </tbody> </table>								Models	6-cell	9-cell	Integrated	4.70 lb / 2.14kg	4.92 lb / 2.23kg	Optimus	4.77 lb / 2.16kg	5.10 lb / 2.31kg		
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Integrated	4.70 lb / 2.14kg	4.92 lb / 2.23kg																																					
Optimus	4.77 lb / 2.16kg	5.10 lb / 2.31kg																																					
Graphics	Intel HD Graphics 4600 in processor only, or Intel HD Graphics 4600 in processor and NVIDIA GeForce® GT 730M, PCI Express® x8, 1GB memory, NVIDIA® Optimus™ technology; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; <i>Max resolution:</i> 1920x1200@60Hz (VGA); 3840x2160@60Hz (DP via mDP cable)								Case material				Display cover: Glass-Fiber Reinforced Plastic; Bottom: Carbon-Fiber Reinforced Plastic																										
Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight												Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication																									
UltraNav™	TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch									Max battery life ¹⁰				<table border="1"> <thead> <tr> <th>Models</th> <th>6-cell</th> <th>9-cell</th> </tr> </thead> <tbody> <tr> <td>Integrated</td> <td>7.4 hr</td> <td>13.2 hr</td> </tr> <tr> <td>Optimus</td> <td>7.2 hr</td> <td>12.7 hr</td> </tr> </tbody> </table>								Models	6-cell	9-cell	Integrated	7.4 hr	13.2 hr	Optimus	7.2 hr	12.7 hr									
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ThinkPad T440p 20AN (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AN0069US	i5-4200M	No	HD 4600	4GBx1	14" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	720p	None	None	None	6	65W	Win8 DG Win7	1-depot	No	10/13
20AN006AUS	i5-4300M	No	HD 4600	4GBx1	14" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	1-depot	No	10/13
20AN006BUS	i5-4300M	No	HD 4600	4GBx1	14" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	720p	None	None	None	6	65W	Win8 DG Win7	1-depot	No	10/13
20AN006CUS	i5-4300M	vPro	HD 4600	4GBx1	14" FHD IPS	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20AN006DUS	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20AN006EUS	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20AN006FUS	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	128G SSD	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20AN006GUS	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20AN006HUS	i5-4300M	vPro	HD 4600	4GBx1	14" HD+	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20AN006JUS	i5-4300M	vPro	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	None	None	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20AN006KUS	i5-4300M	vPro	HD 4600	4GBx1	14" HD	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Audio support		HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack													
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard		6-row, spill-resistant, multimedia Fn keys, optional LED backlight UltraNav™ TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch													
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600	ThinkLight™		None													
	i5-4200M		2.5 GHz	3.1 GHz	3MB		Chipset		Mobile Intel QM87 Express Chipset													
	i5-4300M		2.6 GHz	3.3 GHz	3MB		Smart card reader		Optional: Smart card reader													
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Multicard reader		Optional: 4-in-1 reader (MMC, SD, SDHC, SDXC)													
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB		Ports		Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector													
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB		WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card													
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB		WWAN (optional)		Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS													
	i7-4900MQ		2.8 GHz	3.8 GHz	8MB		SIM card (optional)		AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider													
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Bluetooth™		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter													
Optical	DVD burner, 9.5mm Ultrabay slim, removable						Ethernet		Intel Ethernet Connection I217-LM (Clarkville)													
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						NFC		Optional: Near Field Communication													
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						Security		Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant													
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						vPro (optional)		Intel vPro Technology													
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 or 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS						Fingerprint reader		Optional: Fingerprint reader on the keyboard bezel, swipe sensor													
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit													
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						Limited warranty ¹²		1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite													
Dimensions ³	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18", 335mm x 229.1mm x 27.9-29.95mm																					
Weight ²	Models	6-cell		9-cell																		
	Integrated	4.70 lb / 2.14kg		4.92 lb / 2.23kg																		
	Optimus	4.77 lb / 2.16kg		5.10 lb / 2.31kg																		
Case material	Display cover: Glass-Fiber Reinforced Plastic; Bottom: Carbon-Fiber Reinforced Plastic																					
Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication																					
Max battery life ¹⁰	Models	6-cell		9-cell																		
	Integrated	7.4 hr		13.2 hr																		
	Optimus	7.2 hr		12.7 hr																		
AC adapter	65-watt, 90-watt, or 135-watt AC adapter																					

See footnotes for more detailed information

(OA1-1) © Lenovo

ThinkPad T440p 20AN (Optimus) - TopSeller

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AN00DBUS	i7-4600M	vPro	GT 730M	8GBx1	14" FHD IPS	512G SSD	7260 a/b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8.1 DG Win7	3-depot	No	10/14
20AN00DCUS	i7-4600M	vPro	GT 730M	8GBx1	14" FHD IPS	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8.1 DG Win7	3-depot	No	10/14
20AN006LUS	i7-4600M	vPro	GT 730M	8GBx1	14" FHD IPS	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-depot	No	10/13
20AN006MUS	i7-4600M	vPro	GT 730M	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-depot	No	10/13
20AN006NUS	i5-4300M	vPro	GT 730M	4GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-depot	No	10/13
20AN007HUS	i7-4600M	vPro	GT 730M	4GBx2	14" HD+	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-depot	No	11/13
20AN007JUS	i5-4300M	vPro	GT 730M	4GBx1	14" HD+	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-depot	No	11/13
20AN0096US	i7-4600M	vPro	GT 730M	8GBx1	14" HD+	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-depot	No	01/14
20AN009CUS	i7-4600M	vPro	GT 730M	8GBx1	14" HD+	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-depot	No	01/14
20AN00ANUS	i7-4700MQ	No	GT 730M	8GBx1	14" HD+	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	135W	Win8 DG Win7	3-depot	No	03/14
20AN00APUS	i5-4300M	vPro	GT 730M	8GBx1	14" HD+	500G 7200	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	9	90W	Win8 DG Win7	3-depot	No	03/14

• For detailed platform specifications, please see [ThinkPad T440p Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Audio support		HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack												
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard		6-row, spill-resistant, multimedia Fn keys, optional LED backlight UltraNav™ TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch												
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600	ThinkLight™		None												
	i5-4200M		2.5 GHz	3.1 GHz	3MB		Chipset		Mobile Intel QM87 Express Chipset												
	i5-4300M		2.6 GHz	3.3 GHz	3MB		Smart card reader		Optional: Smart card reader												
	i5-4330M		2.8 GHz	3.5 GHz	3MB		Multicard reader		Optional: 4-in-1 reader (MMC, SD, SDHC, SDXC)												
	i7-4600M		2.9 GHz	3.6 GHz	4MB		Ports		Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector												
	i7-4700MQ	4	2.4 GHz	3.4 GHz	6MB		WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card												
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB		WWAN (optional)		Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS												
	i7-4900MQ		2.8 GHz	3.8 GHz	8MB		SIM card (optional)		AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider												
							Bluetooth™		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter												
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						Ethernet		Intel Ethernet Connection I217-LM (Clarkville)												
Optical	DVD burner, 9.5mm Ultrabay slim, removable						NFC		Optional: Near Field Communication												
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						Security		Power-on password, hard disk password, supervisor password, security keyhole												
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS						Security chip		Trusted Platform Module, TCG 1.2-compliant												
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						vPro (optional)		Intel vPro Technology												
Widescreen display	Some: 14.0" (355mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 or 500:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS						Fingerprint reader		Optional: Fingerprint reader on the keyboard bezel, swipe sensor												
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit												
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M, 1GB memory (Optimus)						Limited warranty ¹²		1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite												
Dimensions ³	14.0W" (WxDxH): 13.2" x 9.02" x 1.10-1.18", 335mm x 229.1mm x 27.9-29.95mm																				
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	Optimus	7.2 hr		12.7 hr																	
AC adapter	65-watt, 90-watt, or 135-watt AC adapter																				

See footnotes for more detailed information

(OA1-2) © Lenovo



Lenovo® ThinkPad T440s



Lenovo ThinkPad T440s



Lenovo ThinkPad T440s



Lenovo ThinkPad T440s



Lenovo ThinkPad T440s

ThinkPad T440s Platform Specifications

Product Specifications Reference (PSREF)

Positioning	Premium Ultrabook™ or Thinbook; one spindle								WLAN ⁴	One of the following, configurable by model: <ul style="list-style-type: none"> ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card 																														
Processor	4th Generation Intel® Core™ i5 / i7 Processor								<table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Speed</th> <th>Processor Graphics</th> </tr> </thead> <tbody> <tr> <td>i5-4200U</td> <td rowspan="4">2</td> <td rowspan="4">4</td> <td>1.6 GHz</td> <td>2.6 GHz</td> <td>3MB</td> <td rowspan="4">DDR3L-1600</td> <td rowspan="4">Intel HD graphics 4400</td> </tr> <tr> <td>i5-4210U</td> <td>1.7 GHz</td> <td>2.7 GHz</td> <td>3MB</td> </tr> <tr> <td>i5-4300U</td> <td>1.9 GHz</td> <td>2.9 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-4600U</td> <td>2.1 GHz</td> <td>3.3 GHz</td> <td>4MB</td> </tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	i5-4200U	2	4	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	Intel HD graphics 4400	i5-4210U	1.7 GHz	2.7 GHz	3MB	i5-4300U	1.9 GHz	2.9 GHz	3MB	i7-4600U	2.1 GHz	3.3 GHz	4MB	WWAN (optional)	One of the following, configurable by model (mutually exclusive with M.2 SSD): <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models) 	
Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics																																	
i5-4200U	2	4	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	Intel HD graphics 4400																																	
i5-4210U			1.7 GHz	2.7 GHz	3MB																																			
i5-4300U			1.9 GHz	2.9 GHz	3MB																																			
i7-4600U			2.1 GHz	3.3 GHz	4MB																																			
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket								SIM card (optional)	One of the following, configurable by model: <ul style="list-style-type: none"> AT&T® or Verizon® LTE (4G), contract required with service provider (US models) Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models) User selectable, contract required with service provider 																														
Optical Storage	None <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> SSHD with 8GB NAND flash memory								Bluetooth™ Ethernet	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter <i>Non-vPro model:</i> Intel Ethernet Connection I218-V (Clarkville) <i>vPro model:</i> Intel Ethernet Connection I218-LM (Clarkville) <i>Optional:</i> Near Field Communication																														
M.2 SSD	<i>Some:</i> Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader <i>Some:</i> Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card								NFC	<i>Optional:</i> Near Field Communication																														
Widescreen display	<i>Some:</i> 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some:</i> 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS								Security chip	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant																														
Multi-touch	<i>Some:</i> Capacitive-type multi-touch, supports 10-finger gesture								vPro (optional)	Intel vPro Technology																														
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus								Fingerprint reader	<i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor																														
Graphics	Intel HD Graphics 4400 in processor only, or Intel HD Graphics 4400 in processor and NVIDIA GeForce® GT 730M, PCI Express® x8, 1GB memory, NVIDIA® Optimus™ technology; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; <i>Max external resolution:</i> 1920x1200@60Hz (VGA); 3840x2160@30Hz (DisplayPort via Mini DisplayPort cable on integrated models); 3840x2160@60Hz (DisplayPort via Mini DisplayPort cable on optimus models)								Limited warranty ¹²	One of the following, configurable by model: <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 																														
Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update Lenovo Cloud Storage by SugarSync PC Device Stage Adobe® Reader® Nitro Pro Evernote® Skype™ Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) 	<i>Some:</i> Windows 8 / 8.1 64-bit <i>Some:</i> Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support Lenovo Companion ThinkVantage System Update Lenovo Reach (Windows 8.1 model) Hightail - Metro (Windows 8.1 model) Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model) Lenovo Cloud Storage by SugarSync (Windows 8 model) PC Device Stage AccuWeather Amazon Kindle Nitro Pro Evernote Skype Rara Streaming Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) 																													
ThinkLight™	None								Environment	EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant																														
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm 14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm																																							
Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell</th> </tr> </thead> <tbody> <tr> <td>Non-MultiTouch</td> <td>3.5 lb / 1.59kg</td> <td>3.9 lb / 1.77kg</td> </tr> <tr> <td>MultiTouch</td> <td>3.9 lb / 1.76</td> <td>4.2 lb / 1.94kg</td> </tr> </tbody> </table>								Models	3-cell + 3-cell	3-cell + 6-cell	Non-MultiTouch	3.5 lb / 1.59kg	3.9 lb / 1.77kg	MultiTouch	3.9 lb / 1.76	4.2 lb / 1.94kg																							
Models	3-cell + 3-cell	3-cell + 6-cell																																						
Non-MultiTouch	3.5 lb / 1.59kg	3.9 lb / 1.77kg																																						
MultiTouch	3.9 lb / 1.76	4.2 lb / 1.94kg																																						
Case material	<i>Display cover:</i> Hybrid Carbon-fiber reinforced plastic; <i>Bottom:</i> Magnesium alloy																																							
Internal battery	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication																																							
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication																																							
Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 47.5Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Integrated</td> <td>8.4 hr</td> <td>12.6 hr</td> <td>16.8 hr</td> </tr> <tr> <td>Optimus</td> <td>8.3 hr</td> <td>12.4 hr</td> <td>16.6 hr</td> </tr> </tbody> </table>								Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh	Integrated	8.4 hr	12.6 hr	16.8 hr	Optimus	8.3 hr	12.4 hr	16.6 hr																				
Models	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh																																					
Integrated	8.4 hr	12.6 hr	16.8 hr																																					
Optimus	8.3 hr	12.4 hr	16.6 hr																																					
AC adapter	45-watt (integrated models only), 65-watt, or 65-watt Slim AC adapter																																							
Chipset	Intel SoC (System on Chip) platform																																							
Smart card reader	<i>Optional:</i> Smart card reader, exclusive with M.2 SSD																																							
Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																																							
Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector																																							
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack																																							

ThinkPad T440s 20AQ (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit keyboard	Fingerprint reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AQ005NUS	i5-4200U	No	HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	Upg None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	1-depot	No	20/13		
20AQ005PUS	i5-4200U	No	HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	Upg None	16GB	720p	None	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		
20AQ009GUS	i5-4300U	vPro	HD 4400	4+4GB 14" FHD IPS	No	512G SSD	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	No	20/14		
20AQ005QUS	i5-4300U	vPro	HD 4400	4+0GB 14" HD+	No	500G 7200	7260 ac+BT	Upg None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		
20AQ005SUS	i5-4300U	vPro	HD 4400	4+0GB 14" FHD IPS	No	500G 7200	7260 ac+BT	Upg None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		
20AQ005TUS	i5-4300U	vPro	HD 4400	4+0GB 14" HD+	No	180G SSD Opal	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		
20AQ005UUS	i5-4300U	vPro	HD 4400	4+0GB 14" FHD IPS	No	180G SSD Opal	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		
20AQ005VUS	i5-4300U	vPro	HD 4400	4+0GB 14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		
20AQ006JUS	i5-4300U	vPro	HD 4400	4+0GB 14" HD+	No	128G SSD	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		
20AQ008FUS	i5-4300U	vPro	HD 4400	4+4GB 14" HD+	No	180G SSD Opal	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/14		
20AQ008GUS	i5-4300U	vPro	HD 4400	4+0GB 14" FHD IPS	No	500G 7200 Opal	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/14		
20AQ009HUS	i7-4600U	vPro	HD 4400	4+4GB 14" FHD IPS	No	512G SSD	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 DG Win7	3-depot	No	20/14		
20AQ005WUS	i7-4600U	vPro	HD 4400	4+0GB 14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		
20AQ005XUS	i7-4600U	vPro	HD 4400	4+0GB 14" HD+	No	180G SSD Opal	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		
20AQ008YUS	i7-4600U	vPro	HD 4400	4+0GB 14" FHD IPS	No	180G SSD Opal	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		
20AQ006FUS	i7-4600U	vPro	HD 4400	4+4GB 14" FHD IPS	No	180G SSD Opal	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		
20AQ006GUS	i7-4600U	vPro	HD 4400	4+4GB 14" FHD IPS	No	240G SSD Opal	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		
20AQ006HUS	i7-4600U	vPro	HD 4400	4+4GB 14" FHD IPS	No	256G SSD eDrive	7260 ac+BT	Upg None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13		

• For detailed platform specifications, please see [ThinkPad T440s Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor					Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch					
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	ThinkLight™	None				
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	Chipset	Intel SoC (System on Chip) platform				
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Smart card reader	Optional: Smart card reader				
	i7-4600U		2.1 GHz	3.3 GHz	4MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket					Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector					
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory					WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card					
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					WWAN (optional)	Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS					
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio					SIM card (optional)	AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider					
Multi-touch	Some: Capacitive-type multi-touch, supports 10-finger gesture					Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication					
Graphics	Intel HD Graphics 4400 in processor					NFC	Optional: Near Field Communication					
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm 14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm					Security	Power-on password, hard disk password, supervisor password, security keyhole					
Weight ²	Models	3-cell + 3-cell	3-cell + 6-cell			Security chip	Trusted Platform Module, TCG 1.2-compliant					
	Non-MultiTouch	3.5 lb / 1.59kg	3.9 lb / 1.77kg			vPro (optional)	Intel vPro Technology					
	MultiTouch	3.9 lb / 1.76kg	4.2 lb / 1.94kg			Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor					
Case material	Display cover: Hybrid Carbon-fiber reinforced plastic; Bottom: Magnesium alloy					Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit					
Internal battery	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication						Win8 / 8.1 P64: Windows 8 / 8.1 64-bit					
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication						Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit					
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell	3-cell + 6-cell	47.5Wh	3-cell + 6-cell	72Wh	Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite					
	Battery life	8.4 hr	12.6 hr		16.8 hr							
AC adapter	45-watt AC adapter											
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack											

See footnotes for more detailed information

(STG1-1) © Lenovo

ThinkPad T440s 20AQ (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit keyboard	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AQ0071US	i5-4300U	vPro	HD 4400	4+0GB	14" FHD IPS	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	20/14
20AQ0074US	i5-4300U	vPro	HD 4400	4+0GB	14" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	20/14
20AQ004EUS	i5-4300U	vPro	HD 4400	4+0GB	14" FHD IPS	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AQ004FUS	i5-4300U	vPro	HD 4400	4+0GB	14" FHD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AQ004GUS	i5-4300U	vPro	HD 4400	4+0GB	14" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AQ006DUS	i5-4300U	vPro	HD 4400	4+0GB	14" FHD IPS	MT	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AQ006EUS	i5-4300U	vPro	HD 4400	4+0GB	14" FHD IPS	MT	240G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AQ0072US	i7-4600U	vPro	HD 4400	4+0GB	14" FHD IPS	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	20/14
20AQ0073US	i7-4600U	vPro	HD 4400	4+0GB	14" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	20/14
20AQ009JUS	i7-4600U	vPro	HD 4400	4+4GB	14" FHD IPS	MT	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	20/14
20AQ004HUS	i7-4600U	vPro	HD 4400	4+0GB	14" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AQ004JUS	i7-4600U	vPro	HD 4400	4+4GB	14" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AQ004KUS	i7-4600U	vPro	HD 4400	4+0GB	14" FHD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13

• For detailed platform specifications, please see [ThinkPad T440s Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor					Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch					
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	ThinkLight™	None				
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	Chipset	Intel SoC (System on Chip) platform				
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Smart card reader	Optional: Smart card reader				
	i7-4600U		2.1 GHz	3.3 GHz	4MB		Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket					Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector					
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory					WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card					
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					WWAN (optional)	Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS					
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio					SIM card (optional)	AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider					
Multi-touch	Some: Capacitive-type multi-touch, supports 10-finger gesture					Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville) Optional: Near Field Communication					
Graphics	Intel HD Graphics 4400 in processor					NFC	Optional: Near Field Communication					
Dimensions ³	14.0W" (WxDxH): 13.0" x 8.9" x 0.81; 331mm x 226mm x 20.65mm 14.0W" MultiTouch (WxDxH): 13.0" x 8.9" x 0.90; 331mm x 226mm x 22.94mm					Security	Power-on password, hard disk password, supervisor password, security keyhole					
Weight ²	Models	3-cell + 3-cell		3-cell + 6-cell		Security chip	Trusted Platform Module, TCG 1.2-compliant					
	Non-MultiTouch	3.5 lb / 1.59kg		3.9 lb / 1.77kg		vPro (optional)	Intel vPro Technology					
	MultiTouch	3.9 lb / 1.76kg		4.2 lb / 1.94kg		Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor					
Case material	Display cover: Hybrid Carbon-fiber reinforced plastic; Bottom: Magnesium alloy					Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit					
Internal battery	Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication						Win8 / 8.1 P64: Windows 8 / 8.1 64-bit					
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication						Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit					
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell		3-cell + 6-cell 47.5Wh		3-cell + 6-cell 72Wh						
	Battery life	8.4 hr		12.6 hr		16.8 hr						
AC adapter	45-watt AC adapter					Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite						
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack											

See footnotes for more detailed information

(STG1-2) © Lenovo



Lenovo® ThinkPad T450s



Lenovo ThinkPad T450s



Lenovo ThinkPad T450s



Lenovo ThinkPad T450s



Lenovo ThinkPad T450s

ThinkPad T450s Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i5 / i7 Processor								Smart card reader <i>Optional</i> : Smart card reader Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC) Ports Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)																								
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Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 1920x1200@60Hz (VGA)								Keyboard 6-row, spill-resistant, multimedia Fn keys, optional LED backlight UltraNav™ TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch																								
Chipset	Intel SoC (System on Chip) platform								Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, TCG 1.2-compliant ThinkEngine Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures																								
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket								vPro <i>(optional)</i> Intel vPro Technology Fingerprint reader <i>Optional</i> : Fingerprint reader on the keyboard bezel, swipe sensor																								
Display	<i>Some</i> : 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some</i> : 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS								Internal battery <i>Optional</i> : Integrated Li-Ion or Li-Polymer 3-cell (23Wh) External battery Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh) Max battery life ¹⁰																								
Multi-touch <i>(opt)</i>	Capacitive-type multi-touch, supports 10-finger gesture, 264 nits								<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 48Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td><i>Integrated</i></td> <td>10.16 hr</td> <td>14.9 hr</td> <td>19.9 hr</td> </tr> <tr> <td><i>Discrete</i></td> <td>10.5 hr</td> <td>15.4 hr</td> <td>20.6 hr</td> </tr> </tbody> </table>				Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	<i>Integrated</i>	10.16 hr	14.9 hr	19.9 hr	<i>Discrete</i>	10.5 hr	15.4 hr	20.6 hr									
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Storage	<i>Some</i> : SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some</i> : HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some</i> : SSHD with 8GB NAND flash memory								AC adapter 45W AC adapter, 65W Slim AC adapter, or 65W AC adapter																								
M.2 SSD <i>(opt)</i>	Single-sided M.2 SSD, via M.2 card slot								Preload Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center Lenovo SHAREit ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update PC Device Stage Evernote® Skype™ Maxthon Cloud Browser Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) 																								
Optical	None								<i>Some</i> : Windows 8.1 64-bit <i>Some</i> : Windows 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center Lenovo SHAREit Lenovo Companion ThinkVantage System Update PC Device Stage Weather Channel Evernote Maxthon Cloud Browser Bing Translator Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) 																								
Ethernet	<i>Non-vPro model</i> : Intel Ethernet Connection I218-V (Clarkville) <i>vPro model</i> : Intel Ethernet Connection I218-LM (Clarkville)								Limited warranty ¹² <i>One of the following, configurable by model</i> : <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 																								
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Environment EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant																								
WLAN ⁴	<i>One of the following, configurable by model</i> : <ul style="list-style-type: none"> 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card 								<table border="1"> <thead> <tr> <th>Models</th> <th>No + 3-cell</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell</th> </tr> </thead> <tbody> <tr> <td><i>Integrated Non-touch</i></td> <td>3.26 lb / 1.48 kg</td> <td>3.49 lb / 1.59 kg</td> <td>3.90 lb / 1.77 kg</td> </tr> <tr> <td><i>Integrated Multi-touch</i></td> <td>3.79 lb / 1.72 kg</td> <td>4.02 lb / 1.82 kg</td> <td>4.42 lb / 2.01 kg</td> </tr> <tr> <td><i>Discrete Non-touch</i></td> <td>3.27 lb / 1.48 kg</td> <td>3.51 lb / 1.59 kg</td> <td>3.91 lb / 1.77 kg</td> </tr> <tr> <td><i>Discrete Multi-touch</i></td> <td>3.80 lb / 1.72 kg</td> <td>4.03 lb / 1.83 kg</td> <td>4.43 lb / 2.01 kg</td> </tr> </tbody> </table>				Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell	<i>Integrated Non-touch</i>	3.26 lb / 1.48 kg	3.49 lb / 1.59 kg	3.90 lb / 1.77 kg	<i>Integrated Multi-touch</i>	3.79 lb / 1.72 kg	4.02 lb / 1.82 kg	4.42 lb / 2.01 kg	<i>Discrete Non-touch</i>	3.27 lb / 1.48 kg	3.51 lb / 1.59 kg	3.91 lb / 1.77 kg	<i>Discrete Multi-touch</i>	3.80 lb / 1.72 kg	4.03 lb / 1.83 kg	4.43 lb / 2.01 kg	
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WWAN <i>(optional)</i>	<i>One of the following, configurable by model</i> : <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card 								Case material <i>Display cover</i> : Carbon-Fiber Reinforced Plastic; <i>Bottom</i> : Magnesium/Aluminum																								
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ThinkPad T450s 20BX (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit keyboard	Fingerprint reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BX001PUS	i5-5200U	No	HD 5500	4+0GB 14" HD+	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	None	Finger	3+3	45W	Win8.1 DG Win7	1-depot	No	01/15	
20BX0015US	i5-5300U	vPro	HD 5500	4+0GB 14" HD+	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	None	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15	
20BX0016US	i5-5300U	vPro	HD 5500	4+4GB 14" HD+	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15	
20BX0017US	i5-5300U	vPro	HD 5500	4+4GB 14" HD+	No	128G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15	
20BX0018US	i5-5300U	vPro	HD 5500	4+4GB 14" FHD IPS	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15	
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20BX001AUS	i5-5300U	vPro	HD 5500	4+4GB 14" HD+	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15	
20BX001DUS	i5-5300U	vPro	HD 5500	4+4GB 14" HD+	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	None	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15	
20BX001EUS	i5-5300U	vPro	HD 5500	4+4GB 14" HD+	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15	
20BX001HUS	i5-5300U	vPro	HD 5500	4+0GB 14" HD+	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15	
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20BX001NUS	i5-5300U	vPro	HD 5500	4+0GB 14" HD+	No	128G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15	
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20BX001FUS	i7-5600U	vPro	HD 5500	4+4GB 14" FHD IPS	No	512G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15	
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• For detailed platform specifications, please see [ThinkPad T450s Platform Specifications sheet](#)

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Integrated Multi-touch	3.79 lb / 1.72 kg	4.02 lb / 1.82 kg	4.42 lb / 2.01 kg																																										
Discrete Non-touch	3.27 lb / 1.48 kg	3.51 lb / 1.59 kg	3.91 lb / 1.77 kg																																										
Discrete Multi-touch	3.80 lb / 1.72 kg	4.03 lb / 1.83 kg	4.43 lb / 2.01 kg																																										
Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory	Case material	Display cover: Carbon-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum																																										
Chipset	Intel SoC (System on Chip) platform	Smart card reader	Optional: Smart card reader																																										
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																																										
Display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS	Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)																																										
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 264 nits	Camera	HD720p resolution, low light sensitive, fixed focus																																										
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory	Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack																																										
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot	Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight																																										
Optical	None	UltraNav™	TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch																																										
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)	Security	Power-on password, hard disk password, supervisor password, security keyhole																																										
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	Security chip	Trusted Platform Module, TCG 1.2-compliant																																										
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card	vPro (optional)	Intel vPro Technology																																										
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card	Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor																																										
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider	Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)																																										
		External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)																																										
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		AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter																																										
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		Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS																																										

See footnotes for more detailed information

(STG2-1) © Lenovo

ThinkPad T450s 20BX (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered +DIMM)	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit keyboard	Fingerprint reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BX001GUS	i5-5300U	vPro	HD 5500	4+4GB	14" FHD IPS	MT	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-depot	No	01/15
20BX001MUS	i7-5600U	vPro	HD 5500	4+4GB	14" FHD IPS	MT	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 P64	3-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad T450s Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i5 / i7 Processor						Dimensions ³ 14.0" (WxDxH): 13.03" x 8.90" x 0.81"; 331mm x 226mm x 20.65mm 14.0" Touch (WxDxH): 13.03" x 8.90" x 0.90"; 331mm x 226mm x 22.94mm																			
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed																				
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600																				
	i5-5300U		2.3 GHz	2.9 GHz	3MB																					
i7-5600U	2.6 GHz		3.2 GHz	4MB																						
Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>No + 3-cell</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell</th> </tr> </thead> <tbody> <tr> <td>Integrated Non-touch</td> <td>3.26 lb / 1.48 kg</td> <td>3.49 lb / 1.59 kg</td> <td>3.90 lb / 1.77 kg</td> </tr> <tr> <td>Integrated Multi-touch</td> <td>3.79 lb / 1.72 kg</td> <td>4.02 lb / 1.82 kg</td> <td>4.42 lb / 2.01 kg</td> </tr> <tr> <td>Discrete Non-touch</td> <td>3.27 lb / 1.48 kg</td> <td>3.51 lb / 1.59 kg</td> <td>3.91 lb / 1.77 kg</td> </tr> <tr> <td>Discrete Multi-touch</td> <td>3.80 lb / 1.72 kg</td> <td>4.03 lb / 1.83 kg</td> <td>4.43 lb / 2.01 kg</td> </tr> </tbody> </table>						Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell	Integrated Non-touch	3.26 lb / 1.48 kg	3.49 lb / 1.59 kg	3.90 lb / 1.77 kg	Integrated Multi-touch	3.79 lb / 1.72 kg	4.02 lb / 1.82 kg	4.42 lb / 2.01 kg	Discrete Non-touch	3.27 lb / 1.48 kg	3.51 lb / 1.59 kg	3.91 lb / 1.77 kg	Discrete Multi-touch	3.80 lb / 1.72 kg	4.03 lb / 1.83 kg	4.43 lb / 2.01 kg
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Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory						Case material	Display cover: Carbon-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum																		
Chipset	Intel SoC (System on Chip) platform						Smart card reader	Optional: Smart card reader																		
Memory	12GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, 4GB memory soldered to systemboard, one 204-pin SO-DIMM socket						Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																		
Display	Some: 14.0" (355mm) HD+ (1600x900), 250 nits, 400:1 contrast ratio Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 700:1 contrast ratio, IPS						Ports	Three USB 3.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector (integrated models only)																		
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 264 nits						Camera	HD720p resolution, low light sensitive, fixed focus																		
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory						Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack																		
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot						Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight																		
Optical	None						UltraNav™	TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch																		
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)						Security	Power-on password, hard disk password, supervisor password, security keyhole																		
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Security chip	Trusted Platform Module, TCG 1.2-compliant																		
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card						vPro (optional)	Intel vPro Technology																		
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card						Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor																		
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider						Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)																		
							External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)																		
							Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 48Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Integrated</td> <td>10.16 hr</td> <td>14.9 hr</td> <td>19.9 hr</td> </tr> <tr> <td>Discrete</td> <td>10.5 hr</td> <td>15.4 hr</td> <td>20.6 hr</td> </tr> </tbody> </table>	Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	Integrated	10.16 hr	14.9 hr	19.9 hr	Discrete	10.5 hr	15.4 hr	20.6 hr						
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							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit																		
							Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS																		

See footnotes for more detailed information

(STG2-2) © Lenovo



Lenovo® ThinkPad T540p



Lenovo ThinkPad T540p



Lenovo ThinkPad T540p



Lenovo ThinkPad T540p



Lenovo ThinkPad T540p

ThinkPad T540p Platform Specifications

Product Specifications Reference (PSREF)

Positioning	<i>Premiere performance; two spindles</i>								Chipset	Mobile Intel QM87 Express Chipset	
Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor								ExpressCard	One slot (ExpressCard/34)	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Smart card reader	<i>Optional:</i> Smart card reader	
	i3-4000M	2	4	2.4 GHz	-	3MB	DDR3L-1600	Intel HD Graphics 4600	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
	i3-4100M			2.5 GHz	-	3MB			Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector	
	i5-4200M			2.5 GHz	3.1 GHz	3MB			WLAN ⁴	<i>One of the following, configurable by model:</i>	
	i5-4210M			2.6 GHz	3.2 GHz	3MB			<ul style="list-style-type: none"> ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card 		
	i5-4300M			2.6 GHz	3.3 GHz	3MB			WWAN (<i>optional</i>)	<i>One of the following, configurable by model (mutually exclusive with M.2 SSD):</i>	
	i5-4330M	2.8 GHz	3.5 GHz	3MB	<ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models) 						
	i7-4600M	2.9 GHz	3.6 GHz	4MB							
	i7-4700MQ	2.4 GHz	3.4 GHz	6MB							
	i7-4710MQ	2.5 GHz	3.5 GHz	6MB							
	i7-4800MQ	2.7 GHz	3.7 GHz	6MB							
	i7-4900MQ	2.8 GHz	3.8 GHz	8MB							
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								SIM card (<i>optional</i>)	<i>One of the following, configurable by model:</i>	
Optical Ultrabay	DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high, bottom access								<ul style="list-style-type: none"> AT&T® or Verizon® LTE (4G), contract required with service provider (US models) Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models) User selectable, contract required with service provider 		
Storage	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive (HDD) / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™								Security chip	Power-on password, hard disk password, supervisor password, security keyhole	
M.2 SSD	<i>All:</i> removable, upgradable, supports the second disk, Shock Mounted <i>Some:</i> M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card								vPro (<i>optional</i>)	Trusted Platform Module, TCG 1.2-compliant	
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some:</i> 15.6" (396mm) FHD (1920x1080) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.5" (394mm) 3K (2880x1620) , anti-glare, LED backlight, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, IPS								Fingerprint reader	<i>Optional:</i> Fingerprint reader on the palm rest, swipe sensor	
Camera (<i>optional</i>)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus								Limited warranty ¹²	<i>One of the following, configurable by model:</i>	
Graphics	Intel HD Graphics 4600 in processor only, or Intel HD Graphics 4600 in processor and NVIDIA GeForce® GT 730M , PCI Express® x8, 1GB memory, NVIDIA® Optimus™ technology; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; <i>Max resolution:</i> 1920x1200@60Hz (VGA); 3840x2160@60Hz (DP via mDP cable)								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit	<i>Some:</i> Windows 8 / 8.1 64-bit
Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch								<ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update Lenovo Cloud Storage by SugarSync PC Device Stage Adobe® Reader® Nitro Pro Evernote® Skype™ Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) Cyberlink PowerDVD (DVD±RW) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) 	<ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support Lenovo Companion ThinkVantage System Update Lenovo Reach (Windows 8.1 model) Hightail - Metro (Windows 8.1 model) Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model) Lenovo Cloud Storage by SugarSync (Windows 8 model) PC Device Stage AccuWeather Amazon Kindle Nitro Pro Evernote Skype Rara Streaming Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) Cyberlink PowerDVD (DVD±RW) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) 	
ThinkLight™	None										
Dimensions ³	<i>HD (WxDxH):</i> 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm <i>FHD / 3K:</i> 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm										
Weight ²	<i>Models</i>	<i>6-cell</i>		<i>9-cell</i>							
	<i>Integrated</i>	5.31 lb / 2.41kg		5.65 lb / 2.56kg							
	<i>Optimus</i>	5.43 lb / 2.46kg		5.80 lb / 2.63kg							
Case material	Glass-Fiber Reinforced Plastic										
Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication										
Max battery life ¹⁰	<i>Models</i>	<i>6-cell</i>		<i>9-cell</i>							
	<i>Integrated</i>	7 hr		12.5 hr							
	<i>Optimus</i>	6.2 hr		11 hr							
AC adapter	65-watt, 90-watt, or 135-watt AC adapter										
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack										
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Environment	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant	
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)										
NFC	<i>Optional:</i> Near Field Communication										

ThinkPad T540p 20BE (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Backlit keyboard	Fingerprint reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BE003AUS	i5-4200M	No	HD 4600	4GBx1	15.6" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/34	720p	None	None	None	6	65W	Win8 DG Win7	1-depot	No	10/13
20BE003CUS	i5-4300M	No	HD 4600	4GBx1	15.6" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/34	720p	None	None	None	6	65W	Win8 DG Win7	1-depot	No	10/13
20BE003DUS	i5-4300M	No	HD 4600	4GBx1	15.6" HD	500G 7200	7260 b/g/n+BT	Upg	None	None	Exp/34	720p	None	None	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20BE003EUS	i5-4300M	vPro	HD 4600	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	None	None	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20BE003FUS	i5-4300M	vPro	HD 4600	4GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20BE003GUS	i5-4300M	vPro	HD 4600	4GBx1	15.6" HD	180G SSD Opal	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20BE003HUS	i5-4300M	vPro	HD 4600	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20BE003JUS	i5-4300M	vPro	HD 4600	4GBx1	15.6" FHD	180G SSD Opal	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20BE003KUS	i5-4300M	vPro	HD 4600	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	6	65W	Win8 DG Win7	3-depot	No	10/13
20BE004EUS	i5-4300M	vPro	HD 4600	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-depot	No	11/13
20BE0095US	i5-4300M	vPro	HD 4600	8GBx1	15.6" HD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	6	65W	Win8 DG Win7	3-depot	No	03/14

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Audio support		HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack													
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard		6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight													
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600	UltraNav™		TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch													
	i5-4200M		2.5 GHz	3.1 GHz	3MB		ThinkLight™		None													
	i5-4300M		2.6 GHz	3.3 GHz	3MB		Chipset		Mobile Intel QM87 Express Chipset													
	i5-4330M		2.8 GHz	3.5 GHz	3MB		ExpressCard		One slot (ExpressCard/34)													
	i7-4600M	4	2.9 GHz	3.6 GHz	4MB		Smart card reader		Optional: Smart card reader													
	i7-4700MQ		2.4 GHz	3.4 GHz	6MB		Multicard reader		4-in-1 reader (MMC, SD, SDHC, SDXC)													
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB		Ports		Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector													
	i7-4900MQ		2.8 GHz	3.8 GHz	8MB		WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card													
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WWAN (optional)		Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS													
Optical	DVD burner, 9.5mm Ultrabay slim, removable						SIM card (optional)		AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider													
Ultrabay Storage	One modular bay for removable devices (right side, cold swap), 9.5mm high <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS <i>Some:</i> M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						Bluetooth™		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter													
M.2 SSD							Ethernet		Intel Ethernet Connection I217-LM (Clarkville)													
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) , 220 nits, 400:1 contrast ratio <i>Some:</i> 15.6" (396mm) FHD (1920x1080) , 300 nits, 500:1 contrast ratio <i>Some:</i> 15.5" (394mm) 3K (2880x1620) , 350 nits, 1000:1 contrast ratio, IPS						NFC		Optional: Near Field Communication													
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Security		Power-on password, hard disk password, supervisor password, security keyhole													
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M , 1GB memory (Optimus)						Security chip		Trusted Platform Module, TCG 1.2-compliant													
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm						vPro (optional)		Intel vPro Technology													
Weight ²	Models	6-cell		9-cell		Fingerprint reader		Optional: Fingerprint reader on the palm rest, swipe sensor														
	Integrated	5.31 lb / 2.41kg		5.65 lb / 2.56kg		Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit														
	Optimus	5.43 lb / 2.46kg		5.80 lb / 2.63kg		Limited warranty ¹²		1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite														
Case material	Glass-Fiber Reinforced Plastic						AC adapter		65-watt, 90-watt, or 135-watt AC adapter													
Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication																					
Max battery life ¹⁰	Models	6-cell		9-cell																		
	Integrated	7 hr		12.5 hr																		
	Optimus	6.2 hr		11 hr																		

See footnotes for more detailed information

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ThinkPad T540p 20BE (Optimus) - TopSeller

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Express-Card	Camera	Backlit key-board	Finger-print reader	NFC	Bat-tery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)	
20BE00BPUS	i7-4600M	vPro	GT 730M	8GBx1	15.6" FHD	512G SSD	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	90W	Win8.1 DG	Win7	3-depot	No	10/14
20BE003LUS	i5-4300M	vPro	GT 730M	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 DG	Win7	3-depot	No	10/13
20BE003MUS	i5-4300M	vPro	GT 730M	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	None	Finger	None	9	90W	Win8 DG	Win7	3-depot	No	10/13
20BE003NUS	i7-4600M	vPro	GT 730M	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	90W	Win8 DG	Win7	3-depot	No	10/13
20BE003PUS	i7-4600M	vPro	GT 730M	4GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	90W	Win8 DG	Win7	3-depot	No	10/13
20BE003QUS	i7-4600M	vPro	GT 730M	4GBx1	15.6" FHD	180G SSD Opal	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	90W	Win8 DG	Win7	3-depot	No	10/13
20BE003RUS	i7-4600M	vPro	GT 730M	4GBx1	15.5" 3K IPS	180G SSD Opal	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	90W	Win8 DG	Win7	3-depot	No	10/13
20BE003SUS	i7-4600M	vPro	GT 730M	4GBx1	15.5" 3K IPS	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	90W	Win8 DG	Win7	3-depot	No	10/13
20BE004FUS	i5-4300M	vPro	GT 730M	4GBx1	15.6" FHD	500G 7200	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	90W	Win8 DG	Win7	3-depot	No	11/13
20BE004GUS	i7-4600M	vPro	GT 730M	4GBx2	15.6" FHD	180G SSD Opal	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	90W	Win8 DG	Win7	3-depot	No	11/13
20BE007YUS	i7-4600M	vPro	GT 730M	8GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	90W	Win8 DG	Win7	3-depot	No	01/14
20BE0085US	i7-4600M	vPro	GT 730M	8GBx1	15.6" FHD	240G SSD Opal	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	90W	Win8 DG	Win7	3-depot	No	01/14
20BE0096US	i7-4700MQ	No	GT 730M	8GBx1	15.6" FHD	256G SSD eDrive	7260 ac+BT	Upg	None	None	Exp/34	720p	Backlit	Finger	None	9	135W	Win8 DG	Win7	3-depot	No	03/14

• For detailed platform specifications, please see [ThinkPad T540p Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor						Audio support		HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack													
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard		6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight													
	i3-4000M	2	2.4 GHz	-	3MB	DDR3L-1600	UltraNav™		TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch													
	i5-4200M		2.5 GHz	3.1 GHz	3MB		ThinkLight™		None													
	i5-4300M		2.6 GHz	3.3 GHz	3MB		Chipset		Mobile Intel QM87 Express Chipset													
	i5-4330M		2.8 GHz	3.5 GHz	3MB		ExpressCard		One slot (ExpressCard/34)													
	i7-4600M		2.9 GHz	3.6 GHz	4MB		Smart card reader		Optional: Smart card reader													
	i7-4700MQ	4	2.4 GHz	3.4 GHz	6MB		Multicard reader		4-in-1 reader (MMC, SD, SDHC, SDXC)													
	i7-4800MQ		2.7 GHz	3.7 GHz	6MB		Ports		Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort, Ethernet (RJ-45), Dock connector													
	i7-4900MQ		2.8 GHz	3.8 GHz	8MB	WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card														
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets						WWAN (optional)		Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS													
Optical	DVD burner, 9.5mm Ultrabay slim, removable						SIM card (optional)		AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider													
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						Bluetooth™		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter													
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						Ethernet		Intel Ethernet Connection I217-LM (Clarkville)													
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						NFC		Optional: Near Field Communication													
Widescreen display	Some: 15.6" (396mm) HD (1366x768) , 220 nits, 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080) , 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620) , 350 nits, 1000:1 contrast ratio, IPS						Security		Power-on password, hard disk password, supervisor password, security keyhole													
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus						Security chip		Trusted Platform Module, TCG 1.2-compliant													
Graphics	Intel HD Graphics 4600 in processor, or Intel HD Graphics 4600 and NVIDIA GeForce® GT 730M , 1GB memory (Optimus)						vPro (optional)		Intel vPro Technology													
Dimensions ³	HD (WxDxH): 14.83" x 9.77" x 1.18-1.33"; 376.6mm x 248.1mm x 29.9-33.9mm FHD / 3K: 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm						Fingerprint reader		Optional: Fingerprint reader on the palm rest, swipe sensor													
Weight ²	Models	6-cell		9-cell		Preload		Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit														
	Integrated	5.31 lb / 2.41kg		5.65 lb / 2.56kg		Limited warranty ¹²		1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite														
	Optimus	5.43 lb / 2.46kg		5.80 lb / 2.63kg																		
Case material	Glass-Fiber Reinforced Plastic						AC adapter		65-watt, 90-watt, or 135-watt AC adapter													
Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication																					
Max battery life ¹⁰	Models	6-cell		9-cell																		
	Integrated	7 hr		12.5 hr																		
	Optimus	6.2 hr		11 hr																		

See footnotes for more detailed information

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Lenovo® ThinkPad T550



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Lenovo ThinkPad T550

ThinkPad T550 Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i5 / i7 Processor								Smart card reader <i>Optional</i> : Smart card reader											
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)										
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB	DDR3L-1600	Intel HD Graphics 5500	Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector										
	i5-5300U			2.3 GHz	2.9 GHz	3MB														
	i7-5600U			2.6 GHz	3.2 GHz	4MB														
Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 2560x1600@60Hz (VGA)								Camera <i>(optional)</i> HD720p resolution, low light sensitive, fixed focus											
Chipset	Intel SoC (System on Chip) platform								Audio support											
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack											
Display	<i>Some</i> : 15.6" (396mm) HD (1366x768), anti-glare, LED backlight, 200 or 220 nits, 16:9 aspect ratio, 350:1 or 400:1 contrast ratio								Keyboard											
	<i>Some</i> : 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 or 500:1 contrast ratio								UltraNav™											
	<i>Some</i> : 15.5" (394mm) 3K (2880x1620), anti-glare, LED backlight, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, IPS								Security											
Multi-touch <i>(opt)</i>	Capacitive-type multi-touch, supports 10-finger gesture, 315 nits								Security chip											
Storage	<i>Some</i> : SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable								ThinkEngine											
	<i>Some</i> : HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™								vPro <i>(optional)</i>											
M.2 SSD <i>(opt)</i>	<i>Some</i> : SSHD with 8GB NAND flash memory								Fingerprint reader											
Optical	Single-sided M.2 SSD, via M.2 card slot								Internal battery											
Ethernet	<i>Non-vPro model</i> : Intel Ethernet Connection I218-V (Clarkville)								External battery											
	<i>vPro model</i> : Intel Ethernet Connection I218-LM (Clarkville)								Li-lon or Li-Polymer 3-cell (23Wh) or Li-lon 6-cell (48Wh or 72Wh)											
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Max battery life ¹⁰											
WLAN ⁴	<i>One of the following, configurable by model:</i>								<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 48Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Battery life</td> <td>14.8 hr</td> <td>20 hr</td> <td>25.2 hr</td> </tr> </tbody> </table>				Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	Battery life	14.8 hr	20 hr	25.2 hr
Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh																	
Battery life	14.8 hr	20 hr	25.2 hr																	
	<ul style="list-style-type: none"> 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card 								AC adapter											
WWAN <i>(optional)</i>	<i>One of the following, configurable by model:</i>								Preload											
	<ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card 								<ul style="list-style-type: none"> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Lenovo Solution Center Lenovo SHAREit Lenovo Companion ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update PC Device Stage Adobe® Reader® Evernote® Skype™ Maxthon Cloud Browser Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) 											
SIM card <i>(opt)</i>	AT&T® or Verizon® LTE (4G), contract required with service provider								Limited warranty ¹²											
Dimensions ³	15.6" (WxDxH): 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm								<i>One of the following, configurable by model:</i>											
Weight ²	15.6" Touch (WxDxH): 14.98" x 10.17" x 0.92"; 380.6mm x 258.2mm x 23.30mm								<ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 											
	Models	No + 6-cell	3-cell + 3-cell	3-cell + 6-cell					Environment											
	Integrated Non-touch	4.93 lb / 2.23 kg	4.70 lb / 2.13 kg	5.04 lb / 2.29 kg					EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant											
	Integrated Multi-touch	-	5.01 lb / 2.27 kg	5.35 lb / 2.43 kg																
	Discrete Non-touch	5.01 lb / 2.27 kg	4.78 lb / 2.17 kg	5.12 lb / 2.32 kg																
	Discrete Multi-touch	-	5.09 lb / 2.31 kg	5.43 lb / 2.46 kg																
Case material	<i>Display cover</i> : Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model);																			
	<i>Bottom</i> : Glass-Fiber Reinforced Plastic																			

ThinkPad T550 20CK (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit keyboard	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20CK000GUS	i5-5200U	No	HD 5500	4GBx1	15.6" HD	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	None	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CK000BUS	i5-5300U	vPro	HD 5500	8GBx1	15.6" FHD	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CK000CUS	i5-5300U	vPro	HD 5500	4GBx1	15.6" HD	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CK000FUS	i5-5300U	vPro	HD 5500	4GBx1	15.6" HD	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CK000HUS	i5-5300U	vPro	HD 5500	4GBx1	15.6" HD	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CK000KUS	i5-5300U	vPro	HD 5500	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CK000LUS	i5-5300U	vPro	HD 5500	8GBx1	15.6" HD	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CK000MUS	i5-5300U	vPro	HD 5500	4GBx1	15.6" FHD	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CK000DUS	i7-5600U	vPro	HD 5500	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CK000EUS	i7-5600U	vPro	HD 5500	4GBx1	15.6" HD	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CK000JUS	i7-5600U	vPro	HD 5500	8GBx1	15.6" FHD	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad T550 Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i5 / i7 Processor					Dimensions ³	15.6" (WxDxH): 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm 15.6" Touch (WxDxH): 14.98" x 10.17" x 0.92"; 380.6mm x 258.2mm x 23.30mm																							
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>No + 6-cell</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell</th> </tr> </thead> <tbody> <tr> <td>Integrated Non-touch</td> <td>4.93 lb / 2.23 kg</td> <td>4.70 lb / 2.13 kg</td> <td>5.04 lb / 2.29 kg</td> </tr> <tr> <td>Integrated Multi-touch</td> <td>-</td> <td>5.01 lb / 2.27 kg</td> <td>5.35 lb / 2.43 kg</td> </tr> <tr> <td>Discrete Non-touch</td> <td>5.01 lb / 2.27 kg</td> <td>4.78 lb / 2.17 kg</td> <td>5.12 lb / 2.32 kg</td> </tr> <tr> <td>Discrete Multi-touch</td> <td>-</td> <td>5.09 lb / 2.31 kg</td> <td>5.43 lb / 2.46 kg</td> </tr> </tbody> </table>			Models	No + 6-cell	3-cell + 3-cell	3-cell + 6-cell	Integrated Non-touch	4.93 lb / 2.23 kg	4.70 lb / 2.13 kg	5.04 lb / 2.29 kg	Integrated Multi-touch	-	5.01 lb / 2.27 kg	5.35 lb / 2.43 kg	Discrete Non-touch	5.01 lb / 2.27 kg	4.78 lb / 2.17 kg	5.12 lb / 2.32 kg	Discrete Multi-touch	-	5.09 lb / 2.31 kg	5.43 lb / 2.46 kg
Models	No + 6-cell	3-cell + 3-cell	3-cell + 6-cell																											
Integrated Non-touch	4.93 lb / 2.23 kg	4.70 lb / 2.13 kg	5.04 lb / 2.29 kg																											
Integrated Multi-touch	-	5.01 lb / 2.27 kg	5.35 lb / 2.43 kg																											
Discrete Non-touch	5.01 lb / 2.27 kg	4.78 lb / 2.17 kg	5.12 lb / 2.32 kg																											
Discrete Multi-touch	-	5.09 lb / 2.31 kg	5.43 lb / 2.46 kg																											
Graphics	Intel HD Graphics 5500 in processor only, or Intel HD Graphics 5500 in processor and NVIDIA GeForce® 940M, 1GB memory					Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic																							
Chipset Memory	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets					Smart card reader	Optional: Smart card reader																							
Display	Some: 15.6" (396mm) HD (1366x768), 200 / 220 nits, 350:1 / 400:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 400:1 or 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																							
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 315 nits					Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector																							
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, APS Some: SSHD with 8GB NAND flash memory					Camera (optional)	HD720p resolution, low light sensitive, fixed focus																							
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot					Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack																							
Optical	None					Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight																							
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)					UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch																							
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					Security	Power-on password, hard disk password, supervisor password, security keyhole																							
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card					Security chip	Trusted Platform Module, TCG 1.2-compliant																							
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card					vPro (optional)	Intel vPro Technology																							
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider					Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor																							
						Internal battery	Optional: Integrated Li-Polymer 3-cell (44Wh)																							
						External battery	Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)																							
						Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 48Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Battery life</td> <td>14.8 hr</td> <td>20 hr</td> <td>25.2 hr</td> </tr> </tbody> </table>			Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	Battery life	14.8 hr	20 hr	25.2 hr													
Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh																											
Battery life	14.8 hr	20 hr	25.2 hr																											
						AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter																							
						Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit																							
						Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS																							

See footnotes for more detailed information

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Lenovo® ThinkPad W540



Lenovo ThinkPad W540



Lenovo ThinkPad W540



Lenovo ThinkPad W540



Lenovo ThinkPad W540

ThinkPad W540 Platform Specifications

Product Specifications Reference (PSREF)

Positioning	<i>Mobile workstation; two spindles</i>								Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor								WLAN ⁴	One of the following, configurable by model:	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics		<ul style="list-style-type: none"> • ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card • Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card • Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card • Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card 	
	i5-4200M	2	4	2.5 GHz	3.1 GHz	3MB	DDR3L-1600	Intel HD Graphics 4600			
	i5-4210M			2.6 GHz	3.2 GHz	3MB					
	i5-4330M			2.8 GHz	3.5 GHz	3MB					
	i7-4600M			2.9 GHz	3.6 GHz	4MB					
	i7-4700MQ	4	8	2.4 GHz	3.4 GHz	6MB					
	i7-4710MQ			2.5 GHz	3.5 GHz	6MB					
	i7-4800MQ			2.7 GHz	3.7 GHz	6MB					
	i7-4810MQ			2.8 GHz	3.8 GHz	6MB					
i7-4900MQ	2.8 GHz			3.8 GHz	8MB						
i7-4910MQ	2.9 GHz			3.9 GHz	8MB						
i7-4930MX	3 GHz	3.9 GHz	8MB								
Memory	<i>dual-core model:</i> 16GB max ⁷ , two 204-pin SO-DIMM sockets <i>quad-core model:</i> 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support <i>All:</i> PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable								SIM card (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> • AT&T® or Verizon® LTE (4G), contract required with service provider (US models) • Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models) • User selectable, contract required with service provider 	
Optical (optional)	DVD burner, 9.5mm Ultrabay slim, removable								Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high, bottom access								Ethernet	Intel Ethernet Connection I217-LM (Clarkville)	
Storage	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high								NFC	<i>Optional:</i> Near Field Communication	
	<i>Some:</i> Hard Disk Drive (HDD) / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Active Protection System™								Security chip	Power-on password, hard disk password, supervisor password, security keyhole	
M.2 SSD	<i>All:</i> removable, upgradable, supports the second disk, Shock Mounted								vPro (optional)	Trusted Platform Module, TCG 1.2-compliant	
	<i>Some:</i> M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card								Fingerprint reader	<i>Optional:</i> Fingerprint reader on the palm rest, swipe sensor	
Widescreen display	<i>Some:</i> 15.6" (396mm) FHD (1920x1080) , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio								Limited warranty ¹² <i>One of the following, configurable by model:</i>		
Multi-touch	<i>Some:</i> 15.5" (394mm) 3K (2880x1620) , anti-glare, LED backlight, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, IPS								<ul style="list-style-type: none"> • 1-year depot repair service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service²⁴ • 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 		
	Color calibration	<i>None</i>								Preload	Windows® 7 Professional 64
Camera (optional)	<i>Optional:</i> Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator								preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit		
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M , PCI Express® x16, 2GB memory, supports external analog monitor via VGA and digital monitor via Mini DisplayPort / Thunderbolt™; supports three independent displays;								<ul style="list-style-type: none"> • Lenovo Solution Center • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • Lenovo Cloud Storage by SugarSync • PC Device Stage • Adobe® Reader® • Nitro Pro • Evernote® • Skype™ • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) • Cyberlink PowerDVD (DVD±RW) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 		
	Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch								<ul style="list-style-type: none"> • Lenovo Solution Center • ThinkVantage System Update • Lenovo Reach (Windows 8.1 model) • Hightail - Metro (Windows 8.1 model) • Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model) • Lenovo Cloud Storage by SugarSync (Windows 8 model) • PC Device Stage • AccuWeather • Amazon Kindle • Nitro Pro • Evernote • Skype • Rara Streaming • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions) • Cyberlink PowerDVD (DVD±RW) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 	
ThinkLight™	<i>None</i>								<ul style="list-style-type: none"> • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions) • Cyberlink PowerDVD (DVD±RW) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) 		
Dimensions ³	15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm								<p><i>For ISV certifications, please visit www.lenovo.com/support/ISV</i></p>		
Weight ²	6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg)								Environment		EPEAT™ Gold; ENERGY STAR® 6.0; RoHS-compliant
Case material	Glass-Fiber Reinforced Plastic										
Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication										
Max battery life ¹⁰	6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr										
AC adapter	<i>dual-core:</i> 135-watt AC adapter; <i>quad-core:</i> 170-watt AC adapter										
Chipset	Mobile Intel QM87 Express Chipset										
ExpressCard	One slot (ExpressCard/34)										
Smart card reader	<i>Optional:</i> Smart card reader										
Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card										
Ports	Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector										

ThinkPad W540 20BG (Optimus) - TopSeller

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	RAID	Optical	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Color cali-brator	Bat-tery adapter (watt)	Power	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20BG0010US	i7-4700MQ	No	K1100M	4GBx2	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 DG Win7	3-depot	No	11/13
20BG0011US	i7-4700MQ	No	K1100M	4GBx2	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 DG Win7	3-depot	No	11/13
20BG0012US	i7-4800MQ vPro		K1100M	4GBx2	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 DG Win7	3-depot	No	11/13
20BG0013US	i7-4800MQ vPro		K1100M	4GBx2	15.6" FHD	180G SSD Opal	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 DG Win7	3-depot	No	11/13
20BG0014US	i7-4800MQ vPro		K1100M	4GBx2	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 DG Win7	3-depot	No	11/13
20BG001YUS	i7-4700MQ	No	K1100M	8GBx1	15.6" FHD	240G SSD Opal	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 DG Win7	3-depot	No	11/13
20BG0020US	i7-4800MQ vPro		K1100M	8GBx1	15.6" FHD	240G SSD Opal	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 DG Win7	3-depot	No	11/13
20BG0022US	i7-4800MQ vPro		K1100M	8GBx1	15.5" 3K IPS	240G SSD Opal	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 DG Win7	3-depot	No	11/13
20BG004HUS	i7-4800MQ vPro		K1100M	4GBx2	15.6" FHD	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 DG Win7	3-depot	No	07/14
20BG0015US	i7-4800MQ vPro		K2100M	4GBx2	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 DG Win7	3-depot	No	11/13
20BG0016US	i7-4800MQ vPro		K2100M	8GBx1	15.5" 3K IPS	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8 DG Win7	3-depot	No	11/13
20BG0017US	i7-4800MQ vPro		K2100M	8GBx1	15.5" 3K IPS	180G SSD Opal	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8 DG Win7	3-depot	No	11/13
20BG0021US	i7-4800MQ vPro		K2100M	8GBx1	15.6" FHD	240G SSD Opal	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8 DG Win7	3-depot	No	11/13
20BG004GUS	i7-4800MQ vPro		K2100M	8GBx1	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8 DG Win7	3-depot	No	07/14

• For detailed platform specifications, please see [ThinkPad W540 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor	Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack																																				
	<table border="1"> <thead> <tr> <th>Processor</th> <th># of Cores</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Speed</th> </tr> </thead> <tbody> <tr> <td>i5-4200M</td> <td rowspan="3">2</td> <td>2.5 GHz</td> <td>3.1 GHz</td> <td>3MB</td> <td rowspan="6">DDR3L-1600</td> </tr> <tr> <td>i5-4330M</td> <td>2.8 GHz</td> <td>3.5 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-4600M</td> <td>2.9 GHz</td> <td>3.6 GHz</td> <td>4MB</td> </tr> <tr> <td>i7-4700MQ</td> <td rowspan="4">4</td> <td>2.4 GHz</td> <td>3.4 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4800MQ</td> <td>2.7 GHz</td> <td>3.7 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4900MQ</td> <td>2.8 GHz</td> <td>3.8 GHz</td> <td>8MB</td> </tr> <tr> <td>i7-4930MX</td> <td>3 GHz</td> <td>3.9 GHz</td> <td>8MB</td> </tr> </tbody> </table>	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	i5-4200M	2	2.5 GHz	3.1 GHz	3MB	DDR3L-1600	i5-4330M	2.8 GHz	3.5 GHz	3MB	i7-4600M	2.9 GHz	3.6 GHz	4MB	i7-4700MQ	4	2.4 GHz	3.4 GHz	6MB	i7-4800MQ	2.7 GHz	3.7 GHz	6MB	i7-4900MQ	2.8 GHz	3.8 GHz	8MB	i7-4930MX	3 GHz	3.9 GHz	8MB	Keyboard UltraNav™ TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch ThinkLight™ None
Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed																																		
i5-4200M	2	2.5 GHz	3.1 GHz	3MB	DDR3L-1600																																		
i5-4330M		2.8 GHz	3.5 GHz	3MB																																			
i7-4600M		2.9 GHz	3.6 GHz	4MB																																			
i7-4700MQ	4	2.4 GHz	3.4 GHz	6MB																																			
i7-4800MQ		2.7 GHz	3.7 GHz	6MB																																			
i7-4900MQ		2.8 GHz	3.8 GHz	8MB																																			
i7-4930MX		3 GHz	3.9 GHz	8MB																																			
Memory	<i>dual-core model:</i> 16GB max ⁷ , two 204-pin SO-DIMM sockets <i>quad-core model:</i> 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support <i>All:</i> PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable	Chipset Mobile Intel QM87 Express Chipset ExpressCard One slot (ExpressCard/34) Smart card reader <i>Optional:</i> Smart card reader Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card Ports Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector																																					
Optical	<i>Some:</i> DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS <i>Some:</i> M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card	WLAN ⁴ <i>11b/g/n+BT:</i> ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card <i>7260 b/g/n+BT:</i> Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 a/b/g/n+BT:</i> Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 ac+BT:</i> Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card																																					
M.2 SSD		WWAN (optional) <i>Upg:</i> Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+ / EVDO / GSM / GPRS / EDGE, GPS																																					
Widescreen display	<i>Some:</i> 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio <i>Some:</i> 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS	SIM card (optional) <i>AT&T / Verizon:</i> AT&T® / Verizon® LTE (4G), contract required with service provider <i>Select:</i> User selectable, contract required with service provider																																					
Multi-touch	None	Bluetooth™ Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter Ethernet Intel Ethernet Connection I217-LM (Clarkville) NFC Optional: Near Field Communication																																					
Color calibration	<i>Optional:</i> Pantone® color calibrator by X-Rite® color calibration sensor in palm rest	Security Security chip Trusted Platform Module, TCG 1.2-compliant vPro (optional) Intel vPro Technology Fingerprint reader Optional: Fingerprint reader on the palm rest, swipe sensor																																					
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus																																						
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4600 in processor, and NVIDIA Quadro® K1100M or K2100M , PCI Express® x16, 2GB memory																																						
Dimensions ³	15.6W" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm	Preload <i>Win8 / 8.1 DG Win7:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit <i>Win8 / 8.1 64:</i> Windows 8 / 8.1 64-bit <i>Win8 / 8.1 P64:</i> Windows 8 / 8.1 Pro 64-bit																																					
Weight ²	6-cell: starting at 5.57 lb (2.53kg); 9-cell: starting at 5.95 lb (2.70kg)																																						
Case material	Glass-Fiber Reinforced Plastic																																						
Battery type	Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication																																						
Max battery life ¹⁰	6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr																																						
AC adapter	dual-core: 135-watt AC adapter; quad-core: 170-watt AC adapter																																						
		Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite																																					

See footnotes for more detailed information

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Lenovo® ThinkPad W541



Lenovo ThinkPad W541



Lenovo ThinkPad W541



Lenovo ThinkPad W541



Lenovo ThinkPad W541

ThinkPad W541 Platform Specifications

Product Specifications Reference (PSREF)

Processor	<p>4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor</p> <table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Speed</th> <th>Processor Graphics</th> </tr> </thead> <tbody> <tr> <td>i5-4210M</td> <td rowspan="3">2</td> <td rowspan="3">4</td> <td>2.6 GHz</td> <td>3.2 GHz</td> <td>3MB</td> <td rowspan="8">DDR3L-1600</td> <td rowspan="8">Intel HD Graphics 4600</td> </tr> <tr> <td>i5-4340M</td> <td>2.9 GHz</td> <td>3.6 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-4600M</td> <td>2.9 GHz</td> <td>3.6 GHz</td> <td>4MB</td> </tr> <tr> <td>i7-4710MQ</td> <td rowspan="4">4</td> <td rowspan="4">8</td> <td>2.5 GHz</td> <td>3.5 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4810MQ</td> <td>2.8 GHz</td> <td>3.8 GHz</td> <td>6MB</td> </tr> <tr> <td>i7-4910MQ</td> <td>2.9 GHz</td> <td>3.9 GHz</td> <td>8MB</td> </tr> <tr> <td>i7-4940MX</td> <td>3.1 GHz</td> <td>4 GHz</td> <td>8MB</td> </tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	i5-4210M	2	4	2.6 GHz	3.2 GHz	3MB	DDR3L-1600	Intel HD Graphics 4600	i5-4340M	2.9 GHz	3.6 GHz	3MB	i7-4600M	2.9 GHz	3.6 GHz	4MB	i7-4710MQ	4	8	2.5 GHz	3.5 GHz	6MB	i7-4810MQ	2.8 GHz	3.8 GHz	6MB	i7-4910MQ	2.9 GHz	3.9 GHz	8MB	i7-4940MX	3.1 GHz	4 GHz	8MB	<p>Smart card reader <i>Optional</i>: Smart card reader ExpressCard One slot (ExpressCard/34) Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card Ports Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector</p> <p>Camera <i>(optional)</i> HD720p resolution, low light sensitive, fixed focus Audio support HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack</p> <p>Keyboard 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight UltraNav™ TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch</p>
Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics																																					
i5-4210M	2	4	2.6 GHz	3.2 GHz	3MB	DDR3L-1600	Intel HD Graphics 4600																																					
i5-4340M			2.9 GHz	3.6 GHz	3MB																																							
i7-4600M			2.9 GHz	3.6 GHz	4MB																																							
i7-4710MQ	4	8	2.5 GHz	3.5 GHz	6MB																																							
i7-4810MQ			2.8 GHz	3.8 GHz	6MB																																							
i7-4910MQ			2.9 GHz	3.9 GHz	8MB																																							
i7-4940MX			3.1 GHz	4 GHz	8MB																																							
Graphics	<p>Intel HD Graphics 4600 in processor and NVIDIA Quadro® K1100M or K2100M, 2GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort / Thunderbolt™; supports three independent displays; Max resolution: 3840x2160@60Hz (DisplayPort via Mini DisplayPort cable); 3840x2160@60Hz (Thunderbolt); 1920x1200@60Hz (VGA)</p>	<p>Security Power-on password, hard disk password, supervisor password, security keyhole Security chip Trusted Platform Module, TCG 1.2-compliant ThinkEngine Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures</p> <p>vPro <i>(optional)</i> Intel vPro Technology Fingerprint reader <i>Optional</i>: Fingerprint reader on the palm rest, swipe sensor Color calibration <i>Optional</i>: Pantone® color calibrator by X-Rite® color calibration sensor in palm rest, LED indicator</p>																																										
Chipset Memory	<p>Mobile Intel QM87 Express Chipset <i>dual-core model</i>: 16GB max⁷, two 204-pin SO-DIMM sockets <i>quad-core model</i>: 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support <i>All</i>: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable</p>	<p>Battery type Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication Max battery life¹⁰ <i>6-cell</i>: up to 6.2 hr; <i>9-cell</i>: up to 11.1 hr AC adapter <i>dual-core</i>: 135W AC adapter; <i>quad-core</i>: 170W AC adapter</p>																																										
Display	<p><i>Some</i>: 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some</i>: 15.5" (394mm) 3K (2880x1620), anti-glare, LED backlight, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, IPS</p>	<p>Preload Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update Lenovo Cloud Storage by SugarSync PC Device Stage Adobe® Reader® Nitro Pro Evernote® Skype™ Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) Cyberlink PowerDVD (DVD±RW) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) <p><i>Some</i>: Windows 8.1 64-bit <i>Some</i>: Windows 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support Lenovo Companion ThinkVantage System Update Lenovo Reach (Windows 8.1 model) Hightail - Metro (Windows 8.1 model) Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model) Lenovo Cloud Storage by SugarSync (Windows 8 model) PC Device Stage AccuWeather Amazon Kindle Nitro Pro Evernote Skype Rara Streaming Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) Cyberlink PowerDVD (DVD±RW) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) </p> </p>																																										
Multi-touch	None																																											
Storage	<p><i>Some</i>: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some</i>: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, Shock Mounted Hard Drive, Active Protection System™ <i>All</i>: removable, upgradable, supports the second disk</p>																																											
M.2 SSD <i>(opt)</i> Optical <i>(optional)</i> Ultrabay	<p>M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card DVD burner, 9.5mm Ultrabay slim, removable One modular bay for removable devices (right side, cold swap), 9.5mm high, bottom access</p>																																											
Ethernet Bluetooth™	<p>Intel Ethernet Connection I217-LM (Clarkville) Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter</p>																																											
WLAN ⁴	<p><i>One of the following, configurable by model:</i></p> <ul style="list-style-type: none"> 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11b/g/n, Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card 11a/b/g/n, Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT adapter, M.2 card 11ac, Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT adapter, M.2 card 																																											
WWAN <i>(optional)</i>	<p><i>One of the following, configurable by model (mutually exclusive with M.2 SSD):</i></p> <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models) 	<p><i>For ISV certifications, please visit www.lenovo.com/support/ISV</i></p>																																										
SIM card <i>(optional)</i>	<p><i>One of the following, configurable by model:</i></p> <ul style="list-style-type: none"> AT&T® or Verizon® LTE (4G), contract required with service provider User selectable, contract required with service provider 	<p>Limited warranty¹² <i>One of the following, configurable by model:</i></p> <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 																																										
Dimensions ³ Weight ² Case material	<p>15.6" (WxDxH): 14.83" x 9.77" x 1.10-1.16"; 376.6mm x 248.1mm x 27.9-29.5mm <i>6-cell</i>: starting at 5.57 lb (2.53 kg); <i>9-cell</i>: starting at 5.95 lb (2.70 kg) Glass-Fiber Reinforced Plastic</p>	<p>Environment EPEAT™ Gold; ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant</p>																																										

ThinkPad W541 20EF (Discrete) - TopSeller

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	RAID	Optical	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	NFC	Color calibrator	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20EF000HUS	i7-4710MQ	No	K1100M	8GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG	Win7 3-depot	No	01/15
20EF000KUS	i7-4710MQ	No	K1100M	8GBx1	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG	Win7 3-depot	No	01/15
20EF000NUS	i7-4810MQ	vPro	K1100M	8GBx1	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG	Win7 3-depot	No	01/15
20EF000PUS	i7-4810MQ	vPro	K1100M	8GBx1	15.6" FHD	500G 7200	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG	Win7 3-depot	No	01/15
20EF000JUS	i7-4810MQ	vPro	K2100M	8GBx1	15.6" FHD	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG	Win7 3-depot	No	01/15
20EF000LUS	i7-4810MQ	vPro	K2100M	8GBx1	15.5" 3K IPS	256G SSD eDrive	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	None	9	170W	Win8.1 DG	Win7 3-depot	No	01/15
20EF000MUS	i7-4810MQ	vPro	K2100M	8GBx1	15.5" 3K IPS	512G SSD	No	DVD±RW	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	X-Rite	9	170W	Win8.1 DG	Win7 3-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad W541 Platform Specifications sheet](#)

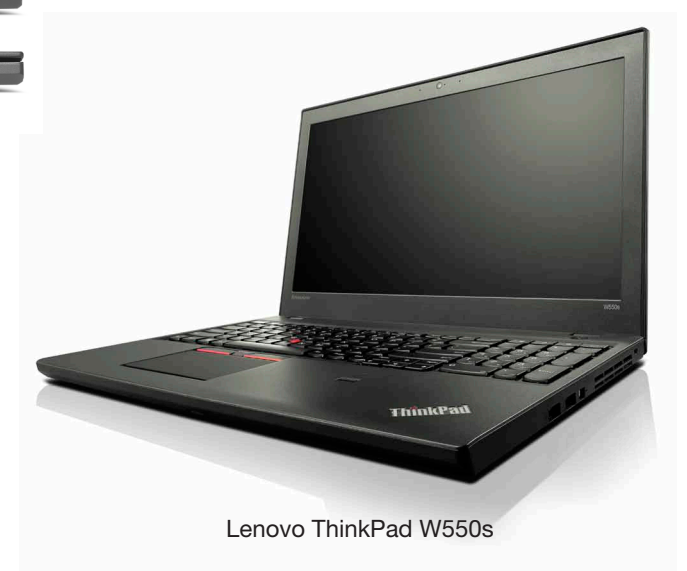
Processor	4th Generation Intel® Core™ i5 / i7 / i7 Extreme Processor						WWAN (optional) Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	SIM card (optional) AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider	
	i5-4210M	2	2.6 GHz	3.2 GHz	3MB	DDR3L-1600		
	i5-4340M		2.9 GHz	3.6 GHz	3MB			
	i7-4600M		2.9 GHz	3.6 GHz	4MB			
	i7-4710MQ	4	2.5 GHz	3.5 GHz	6MB			
	i7-4810MQ		2.8 GHz	3.8 GHz	6MB			
i7-4910MQ	2.9 GHz		3.9 GHz	8MB				
i7-4940MX	3.1 GHz		4 GHz	8MB				
Graphics	Intel HD Graphics 4600 and NVIDIA Quadro® K1100M or K2100M, 2GB memory						Smart card reader (optional) ExpressCard One slot (ExpressCard/34)	
Chipset	Mobile Intel QM87 Express Chipset						Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC), supports UHS-II SD card	
Memory	dual-core model: 16GB max ⁷ , two 204-pin SO-DIMM sockets quad-core model: 32GB max, four 204-pin SO-DIMM sockets, 4+4, 8+8, 4+4+4+4, or 8+8+8+8 combinations support All: PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable						Ports Two USB 3.0, two USB 2.0 (one Always On), VGA, Mini DisplayPort / Thunderbolt, Ethernet (RJ-45), Dock connector	
Display	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS						Camera (optional) HD720p resolution, low light sensitive, fixed focus	
Multi-touch	None						Audio support HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack	
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS						Keyboard 6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight	
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot, exclusive with WWAN card						UltraNav™ TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch	
Optical (optional)	DVD burner, 9.5mm Ultrabay slim, removable						Security Power-on password, hard disk password, supervisor password, security keyhole	
Ultrabay	One modular bay for removable devices (right side, cold swap), 9.5mm high						Security chip Trusted Platform Module, TCG 1.2-compliant	
Ethernet	Intel Ethernet Connection I217-LM (Clarkville)						vPro (optional) Intel vPro Technology	
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter						Fingerprint reader (optional) Fingerprint reader on the palm rest, swipe sensor	
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card						Color calibration (optional) Pantone® color calibrator by X-Rite® color calibration sensor in palm rest	
	7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card						Battery type Li-Ion 6-cell (56Wh) or 9-cell (99.9Wh), HW Authentication	
	7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card						Max battery life ¹⁰ 6-cell: up to 6.2 hr; 9-cell: up to 11.1 hr	
	7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card						AC adapter dual-core: 135W AC adapter; quad-core: 170W AC adapter	
							Preload Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit	
							Win8.1 64: Windows 8.1 64-bit	
							Win8.1 P64: Windows 8.1 Pro 64-bit	
							Limited warranty ¹² 1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS	

See footnotes for more detailed information

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Lenovo ThinkPad W550s



ThinkPad W550s Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i5 / i7 Processor								Smart card reader <i>Optional</i> : Smart card reader																																																				
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Multicard reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC) Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector																																																			
	i5-5300U	2	4	2.3 GHz	2.9 GHz	3MB	DDR3L-1600	Intel HD Graphics 5500	Camera	HD720p resolution, low light sensitive, fixed focus																																																			
	i7-5500U			2.4 GHz	3 GHz	4MB			Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack																																																			
i7-5600U	2.6 GHz			3.2 GHz	4MB	Keyboard UltraNav™			6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch																																																				
Graphics	Intel HD Graphics 5500 in processor and NVIDIA Quadro® K620M, 2GB memory; supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@60Hz (DP via mDP cable); 2560x1600@60Hz (VGA)								Security Security chip ThinkEngine	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures																																																			
Chipset Memory	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								vPro (optional) Fingerprint reader	Intel vPro Technology <i>Optional</i> : Fingerprint reader on the palm rest, swipe sensor																																																			
Display	<i>Some</i> : 15.6" (396mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 or 500:1 contrast ratio <i>Some</i> : 15.5" (394mm) 3K (2880x1620), anti-glare, LED backlight, 350 nits, 16:9 aspect ratio, 1000:1 contrast ratio, IPS								Internal battery	<i>Optional</i> : Integrated Li-Polymer 3-cell (44Wh)																																																			
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 315 nits								External battery	Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)																																																			
Storage	<i>Some</i> : SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some</i> : HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some</i> : SSHD with 8GB NAND flash memory								Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 48Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Battery life</td> <td>12.7 hr</td> <td>17.3 hr</td> <td>21.8 hr</td> </tr> </tbody> </table>				Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	Battery life	12.7 hr	17.3 hr	21.8 hr																																								
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Battery life	12.7 hr	17.3 hr	21.8 hr																																																										
M.2 SSD (opt) Optical	Single-sided M.2 SSD, via M.2 card slot None								AC adapter	65W Slim or 65W AC adapter																																																			
Ethernet	<i>Non-vPro model</i> : Intel Ethernet Connection I218-V (Clarkville) <i>vPro model</i> : Intel Ethernet Connection I218-LM (Clarkville)								Preload	<table border="0"> <tr> <td>Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit</td> <td colspan="3"><i>Some</i>: Windows 8.1 64-bit</td> </tr> <tr> <td>• Lenovo Solution Center</td> <td colspan="3">• Windows 8.1 Pro 64-bit</td> </tr> <tr> <td>• Lenovo SHAREit</td> <td colspan="3">• Lenovo Solution Center</td> </tr> <tr> <td>• Lenovo Vantage Product Recovery</td> <td colspan="3">• Lenovo SHAREit</td> </tr> <tr> <td>• Rescue and Recovery™</td> <td colspan="3">• ThinkVantage System Update</td> </tr> <tr> <td>• ThinkVantage System Update</td> <td colspan="3">• PC Device Stage</td> </tr> <tr> <td>• PC Device Stage</td> <td colspan="3">• Adobe® Reader®</td> </tr> <tr> <td>• Adobe® Reader®</td> <td colspan="3">• Evernote®</td> </tr> <tr> <td>• Skype™</td> <td colspan="3">• Maxthon Cloud Browser</td> </tr> <tr> <td>• Maxthon Cloud Browser</td> <td colspan="3">• Microsoft® Office preloaded; purchase a product key to activate</td> </tr> <tr> <td>• Microsoft® Office preloaded; purchase a product key to activate</td> <td colspan="3">• Norton™ Internet Security (30 days of virus definitions)</td> </tr> <tr> <td>• Norton™ Internet Security (30 days of virus definitions)</td> <td colspan="3">• Norton Internet Security (30 days of virus definitions)</td> </tr> </table>				Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit	<i>Some</i> : Windows 8.1 64-bit			• Lenovo Solution Center	• Windows 8.1 Pro 64-bit			• Lenovo SHAREit	• Lenovo Solution Center			• Lenovo Vantage Product Recovery	• Lenovo SHAREit			• Rescue and Recovery™	• ThinkVantage System Update			• ThinkVantage System Update	• PC Device Stage			• PC Device Stage	• Adobe® Reader®			• Adobe® Reader®	• Evernote®			• Skype™	• Maxthon Cloud Browser			• Maxthon Cloud Browser	• Microsoft® Office preloaded; purchase a product key to activate			• Microsoft® Office preloaded; purchase a product key to activate	• Norton™ Internet Security (30 days of virus definitions)			• Norton™ Internet Security (30 days of virus definitions)	• Norton Internet Security (30 days of virus definitions)		
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Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								<i>For ISV certifications, please visit www.lenovo.com/support/ISV</i>																																																				
WLAN ⁴	<i>One of the following, configurable by model:</i> • 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card • 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card • 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card • 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card								Limited warranty ¹²	<i>One of the following, configurable by model:</i> • 1-year depot repair service • 3-year/1-yr battery depot repair service • 3-year/1-yr battery limited onsite service ²⁴ • 3-year/1-yr battery limited onsite service, IWS (International Warranty Service ¹⁷)																																																			
WWAN (optional)	<i>One of the following, configurable by model:</i> • Wireless WAN upgradable • Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card • Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card								Environment	EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant																																																			
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider																																																												
Dimensions ³	15.6" (WxDxH): 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm 15.6" Touch (WxDxH): 14.98" x 10.17" x 0.92"; 380.6mm x 258.2mm x 23.30mm																																																												
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Case material	<i>Display cover</i> : Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); <i>Bottom</i> : Glass-Fiber Reinforced Plastic																																																												

ThinkPad W550s 20E2 (Discrete) - TopSeller

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit key-board	Finger-print reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)	
20E2000TUS	i7-5500U	No	K620M	8GBx1	15.5" 3K IPS	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20E2000VUS	i7-5500U	No	K620M	8GBx2	15.5" 3K IPS	No	512G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20E2000XUS	i7-5500U	No	K620M	8GBx1	15.6" FHD	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20E2000YUS	i7-5500U	No	K620M	8GBx1	15.6" FHD	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	No+6(48wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20E20010US	i7-5500U	No	K620M	8GBx1	15.5" 3K IPS	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	No+6(48wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20E20017US	i7-5500U	No	K620M	8GBx1	15.6" FHD	No	256G SSD Opal2	None	7265 ac+BT	None	None	None	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-depot	No	01/15
20E2000QUS	i7-5600U	vPro	K620M	8GBx1	15.5" 3K IPS	MT	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-depot	No	01/15
20E2000RUS	i7-5600U	vPro	K620M	8GBx2	15.5" 3K IPS	MT	512G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-depot	No	01/15
20E2000SUS	i7-5600U	vPro	K620M	8GBx1	15.5" 3K IPS	MT	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	65W	Win8.1 DG Win7	3-depot	No	01/15
20E2000UUS	i7-5600U	vPro	K620M	8GBx2	15.6" FHD	No	512G SSD	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(72wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20E2000WUS	i7-5600U	vPro	K620M	8GBx1	15.6" FHD	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+6(48wh)	65W	Win8.1 DG Win7	3-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad W550s Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i5 / i7 Processor	Dimensions ³	15.6" (WxDxH): 14.98" x 10.17" x 0.88"; 380.6mm x 258.2mm x 22.45mm 15.6" Touch (WxDxH): 14.98" x 10.17" x 0.92"; 380.6mm x 258.2mm x 23.30mm																																		
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Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed																																
i5-5300U	2	2.3 GHz	2.9 GHz	3MB	DDR3L-1600																																
i7-5500U		2.4 GHz	3 GHz	4MB																																	
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Multi-touch	-	5.09 lb / 2.31 kg	5.43 lb / 2.46 kg																																		
Graphics	Intel HD Graphics 5500 in processor and NVIDIA Quadro® K620M, 2GB memory	Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic																																		
Chipset	Intel SoC (System on Chip) platform	Smart card reader	Optional: Smart card reader																																		
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																																		
Display	Some: 15.6" (396mm) FHD (1920x1080), 300 nits, 400:1 or 500:1 contrast ratio Some: 15.5" (394mm) 3K (2880x1620), 350 nits, 1000:1 contrast ratio, IPS	Ports	Three USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector																																		
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 315 nits	Camera	HD720p resolution, low light sensitive, fixed focus																																		
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high, APS Some: SSHD with 8GB NAND flash memory	Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1W x 2 / dual array microphone, combo audio/microphone jack																																		
M.2 SSD (opt)	Single-sided M.2 SSD, via M.2 card slot	Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad, optional LED backlight UltraNav™																																		
Optical	None	Security	Power-on password, hard disk password, supervisor password, security keyhole																																		
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)	Security chip	Trusted Platform Module, TCG 1.2-compliant																																		
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	vPro (optional)	Intel vPro Technology																																		
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card	Fingerprint reader	Optional: Fingerprint reader on the palm rest, swipe sensor																																		
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card	Internal battery	Optional: Integrated Li-Polymer 3-cell (44Wh)																																		
		External battery	Li-Ion or Li-Polymer 3-cell (23Wh) or Li-Ion 6-cell (48Wh or 72Wh)																																		
		Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 48Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Battery life</td> <td>12.7 hr</td> <td>17.3 hr</td> <td>21.8 hr</td> </tr> </tbody> </table>			Models	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	Battery life	12.7 hr	17.3 hr	21.8 hr																								
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Battery life	12.7 hr	17.3 hr	21.8 hr																																		
		AC adapter	65W Slim or 65W AC adapter																																		
		Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit																																		
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider	Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS																																		

See footnotes for more detailed information

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Lenovo® ThinkPad 11e



Lenovo ThinkPad 11e



Lenovo ThinkPad 11e

ThinkPad 11e 20D9 (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	Top color	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20D90008US	Cel N2920	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 DG Win7	1-depot	No	05/14
20D90005US	Cel N2930	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 DG Win7	1-depot	No	09/14
20D90016US	Cel N2940	No	Intel HD	4GBx1	11.6" HD	320G 7200	7260 ac+BT	Black	720p	None	4	45W	Win8.1 DG Win7	1-depot	No	12/14
20D9001BUS	Cel N2940	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 ac+BT	Black	720p	None	4	45W	Win8.1 DG Win7	1-depot	No	12/14

Processor	Intel® Celeron® processor N2920, N2930, or N2940							Chipset	Intel SoC (System on Chip) platform									
	Processor Number	# of Cores	# of Threads	Base Frequency	Burst Frequency	Cache	Memory Speed	Processor Graphics	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)								
	N2920	4	4	1.86 GHz	2 GHz	2MB	DDR3L-1066	Intel HD graphics	Ports	One USB 3.0, one powered USB 2.0, HDMI, Ethernet (RJ-45)								
	N2930			1.83 GHz	2.16 GHz		DDR3L-1333		Control buttons	Power button, volume control button								
	N2940			1.83 GHz	2.25 GHz		WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card									
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket								WWAN	None								
Optical Storage	None Some: SSD / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™								Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								
Widescreen display	11.6" (295mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio								Ethernet	Realtek RTL8111GUS-CG Gigabit Network Connection								
Multi-touch	None								NFC	None								
Hinge	Normal hinge, 180 degree								Security	Power-on password, hard disk password, supervisor password, security keyhole								
Camera (optional)	HD720p resolution, low light sensitive								Security chip	None								
Graphics	Intel HD Graphics in processor, supports external digital monitor via HDMI™ supports dual independent display; Max resolution: 1920x1080 (HDMI) @60Hz								vPro (optional)	None								
Dimensions ³	11.6W" (WxDxH): 11.81" x 8.50" x 0.88"; 300mm x 216mm x 22.3mm								Fingerprint reader	None								
Weight ²	from 3.28 lb (1.49kg)								Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available For Lenovo service upgrade options, please go to QP-TA sheet								
Case color	Display cover: Graphite Black or Silver Bottom: Graphite Black								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Some: Windows 8.1 Pro 64-bit								
Case material	Display cover: PolyCarbonate/Glass-Fiber Reinforced Plastic; Bottom: PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic									<ul style="list-style-type: none"> • Lenovo Solution Center • Lenovo Support - Metro • Lenovo QuickCast - Metro • Lenovo Companion - Metro • ThinkVantage System Update • ThinkVantage System Update • Lenovo Reach • PC Device Stage • Nitro Pro • Evernote® • Skype™ • Microsoft® Office preloaded; purchase a product key to activate 								
Battery type	Integrated Lithium Ion 4-cell (35Wh)									<ul style="list-style-type: none"> • Rara Streaming • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions) 								
Max battery life ¹⁰	Models	Windows 7	Windows 8						Environment	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant								
	MobileMark® 2007	7.0 hr	-															
	MobileMark 2012	6.0 hr	6.5 hr															
AC adapter	45-watt AC adapter																	
Audio support	HD Audio, Realtek® ALC283 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / monaural digital microphone, combo audio/mic jack																	
Keyboard	ThinkPad Windows keyboard, 6-row, multimedia Fn keys																	
Touchpad	Buttonless touchpad below keyboard, multi-touch																	
ThinkLight™	None																	

See footnotes for more detailed information

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ThinkPad 11e 20D9 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	Top color	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20D90009US	Cel N2920	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 64	1-depot	No	05/14
20D9000MUS	Cel N2920	No	Intel HD	4GBx1	11.6" HD	320G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 64	1-depot	No	05/14
20D9000GUS	Cel N2920	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 P64	1-depot	No	05/14
20D9000AUS	Cel N2930	No	Intel HD	4GBx1	11.6" HD	320G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 64	1-depot	No	09/14
20D9000NUS	Cel N2930	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 64	1-depot	No	09/14
20D9000FUS	Cel N2930	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 a/b/g/n+BT	Black	720p	None	4	45W	Win8.1 P64	1-depot	No	09/14
20D90015US	Cel N2940	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 ac+BT	Black	720p	None	4	45W	Win8.1 P64	1-depot	No	12/14
20D90017US	Cel N2940	No	Intel HD	4GBx1	11.6" HD	320G 7200	7260 ac+BT	Black	720p	None	4	45W	Win8.1 P64	1-depot	No	12/14
20D9001EUS	Cel N2940	No	Intel HD	4GBx1	11.6" HD	500G 7200	7260 ac+BT	Black	720p	None	4	45W	Win8.1 64	1-depot	No	02/15
20D9001HUS	Cel N2940	No	Intel HD	4GBx1	11.6" HD	320G 7200	7260 ac+BT	Black	720p	None	4	45W	Win8.1 64	1-depot	No	02/15

Processor	Intel® Celeron® processor N2920, N2930, or N2940							Chipset	Intel SoC (System on Chip) platform			
	Processor Number	# of Cores	# of Threads	Base Frequency	Burst Frequency	Cache	Memory Speed	Processor Graphics	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
	N2920	4	4	1.86 GHz	2 GHz	2MB	DDR3L-1066	Intel HD graphics	Ports	One USB 3.0, one powered USB 2.0, HDMI, Ethernet (RJ-45)		
	N2930			1.83 GHz	2.16 GHz		DDR3L-1333		Control buttons	Power button, volume control button		
	N2940			1.83 GHz	2.25 GHz		WLAN ⁴		11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card			
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket							WWAN	None			
Optical Storage	None Some: SSD / SATA 3.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™							Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter			
Widescreen display	11.6" (295mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 400:1 contrast ratio							Ethernet	Realtek RTL8111GUS-CG Gigabit Network Connection			
Multi-touch	None							NFC	None			
Hinge	Normal hinge, 180 degree							Security	Power-on password, hard disk password, supervisor password, security keyhole			
Camera (optional)	HD720p resolution, low light sensitive							Security chip	None			
Graphics	Intel HD Graphics in processor, supports external digital monitor via HDMI™ supports dual independent display; <i>Max resolution: 1920x1080 (HDMI) @60Hz</i>							vPro (optional)	None			
Dimensions ³	11.6W" (WxDxH): 11.81" x 8.50" x 0.88"; 300mm x 216mm x 22.3mm							Fingerprint reader	None			
Weight ²	from 3.28 lb (1.49kg)							Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available <i>For Lenovo service upgrade options, please go to QP-TA sheet</i>			
Case color	Display cover: Graphite Black or Silver Bottom: Graphite Black							Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit			
Case material	Display cover: PolyCarbonate/Glass-Fiber Reinforced Plastic; Bottom: PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic								<ul style="list-style-type: none"> • Lenovo Solution Center • Lenovo Support - Metro • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • Lenovo Reach • PC Device Stage • Nitro Pro • Evernote® • Skype™ • Microsoft® Office preloaded; purchase a product key to activate 			
Battery type	Integrated Lithium Ion 4-cell (35Wh)								<ul style="list-style-type: none"> • Some: Windows 8.1 64-bit • Some: Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo Support - Metro • Lenovo QuickCast - Metro • Lenovo Companion - Metro • ThinkVantage System Update • Lenovo Reach • Hightail - Metro • PC Device Stage • AccuWeather • Amazon Kindle • Nitro Pro • Evernote • Skype • Rara Streaming • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions) 			
Max battery life ¹⁰	Models	Windows 7	Windows 8					Environment	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant			
	MobileMark® 2007	7.0 hr	-									
	MobileMark 2012	6.0 hr	6.5 hr									
AC adapter	45-watt AC adapter											
Audio support	HD Audio, Realtek® ALC283 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / monaural digital microphone, combo audio/mic jack											
Keyboard	ThinkPad Windows keyboard, 6-row, multimedia Fn keys											
Touchpad	Buttonless touchpad below keyboard, multi-touch											
ThinkLight™	None											

See footnotes for more detailed information

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Lenovo® ThinkPad 11e Chromebook



Lenovo ThinkPad 11e Chromebook



Lenovo ThinkPad 11e Chromebook

ThinkPad 11e Chromebook 20DU (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Storage	WLAN & Bluetooth	Top color	Camera	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20DU0003US	Cel N2930	No	Intel HD	4GBx1	11.6" HD	16GB eMMC	7260 ac+BT	Black	720p	None	4	45W	Google Chrome	1-depot	No	06/14
20DU0009US	Cel N2940	No	Intel HD	4GBx1	11.6" HD	16GB eMMC	7260 ac+BT	Black	720p	None	4	45W	Google Chrome	1-depot	No	12/14

Processor	Intel® Celeron® processor N2920, N2930, or N2940							Audio support	HD Audio, Maxim MAX98090AETL+T codec / stereo speakers, 2W x 2 / monaural digital microphone, combo audio/mic jack																
	Processor Number	# of Cores	# of Threads	Base Frequency	Burst Frequency	Cache	Memory Speed	Processor Graphics	Keyboard	ThinkPad Chrome keyboard, 6-row, multimedia Fn keys															
	N2920	4	4	1.86 GHz	2 GHz	2MB	DDR3L-1066	Intel HD graphics	Touchpad	Buttonless touchpad below keyboard, multi-touch															
	N2930			1.83 GHz	2.16 GHz		DDR3L-1333		ThinkLight™	None															
	N2940			1.83 GHz	2.25 GHz																				
Memory	2GB or 4GB / DDR3L-1600MHz / soldered to systemboard, no sockets								Chipset	Intel SoC (System on Chip) platform															
Optical Storage	None 16GB eMMC (embedded Multi Media Card) flash memory on board								Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)															
Widescreen display	11.6" (295mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio								Ports	One USB 3.0, one USB 2.0, HDMI															
Multi-touch									None								Control buttons	Power button, volume control button							
Hinge									Normal hinge, 180 degree								WLAN ⁴	<i>11a/b/g/n+BT</i> : ThinkPad 11a/b/g/n, 2x2, Wi-Fi + BT, M.2 card <i>7260 ac+BT</i> : Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card							
Camera									HD720p resolution, low light sensitive								WWAN	None							
Graphics	Intel HD Graphics in processor, supports external digital monitor via HDMI™ supports dual independent display; <i>Max resolution</i> : 1920x1080 (HDMI) @60Hz								Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter															
									Ethernet	None															
									NFC	None															
Dimensions ³	11.6W" (WxDxH): 11.81" x 8.50" x 0.88"; 300mm x 216mm x 22.3mm								Security	Security keyhole															
Weight ²	from 3.09 lb (1.4kg)								Security chip	Trusted Platform Module, TCG 1.2-compliant															
Case color	<i>Display cover</i> : Graphite Black or Silver <i>Bottom</i> : Graphite Black								vPro (optional)	None															
Case material	<i>Display cover</i> : PolyCarbonate/Glass-Fiber Reinforced Plastic; <i>Bottom</i> : PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic								Fingerprint reader	None															
Battery type	Integrated Lithium Ion 4-cell (35Wh)								Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available <i>For Lenovo service upgrade options, please go to QP-TA sheet</i>															
Max battery life ¹⁰	more than 8 hours								Preload	Google Chrome OS															
AC adapter	45-watt AC adapter								Environment	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant															

See footnotes for more detailed information

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Lenovo® ThinkPad X240



Lenovo ThinkPad X240



Lenovo ThinkPad X240



Lenovo ThinkPad X240



Lenovo ThinkPad X240

ThinkPad X240 Platform Specifications

Product Specifications Reference (PSREF)

Positioning	Ultraportable Ultrabook™ or Thinbook; one spindle							WLAN ⁴	One of the following, configurable by model: <ul style="list-style-type: none"> ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card Intel Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card
Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor							WWAN (optional) One of the following, configurable by model (mutually exclusive with M.2 SSD): <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models) 	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed		Processor Graphics
	i3-4010U	2	4	1.7 GHz	-	3MB	DDR3L-1600		Intel HD graphics 4400
	i5-4200U			1.6 GHz	2.6 GHz	3MB			
	i5-4210U			1.7 GHz	2.7 GHz	3MB			
	i5-4300U			1.9 GHz	2.9 GHz	3MB			
	i7-4600U			2.1 GHz	3.3 GHz	4MB			
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket							SIM card (optional)	One of the following, configurable by model: <ul style="list-style-type: none"> AT&T® or Verizon® LTE (4G), contract required with service provider (US models) Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models) User selectable, contract required with service provider
Optical Storage	None <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> SSHD with 8GB NAND flash memory							Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter
M.2 SSD	<i>Some:</i> Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader <i>Some:</i> Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card							Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I218-V (Clarkville) <i>vPro model:</i> Intel Ethernet Connection I218-LM (Clarkville)
Widescreen display	<i>Some:</i> 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio, TN <i>Some:</i> 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080), anti-glare, LED backlight, 400 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS							NFC	<i>Optional:</i> Near Field Communication
Multi-touch	<i>Some:</i> Capacitive-type multi-touch, supports 10-finger gesture							Security chip	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus							vPro (optional)	Intel vPro Technology
Graphics	Intel HD Graphics 4400 in processor, supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; <i>Max resolution:</i> 3840x2160@30Hz (DP via mDP cable); 1920x1200@60Hz (VGA)							Fingerprint reader	<i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor
Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch							Limited warranty ¹²	One of the following, configurable by model: <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷)
ThinkLight™	None							Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support Lenovo Solution Center Lenovo Companion ThinkVantage System Update ThinkVantage System Update Lenovo Reach (Windows 8.1 model) Rescue and Recovery™ ThinkVantage System Update Lenovo Cloud Storage by SugarSync PC Device Stage Nitro Pro Evernote® Skype™ Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions)
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm								<i>Some:</i> Windows 8 / 8.1 64-bit <i>Some:</i> Windows 8 / 8.1 Pro 64-bit
Weight ²	Models	No + 3-cell	No + 6-cell	3-cell + 3-cell	3-cell + 6-cell			<ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support Lenovo Companion ThinkVantage System Update Lenovo Reach (Windows 8.1 model) Hightail - Metro (Windows 8.1 model) Lenovo Cloud Storage by SugarSync - Metro (Windows 8 model) Lenovo Cloud Storage by SugarSync (Windows 8 model) PC Device Stage AccuWeather Amazon Kindle Nitro Pro Evernote Skype Rara Streaming Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) 	
	Non-MultiTouch	2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg				
	MultiTouch	-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg				
Case material	Glass-Fiber Reinforced Plastic								
Internal battery	<i>Optional:</i> Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication								
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication								
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell	3-cell + 6-cell	47.5Wh	3-cell + 6-cell	72Wh			
	Battery life	8.7 hr	13.1 hr		17.4 hr				
AC adapter	45-watt AC adapter								
Chipset	Intel SoC (System on Chip) platform								
Smart card reader	<i>Optional:</i> Smart card reader, exclusive with M.2 SSD								
Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)								
Ports	Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector								
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack								
Environment	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant								

ThinkPad X240 20AL (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Glob-al	Ann date (m/y)
20AL00FRUS	i3-4010U	No	HD 4400 4GBx1	12.5" HD	No	500G 7200	7260 b/g/n+BT	Upg	None	None	None	None	Finger	None	3+3	45W	Win8 DG Win7	1-depot	No	20/14
20AL00FSUS	i3-4010U	No	HD 4400 4GBx1	12.5" HD	No	500G 7200	7260 b/g/n+BT	Upg	None	None	None	None	Finger	None	No+6(47.5wh)	45W	Win8 DG Win7	1-depot	No	20/14
20AL00FTUS	i3-4010U	No	HD 4400 4GBx1	12.5" HD	No	180G SSD Opal	7260 b/g/n+BT	Upg	None	None	None	None	Finger	None	3+3	45W	Win8 DG Win7	1-depot	No	20/14
20AL008WUS	i5-4200U	No	HD 4400 4GBx1	12.5" HD	No	500G 7200	7260 b/g/n+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 DG Win7	3-depot	No	20/13
20AL008XUS	i5-4200U	No	HD 4400 4GBx1	12.5" HD	No	500G 7200	7260 b/g/n+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL008YUS	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL0090US	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 DG Win7	3-depot	No	20/13
20AL0091US	i5-4300U vPro	HD 4400	8GBx1	12.5" HD IPS	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL0096US	i5-4300U vPro	HD 4400	8GBx1	12.5" HD IPS	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL0097US	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL0098US	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	128G SSD	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 DG Win7	3-depot	No	20/13
20AL0099US	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 DG Win7	3-depot	No	20/13
20AL009AUS	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL009BUS	i5-4300U vPro	HD 4400	8GBx1	12.5" HD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL009EUS	i5-4300U vPro	HD 4400	8GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL009FUS	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL009HUS	i5-4300U vPro	HD 4400	4GBx1	12.5" HD	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 DG Win7	3-depot	No	20/13
20AL00FJUS	i5-4300U vPro	HD 4400	8GBx1	12.5" HD IPS	No	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/14
20AL0092US	i7-4600U vPro	HD 4400	8GBx1	12.5" HD IPS	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL0093US	i7-4600U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL0094US	i7-4600U vPro	HD 4400	4GBx1	12.5" HD	No	500G 7200	7260 ac+BT	Upg	None	None	720p	None	Finger	None	No+6(72wh)	45W	Win8 DG Win7	3-depot	No	20/13

• For detailed platform specifications, please see [ThinkPad X240 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack																											
	<table border="1"> <thead> <tr> <th>Processor</th> <th># of Cores</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Speed</th> </tr> </thead> <tbody> <tr> <td>i3-4010U</td> <td rowspan="4">2</td> <td>1.7 GHz</td> <td>-</td> <td>3MB</td> <td rowspan="4">DDR3L-1600</td> </tr> <tr> <td>i5-4200U</td> <td>1.6 GHz</td> <td>2.6 GHz</td> <td>3MB</td> </tr> <tr> <td>i5-4300U</td> <td>1.9 GHz</td> <td>2.9 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-4600U</td> <td>2.1 GHz</td> <td>3.3 GHz</td> <td>4MB</td> </tr> </tbody> </table>					Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600	i5-4200U	1.6 GHz	2.6 GHz	3MB	i5-4300U	1.9 GHz	2.9 GHz	3MB	i7-4600U	2.1 GHz	3.3 GHz	4MB	Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch			
Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed																													
i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600																													
i5-4200U		1.6 GHz	2.6 GHz	3MB																														
i5-4300U		1.9 GHz	2.9 GHz	3MB																														
i7-4600U		2.1 GHz	3.3 GHz	4MB																														
						ThinkLight™	None																											
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket					Chipset	Intel SoC (System on Chip) platform																											
Optical Storage	None Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory					Smart card reader	Optional: Smart card reader																											
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																											
Widescreen display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS					Ports	Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector																											
Multi-touch	Some: Capacitive-type multi-touch, supports 10-finger gesture					WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card																											
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					WWAN (optional)	Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS																											
Graphics	Intel HD Graphics 4400 in processor					SIM card (optional)	AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider																											
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm					Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																											
Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>3-cell only</th> <th>6-cell only</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell</th> </tr> </thead> <tbody> <tr> <td>Non-MultiTouch</td> <td>2.88 lb / 1.31kg</td> <td>3.23 lb / 1.47kg</td> <td>3.13 lb / 1.42kg</td> <td>3.48 lb / 1.58kg</td> </tr> <tr> <td>MultiTouch</td> <td>-</td> <td>-</td> <td>3.29 lb / 1.49kg</td> <td>3.64 lb / 1.65kg</td> </tr> </tbody> </table>					Models	3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell	Non-MultiTouch	2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg	MultiTouch	-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg	Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville)												
Models	3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell																														
Non-MultiTouch	2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg																														
MultiTouch	-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg																														
Case material	Glass-Fiber Reinforced Plastic					NFC	Optional: Near Field Communication																											
Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication					Security	Power-on password, hard disk password, supervisor password, security keyhole																											
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication					Security chip vPro (optional)	Trusted Platform Module, TCG 1.2-compliant																											
Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Battery configuration</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 47.5Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Battery life</td> <td>8.7 hr</td> <td>13.1 hr</td> <td>17.4 hr</td> </tr> </tbody> </table>					Battery configuration	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh	Battery life	8.7 hr	13.1 hr	17.4 hr	Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor																			
Battery configuration	3-cell + 3-cell	3-cell + 6-cell 47.5Wh	3-cell + 6-cell 72Wh																															
Battery life	8.7 hr	13.1 hr	17.4 hr																															
AC adapter	45-watt AC adapter					Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit																											
						Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite																												

See footnotes for more detailed information

(WV1-1) © Lenovo

ThinkPad X240 20AL (TopSeller) - II

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20AL0095US	i7-4600U vPro	HD 4400	8GBx1	12.5" HD IPS	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL009CUS	i7-4600U vPro	HD 4400	8GBx1	12.5" HD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL009DUS	i7-4600U vPro	HD 4400	8GBx1	12.5" HD IPS	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL009GUS	i7-4600U vPro	HD 4400	4GBx1	12.5" HD	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/13
20AL00FKUS	i7-4600U vPro	HD 4400	8GBx1	12.5" HD IPS	No	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/14
20AL00FLUS	i7-4600U vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 DG Win7	3-depot	No	20/14

• For detailed platform specifications, please see [ThinkPad X240 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack				
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Keyboard UltraNav™ TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch ThinkLight™ None	Chipset Intel SoC (System on Chip) platform			
	i3-4010U	2	1.7 GHz	-	3MB	DDR3L-1600		Smart card reader <i>Optional:</i> Smart card reader			
	i5-4200U		1.6 GHz	2.6 GHz	3MB			Multicard reader 4-in-1 reader (MMC, SD, SDHC, SDXC)			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			Ports Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector			
i7-4600U	2.1 GHz		3.3 GHz	4MB	WLAN ⁴ <i>11b/g/n+BT:</i> ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card <i>7260 b/g/n+BT:</i> Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 a/b/g/n+BT:</i> Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card <i>7260 ac+BT:</i> Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card						
Memory 8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket						WWAN (optional)	<i>Upg:</i> Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS				
Optical Storage	None <i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS <i>Some:</i> SSHD with 8GB NAND flash memory					SIM card (optional)	AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider <i>Select:</i> User selectable, contract required with service provider				
M.2 SSD	<i>Some:</i> Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader <i>Some:</i> Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter				
Widescreen display	<i>Some:</i> 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio <i>Some:</i> 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS					Ethernet	<i>Non-vPro model:</i> Intel Ethernet Connection I218-V (Clarkville) <i>vPro model:</i> Intel Ethernet Connection I218-LM (Clarkville)				
Multi-touch	<i>Some:</i> Capacitive-type multi-touch, supports 10-finger gesture					NFC	<i>Optional:</i> Near Field Communication				
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					Security	Power-on password, hard disk password, supervisor password, security keyhole				
Graphics	Intel HD Graphics 4400 in processor					Security chip (optional)	Trusted Platform Module, TCG 1.2-compliant				
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm					Fingerprint reader (optional)	<i>Optional:</i> Fingerprint reader on the keyboard bezel, swipe sensor				
Weight ²	Models	3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell	Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit				
	Non-MultiTouch	2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg		Win8 / 8.1 64-bit: Windows 8 / 8.1 64-bit				
	MultiTouch	-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg		Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit				
Case material	Glass-Fiber Reinforced Plastic					Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite					
Internal battery	<i>Optional:</i> Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication										
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication										
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell	3-cell + 6-cell	47.5Wh	3-cell + 6-cell	72Wh					
	Battery life	8.7 hr	13.1 hr	17.4 hr							
AC adapter	45-watt AC adapter										

See footnotes for more detailed information

(WV1-2) © Lenovo

ThinkPad X240 20AL (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor vPro	Graphics	Memory	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN / M.2 SSD	SIM card	Smart card reader / M.2 SSD	Camera	Backlit key-board	Finger-print reader	NFC	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)	
20AL00D9US	i5-4200U	No	HD 4400	4GBx1	12.5" FHD IPS	MT	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	20/14
20AL008GUS	i5-4200U	No	HD 4400	4GBx1	12.5" HD IPS	MT	500G 7200	7260 b/g/n+BT	Upg	None	16GB	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AL008HUS	i5-4200U	No	HD 4400	4GBx1	12.5" HD IPS	MT	128G SSD	7260 b/g/n+BT	Upg	None	None	720p	None	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AL00D3US	i5-4300U	vPro	HD 4400	4GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	20/14
20AL00D4US	i5-4300U	vPro	HD 4400	4GBx1	12.5" FHD IPS	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	20/14
20AL008JUS	i5-4300U	vPro	HD 4400	4GBx1	12.5" HD IPS	MT	500G 7200	7260 ac+BT	Upg	None	16GB	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AL008KUS	i5-4300U	vPro	HD 4400	4GBx1	12.5" HD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AL008NUS	i5-4300U	vPro	HD 4400	4GBx1	12.5" HD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AL008PUS	i5-4300U	vPro	HD 4400	8GBx1	12.5" HD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AL009JUS	i5-4300U	vPro	HD 4400	4GBx1	12.5" HD IPS	MT	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AL00D5US	i7-4600U	vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	20/14
20AL00D7US	i7-4600U	vPro	HD 4400	8GBx1	12.5" FHD IPS	MT	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8.1 P64	3-depot	No	20/14
20AL008LUS	i7-4600U	vPro	HD 4400	4GBx1	12.5" HD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AL008MUS	i7-4600U	vPro	HD 4400	4GBx1	12.5" HD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AL008QUS	i7-4600U	vPro	HD 4400	8GBx1	12.5" HD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AL008RUS	i7-4600U	vPro	HD 4400	8GBx1	12.5" HD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13
20AL009KUS	i7-4600U	vPro	HD 4400	8GBx1	12.5" HD IPS	MT	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	3+3	45W	Win8 P64	3-depot	No	20/13

• For detailed platform specifications, please see [ThinkPad X240 Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i3 / i5 / i7 Processor					DDR3L-1600	Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 1.5W x 2 / dual array mic, combo audio/mic jack	
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed	Keyboard UltraNav™	6-row, spill-resistant, multimedia Fn keys, optional LED backlight TrackPoint® pointing device and Mylar surface touchpad, integrated five buttons, multi-touch
	i3-4010U	2	1.7 GHz	-	3MB		DDR3L-1600	ThinkLight™	None
	i5-4200U		1.6 GHz	2.6 GHz	3MB				
i5-4300U	1.9 GHz		2.9 GHz	3MB					
i7-4600U	2.1 GHz		3.3 GHz	4MB					
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket					Chipset	Intel SoC (System on Chip) platform		
Optical Storage	None Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory					Smart card reader	Optional: Smart card reader		
M.2 SSD	Some: Single-sided M.2 SSD, via M.2 card slot, exclusive with Smart card reader Some: Double-sided M.2 SSD, via M.2 card slot, exclusive with WWAN card					Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
Widescreen display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS					Ports	Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector		
Multi-touch	Some: Capacitive-type multi-touch, supports 10-finger gesture					WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card		
Camera (optional)	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus					WWAN (optional)	Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS		
Graphics	Intel HD Graphics 4400 in processor					SIM card (optional)	AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider		
Dimensions ³	12.5W" (WxDxH): 12.0" x 8.21" x 0.78"; 305.5mm x 208.5mm x 19.9mm 12.5W" MultiTouch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm					Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter		
Weight ²	Models	3-cell only	6-cell only	3-cell + 3-cell	3-cell + 6-cell	Ethernet	Non-vPro model: Intel Ethernet Connection I218-V (Clarkville) vPro model: Intel Ethernet Connection I218-LM (Clarkville)		
	Non-MultiTouch	2.88 lb / 1.31kg	3.23 lb / 1.47kg	3.13 lb / 1.42kg	3.48 lb / 1.58kg	NFC	Optional: Near Field Communication		
	MultiTouch	-	-	3.29 lb / 1.49kg	3.64 lb / 1.65kg	Security	Power-on password, hard disk password, supervisor password, security keyhole		
Case material	Glass-Fiber Reinforced Plastic					Security chip	Trusted Platform Module, TCG 1.2-compliant		
Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23.5Wh), HW Authentication					vPro (optional)	Intel vPro Technology		
External battery	Li-Ion 3-cell (23.5Wh) or 6-cell (47.5Wh or 72Wh), HW Authentication					Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor		
Max battery life ¹⁰	Battery configuration	3-cell + 3-cell	3-cell + 6-cell	47.5Wh	3-cell + 6-cell	72Wh	Preload	Win8 / 8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 / 8.1 Pro 64-bit Win8 / 8.1 64: Windows 8 / 8.1 64-bit Win8 / 8.1 P64: Windows 8 / 8.1 Pro 64-bit	
	Battery life	8.7 hr	13.1 hr		17.4 hr		Limited warranty ¹² 1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite		

See footnotes for more detailed information

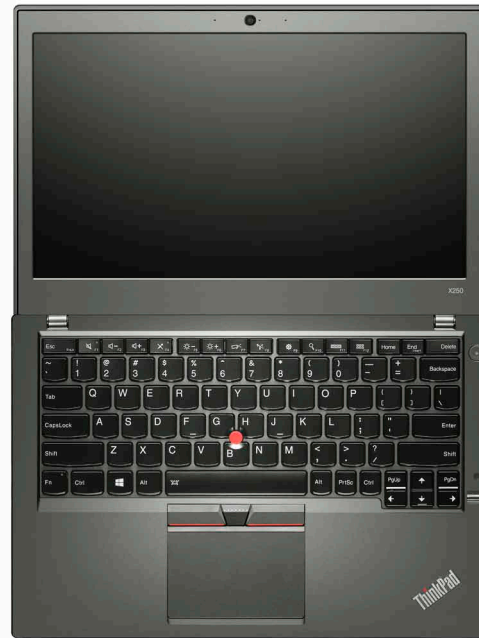
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Lenovo® ThinkPad X250



Lenovo ThinkPad X250



Lenovo ThinkPad X250



Lenovo ThinkPad X250



Lenovo ThinkPad X250

ThinkPad X250 Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor								Smart card reader <i>Optional</i> : Smart card reader																				
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																			
	i3-5010U	2	4	2.1 GHz	-	3MB	DDR3L-1600	Intel HD Graphics 5500	Ports	Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector																			
	i5-5200U			2.2 GHz	2.7 GHz	3MB			Camera (<i>optional</i>)	HD720p resolution, low light sensitive, fixed focus																			
	i5-5300U			2.3 GHz	2.9 GHz	3MB			Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1.5W x 2 / dual array microphone, combo audio/microphone jack																			
i7-5600U	2.6 GHz			3.2 GHz	4MB	Keyboard			6-row, spill-resistant, multimedia Fn keys, optional LED backlight																				
Graphics	Intel HD Graphics 5500 in processor, supports external analog monitor via VGA and digital monitor via Mini DisplayPort; supports three independent displays; Max resolution: 3840x2160@30Hz (DP via mDP cable); 1920x1200@60Hz (VGA)								UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch																			
Chipset	Intel SoC (System on Chip) platform								Security	Power-on password, hard disk password, supervisor password, security keyhole																			
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket								Security chip	Trusted Platform Module, TCG 1.2-compliant																			
Display	<i>Some</i> : 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 300:1 contrast ratio								ThinkEngine	Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures																			
	<i>Some</i> : 12.5" (317.5mm) HD (1366x768), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS								vPro (<i>optional</i>)	Intel vPro Technology																			
	<i>Some</i> : 12.5" (317.5mm) FHD (1920x1080), anti-glare, LED backlight, 400 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS								Fingerprint reader	<i>Optional</i> : Fingerprint reader on the keyboard bezel, swipe sensor																			
Multi-touch (<i>opt</i>)	Capacitive-type multi-touch, supports 10-finger gesture, 270 or 360 nits								Internal battery	<i>Optional</i> : Integrated Li-Ion or Li-Polymer 3-cell (23Wh)																			
Storage	<i>Some</i> : SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable								External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)																			
	<i>Some</i> : HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™								Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>No + 3-cell</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 48Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Battery life</td> <td>5.2 hr</td> <td>10.7 hr</td> <td>16.0 hr</td> <td>21.4 hr</td> </tr> </tbody> </table>					Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	Battery life	5.2 hr	10.7 hr	16.0 hr	21.4 hr					
Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh																									
Battery life	5.2 hr	10.7 hr	16.0 hr	21.4 hr																									
	<i>Some</i> : SSHD with 8GB NAND flash memory								AC adapter	45W AC adapter																			
M.2 SSD (<i>opt</i>)	M.2 Solid State Drive (SSD), via M.2 card slot								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center Lenovo SHAREit Lenovo Companion ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update PC Device Stage Adobe® Reader® Evernote® Skype™ Maxthon Cloud Browser Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) 																			
Optical	None									<i>Some</i> : Windows 8.1 64-bit <ul style="list-style-type: none"> Lenovo Solution Center Lenovo SHAREit Lenovo Companion ThinkVantage System Update PC Device Stage Weather Channel Evernote Maxthon Cloud Browser Bing Translator Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) 																			
Ethernet	<i>Non-vPro model</i> : Intel Ethernet Connection I218-V (Clarkville)								Limited warranty ¹²	<i>One of the following, configurable by model</i> : <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 																			
Bluetooth™	Intel Ethernet Connection I218-LM (Clarkville)								Environment	EPEAT™ Gold (US) or EPEAT Silver (WE); ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant																			
WLAN ⁴	<i>One of the following, configurable by model</i> : <ul style="list-style-type: none"> 11b/g/n, ThinkPad 11b/g/n, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card 																												
WWAN (<i>optional</i>)	<i>One of the following, configurable by model</i> : <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card 																												
SIM card (<i>opt</i>)	AT&T® or Verizon® LTE (4G), contract required with service provider																												
Dimensions ³	<i>12.5" (WxDxH)</i> : 12.0" x 8.21" x 0.80"; 305.5mm x 208.5mm x 20.3mm <i>12.5" Touch (WxDxH)</i> : 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm																												
Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>No + 3-cell</th> <th>3-cell + 3-cell</th> <th>No + 6-cell</th> <th>3-cell + 6-cell</th> </tr> </thead> <tbody> <tr> <td>Non-touch</td> <td>2.88 lb / 1.31 kg</td> <td>3.13 lb / 1.42 kg</td> <td>3.23 lb / 1.47 kg</td> <td>3.48 lb / 1.58 kg</td> </tr> <tr> <td>Multi-touch</td> <td>-</td> <td>3.29 lb / 1.49 kg</td> <td>-</td> <td>3.64 lb / 1.65 kg</td> </tr> </tbody> </table>								Models	No + 3-cell	3-cell + 3-cell	No + 6-cell	3-cell + 6-cell	Non-touch	2.88 lb / 1.31 kg	3.13 lb / 1.42 kg	3.23 lb / 1.47 kg	3.48 lb / 1.58 kg	Multi-touch	-	3.29 lb / 1.49 kg	-	3.64 lb / 1.65 kg						
Models	No + 3-cell	3-cell + 3-cell	No + 6-cell	3-cell + 6-cell																									
Non-touch	2.88 lb / 1.31 kg	3.13 lb / 1.42 kg	3.23 lb / 1.47 kg	3.48 lb / 1.58 kg																									
Multi-touch	-	3.29 lb / 1.49 kg	-	3.64 lb / 1.65 kg																									
Case material	<i>Display cover</i> : Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); <i>Bottom</i> : Glass-Fiber Reinforced Plastic																												

ThinkPad X250 20CM (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	M.2 SSD	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Camera	Backlit keyboard	Fingerprint reader	Battery cells (int+ext)	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20CM002XUS	i5-5200U	No	HD 5500	8GBx1	12.5" HD	No	500G 5400	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CM0036US	i5-5200U	No	HD 5500	4GBx1	12.5" HD	No	500G 5400	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CM002VUS	i5-5300U	vPro	HD 5500	4GBx1	12.5" HD	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	No+6(48wh)	45W	Win8.1 DG Win7	3-depot	No	01/15
20CM002YUS	i5-5300U	vPro	HD 5500	8GBx1	12.5" HD	No	500G 5400	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CM0030US	i5-5300U	vPro	HD 5500	4GBx1	12.5" HD	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CM0031US	i5-5300U	vPro	HD 5500	4GBx1	12.5" HD	No	500G 5400	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CM0032US	i5-5300U	vPro	HD 5500	8GBx1	12.5" HD	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	No+6(48wh)	45W	Win8.1 DG Win7	3-depot	No	01/15
20CM0033US	i5-5300U	vPro	HD 5500	8GBx1	12.5" HD	No	180G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CM0034US	i5-5300U	vPro	HD 5500	4GBx1	12.5" HD	No	500G 7200	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CM0035US	i5-5300U	vPro	HD 5500	4GBx1	12.5" HD IPS	No	500G 7200	16GB	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15
20CM002WUS	i7-5600U	vPro	HD 5500	8GBx1	12.5" HD	No	256G SSD Opal2	None	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	3+3	45W	Win8.1 DG Win7	3-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad X250 Platform Specifications](#) sheet

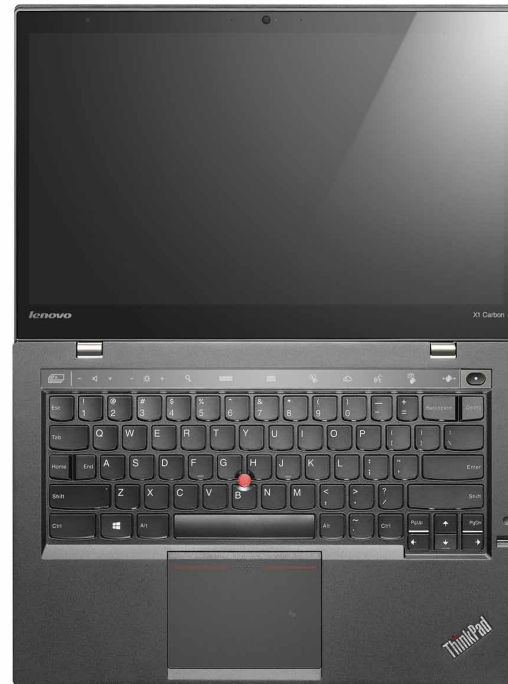
Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor	Dimensions ³	12.5" (WxDxH): 12.0" x 8.21" x 0.80"; 305.5mm x 208.5mm x 20.3mm 12.5" Touch (WxDxH): 12.0" x 8.21" x 0.85"; 305.5mm x 208.5mm x 21.5mm																																										
	<table border="1"> <thead> <tr> <th>Processor</th> <th># of Cores</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Speed</th> </tr> </thead> <tbody> <tr> <td>i3-5010U</td> <td rowspan="4">2</td> <td>2.1 GHz</td> <td>-</td> <td>3MB</td> <td rowspan="4">DDR3L-1600</td> </tr> <tr> <td>i5-5200U</td> <td>2.2 GHz</td> <td>2.7 GHz</td> <td>3MB</td> </tr> <tr> <td>i5-5300U</td> <td>2.3 GHz</td> <td>2.9 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-5600U</td> <td>2.6 GHz</td> <td>3.2 GHz</td> <td>4MB</td> </tr> </tbody> </table>	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	i3-5010U	2	2.1 GHz	-	3MB	DDR3L-1600	i5-5200U	2.2 GHz	2.7 GHz	3MB	i5-5300U	2.3 GHz	2.9 GHz	3MB	i7-5600U	2.6 GHz	3.2 GHz	4MB	Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>No + 3-cell</th> <th>3-cell + 3-cell</th> <th>No + 6-cell</th> <th>3-cell + 6-cell</th> </tr> </thead> <tbody> <tr> <td>Non-touch</td> <td>2.88 lb / 1.31 kg</td> <td>3.13 lb / 1.42 kg</td> <td>3.23 lb / 1.47 kg</td> <td>3.48 lb / 1.58 kg</td> </tr> <tr> <td>Multi-touch</td> <td>-</td> <td>3.29 lb / 1.49 kg</td> <td>-</td> <td>3.64 lb / 1.65 kg</td> </tr> </tbody> </table>				Models	No + 3-cell	3-cell + 3-cell	No + 6-cell	3-cell + 6-cell	Non-touch	2.88 lb / 1.31 kg	3.13 lb / 1.42 kg	3.23 lb / 1.47 kg	3.48 lb / 1.58 kg	Multi-touch	-	3.29 lb / 1.49 kg	-	3.64 lb / 1.65 kg
Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed																																								
i3-5010U	2	2.1 GHz	-	3MB	DDR3L-1600																																								
i5-5200U		2.2 GHz	2.7 GHz	3MB																																									
i5-5300U		2.3 GHz	2.9 GHz	3MB																																									
i7-5600U		2.6 GHz	3.2 GHz	4MB																																									
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Non-touch	2.88 lb / 1.31 kg	3.13 lb / 1.42 kg	3.23 lb / 1.47 kg	3.48 lb / 1.58 kg																																									
Multi-touch	-	3.29 lb / 1.49 kg	-	3.64 lb / 1.65 kg																																									
Graphics	Intel HD Graphics 5500 in processor	Case material	Display cover: Glass-Fiber Reinforced Plastic (non-touch model) or Carbon-Fiber Reinforced Plastic (multi-touch model); Bottom: Glass-Fiber Reinforced Plastic																																										
Chipset	Intel SoC (System on Chip) platform	Smart card reader	Optional: Smart card reader																																										
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket	Multicard reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																																										
Display	Some: 12.5" (317.5mm) HD (1366x768), 200 nits, 300:1 contrast ratio Some: 12.5" (317.5mm) HD (1366x768), 300 nits, 700:1 contrast ratio, IPS Some: 12.5" (317.5mm) FHD (1920x1080), 400 nits, 700:1 contrast ratio, IPS	Ports	Two USB 3.0 (one Always On), VGA, MiniDP, Ethernet (RJ-45), Dock connector																																										
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 or 360 nits	Camera (optional)	HD720p resolution, low light sensitive, fixed focus																																										
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: HDD / SATA 6.0Gb/s, 2.5" wide, 7mm or 9.5mm high, APS Some: SSHD with 8GB NAND flash memory	Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1.5W x 2 / dual array microphone, combo audio/microphone jack																																										
M.2 SSD (opt)	M.2 Solid State Drive (SSD), via M.2 card slot	Keyboard	6-row, spill-resistant, multimedia Fn keys, optional LED backlight																																										
Optical	None	UltraNav™	TrackPoint® pointing device and buttonless Mylar surface touchpad, multi-touch																																										
Ethernet	Intel Ethernet Connection I218-V (Non-vPro model) or I218-LM (vPro model)	Security	Power-on password, hard disk password, supervisor password, security keyhole																																										
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	Security chip	Trusted Platform Module, TCG 1.2-compliant																																										
WLAN ⁴	11b/g/n+BT: ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 card 7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card	vPro (optional)	Intel vPro Technology																																										
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card	Fingerprint reader	Optional: Fingerprint reader on the keyboard bezel, swipe sensor																																										
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider	Internal battery	Optional: Integrated Li-Ion or Li-Polymer 3-cell (23Wh)																																										
		External battery	Li-Ion 3-cell (23Wh) or 6-cell (48Wh or 72Wh)																																										
		Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>No + 3-cell</th> <th>3-cell + 3-cell</th> <th>3-cell + 6-cell 48Wh</th> <th>3-cell + 6-cell 72Wh</th> </tr> </thead> <tbody> <tr> <td>Battery life</td> <td>5.2 hr</td> <td>10.7 hr</td> <td>16.0 hr</td> <td>21.4 hr</td> </tr> </tbody> </table>				Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh	Battery life	5.2 hr	10.7 hr	16.0 hr	21.4 hr																													
Models	No + 3-cell	3-cell + 3-cell	3-cell + 6-cell 48Wh	3-cell + 6-cell 72Wh																																									
Battery life	5.2 hr	10.7 hr	16.0 hr	21.4 hr																																									
		AC adapter	45W AC adapter																																										
		Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit																																										
		Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS																																										

See footnotes for more detailed information

(WV2-1) © Lenovo



Lenovo® ThinkPad X1 Carbon (2nd Gen)



Lenovo ThinkPad X1 Carbon (2nd Gen)



Lenovo ThinkPad X1 Carbon (2nd Gen)



Lenovo ThinkPad X1 Carbon (2nd Gen)



Lenovo ThinkPad X1 Carbon (2nd Gen)

ThinkPad X1 Carbon (2nd Gen) Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th Generation Intel® Core™ i5 / i7 Processor								Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	Processor Graphics	WLAN ⁴	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> Intel Wireless-N 7260, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT combo adapter, M.2 card 	
	i5-4200U	2	4	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	Intel HD Graphics 4400	WWAN (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/HSPA+/EVDO/GSM/GPRS/EDGE, GPS, M.2 card (US models) Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card (WE models) Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card (WE models) 	
	i5-4210U			1.7 GHz	2.7 GHz	3MB					
	i5-4300U			1.9 GHz	2.9 GHz	3MB					
	i7-4600U			2.1 GHz	3.3 GHz	4MB					
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets								SIM card (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> AT&T® or Verizon® LTE (4G), contract required with service provider (US models) Lenovo SIM, out-of-box service, pay-as-you-go via credit card, no contract required (WE models) User selectable, contract required with service provider 	
Optical Storage	None M.2 Solid State Drive (SSD)								Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Widescreen display	<i>Some:</i> 14.0" (355mm) HD+ (1600x900), anti-glare, LED backlight, 250 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some:</i> 14.0" (355mm) WQHD (2560x1440), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS , 170° viewing angle								Ethernet	Ethernet Extension cable	
Multi-touch	<i>Some:</i> Capacitive-type multi-touch, supports 10-finger gesture, 270 nits								NFC	<i>Optional:</i> Near Field Communication	
Camera	HD720p resolution, low light sensitive, face tracking, fixed focus, gesture input								Security	Power-on password, hard disk password, supervisor password, security keyhole, reset switch	
Light sensor	Ambient Light Sensor (Windows 8.1 64-bit only)								Security chip	Trusted Platform Module, TCG 1.2-compliant	
Graphics	Intel HD Graphics 4400 or 5000 in processor, external digital monitor support via Mini DisplayPort or HDMI™ (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable); supports three independent displays; <i>Max resolution:</i> 3840x2160 (Mini DisplayPort)@30Hz; 2880x1620 (HDMI)@60Hz								vPro (optional)	Intel vPro Technology	
Keyboard	Adaptive Keyboard with a dynamically changing row providing additional functionality based on the type of the application active / 5-row, spill-resistant (except Adaptive Keys), LED backlit								Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor	
UltraNav™	TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch								Limited warranty ¹²	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 	
ThinkLight™	None								Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update PC Device Stage Adobe® Reader® Nitro Pro Evernote® Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) 	
Dimensions ³	WQHD (WxDxH):		13.03" x 8.92" x 0.70";		331.0mm x 226.5mm x 17.72mm					<i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center Lenovo Support Lenovo Companion ThinkVantage System Update Hightail - Metro PC Device Stage AccuWeather Amazon Kindle Nitro Pro Rara Streaming Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) 	
	HD+ (WxDxH):		13.03" x 8.93" x 0.71";		331.0mm x 226.8mm x 18.16mm						
	WQHD Touch (WxDxH):		13.03" x 8.94" x 0.73";		331.0mm x 227.1mm x 18.46mm						
Weight ²	Models	WQHD		HD+		WQHD Touch					
	Weight	2.82 lb / 1.28kg		2.96 lb / 1.34kg		3.15 lb / 1.43kg					
Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum										
Battery type	Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery										
Max battery life ¹⁰	Integrated battery: up to 9 hr 45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter										
AC Adapter	AC Adapter		45W		65W Slim		65W				
RapidCharge	Charge to 80%		1.0hr		50min		50min				
	Charge to 100%		2.3hr		2.1hr		2.1hr				
Chipset	Intel SoC (System on Chip) platform										
Smart card reader	None										
Multicard reader	None										
Ports	Two USB 3.0 (one Always On), MiniDP, HDMI, Ethernet extension connector, Lenovo OneLink connector, Micro-SIM card tray (WWAN upg / WWAN model only)										
Monitor Cable	<i>Some:</i> Mini DisplayPort to VGA Monitor Cable										
Environment	EPEAT™ Gold; ENERGY STAR® 6.0; RoHS-compliant										

ThinkPad X1 Carbon (2nd Gen) 20A7 (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit keyboard	Fingerprint reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20A7002FUS	i5-4200U	No	HD 4400	4GBx1	14" HD+	No	128G SSD	7260 b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	01/14
20A7002HUS	i5-4200U	No	HD 4400	4GBx1	14" HD+	No	256G SSD eDrive	7260 b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	01/14
20A7007GUS	i5-4210U	No	HD 4400	4GBx1	14" HD+	No	128G SSD	7260 b/g/n+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	05/14
20A7002JUS	i5-4300U	vPro	HD 4400	4GBx1	14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	01/14
20A7002NUS	i5-4300U	vPro	HD 4400	4GBx1	14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	01/14
20A7002YUS	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	No	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	01/14
20A70031US	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	01/14
20A7002LUS	i5-4300U	vPro	HD 4400	8GBx1	14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	01/14
20A70033US	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	01/14
20A70094US	i5-4300U	vPro	HD 4400	8GBx1	14" HD+	No	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	07/14
20A7002QUS	i7-4600U	vPro	HD 4400	8GBx1	14" HD+	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	01/14
20A7002SUS	i7-4600U	vPro	HD 4400	8GBx1	14" HD+	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	01/14
20A7002UUS	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	01/14
20A7002WUS	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	01/14
20A70096US	i7-4600U	vPro	HD 4400	8GBx1	14" HD+	No	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 DG Win7	3-depot	No	07/14

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(2nd Gen\) Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor					Keyboard	Adaptive Keyboard with a dynamically changing row providing additional functionality based on the type of the application active / 5-row, spill-resistant (except Adaptive Keys), LED backlit					
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	UltraNav™	TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch				
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	ThinkLight™	None				
	i5-4210U		1.7 GHz	2.7 GHz	3MB		Chipset	Intel SoC (System on Chip) platform				
	i5-4300U		1.9 GHz	2.9 GHz	3MB		Smart card reader	None				
	i7-4600U		2.1 GHz	3.3 GHz	4MB		Multicard reader	None				
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets					Ports	Two USB 3.0 (one Always On), MiniDP, HDMI, Ethernet extension connector, Lenovo OneLink connector, Micro-SIM card tray (WWAN upg / WWAN model only)					
Optical Storage	None M.2 Solid State Drive (SSD)					Monitor Cable	Some: Mini DisplayPort to VGA Monitor Cable					
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900) , 250 nits, 400:1 contrast ratio					WLAN ⁴	7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card					
Multi-touch	Some: 14.0" (355mm) WQHD (2560x1440) , 300 nits, 700:1 contrast ratio, IPS					WWAN (optional)	Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS					
Camera	Some: Capacitive-type multi-touch, supports 10-finger gesture, 270 nits					SIM card (optional)	AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider					
Light sensor	HD720p resolution, low light sensitive, face tracking, fixed focus, gesture input					Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					
Graphics	Intel HD Graphics 4400 or 5000					Ethernet	Ethernet Extension cable Optional: Near Field Communication					
Dimensions ³	WQHD (WxDxH):		13.03" x 8.92" x 0.70";		331.0mm x 226.5mm x 17.72mm		Security	Power-on / hard disk / supervisor password, security keyhole, reset switch				
	HD+ (WxDxH):		13.03" x 8.93" x 0.71";		331.0mm x 226.8mm x 18.16mm		Security chip	Trusted Platform Module, TCG 1.2-compliant				
	WQHD Touch (WxDxH):		13.03" x 8.94" x 0.73";		331.0mm x 227.1mm x 18.46mm		vPro (optional)	Intel vPro Technology				
Weight ²	Models	WQHD	HD+	WQHD Touch	Fingerprint reader							
	Weight	2.82 lb / 1.28kg	2.96 lb / 1.34kg	3.15 lb / 1.43kg	Fingerprint reader on the keyboard bezel, swipe sensor							
Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum					Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit					
Battery type	Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery					Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite					
Max battery life ¹⁰	Integrated battery: up to 9 hr											
AC Adapter	45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter											
RapidCharge	AC Adapter	45W	65W Slim	65W								
	Charge to 80%	1.0hr	50min	50min								
	Charge to 100%	2.3hr	2.1hr	2.1hr								
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack											

See footnotes for more detailed information

(MQ1-1) © Lenovo

ThinkPad X1 Carbon (2nd Gen) 20A7 (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Fingerprint reader	NFC	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20A7006DUS	i5-4200U	No	HD 4400	4GBx1	14" WQHD IPS	MT	128G SSD	7260 ac+BT	None	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	1-depot	No	02/14
20A7006TUS	i5-4200U	No	HD 4400	4GBx1	14" WQHD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	1-depot	No	03/14
20A7007DUS	i5-4210U	No	HD 4400	4GBx1	14" WQHD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	1-depot	No	05/14
20A7006RUS	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	1-depot	No	03/14
20A7003BUS	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	MT	128G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	No	01/14
20A7003DUS	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	MT	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	No	01/14
20A7003EUS	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	No	180G SSD Opal	7260 ac+BT	EM7355	Select	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	No	01/14
20A7003GUS	i5-4300U	vPro	HD 4400	4GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 ac+BT	EM7355	Select	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	No	01/14
20A70035US	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	No	01/14
20A7003JUS	i5-4300U	vPro	HD 4400	8GBx1	14" WQHD IPS	No	256G SSD eDrive	7260 ac+BT	EM7355	Select	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	No	01/14
20A70037US	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	No	01/14
20A70039US	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	180G SSD Opal	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	No	01/14
20A7003LUS	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	256G SSD eDrive	7260 ac+BT	EM7355	Select	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	No	01/14
20A7003PUS	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	180G SSD Opal	7260 ac+BT	EM7355	Select	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	No	01/14
20A7006VUS	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	No	03/14
20A7006WUS	i7-4600U	vPro	HD 4400	8GBx1	14" WQHD IPS	MT	512G SSD	7260 ac+BT	Upg	None	None	720p	Backlit	Finger	None	8(45wh)	65W	Win8.1 P64	3-depot	No	07/14

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(2nd Gen\) Platform Specifications sheet](#)

Processor	4th Generation Intel® Core™ i5 / i7 Processor						Keyboard	Adaptive Keyboard with a dynamically changing row providing additional functionality based on the type of the application active / 5-row, spill-resistant (except Adaptive Keys), LED backlit
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	UltraNav™	TrackPoint® pointing device and glass surface touchpad, integrated five buttons, multi-touch
	i5-4200U	2	1.6 GHz	2.6 GHz	3MB	DDR3L-1600	ThinkLight™	None
	i5-4210U		1.7 GHz	2.7 GHz	3MB			
	i5-4300U		1.9 GHz	2.9 GHz	3MB			
	i7-4600U		2.1 GHz	3.3 GHz	4MB			
Memory	4GB or 8GB / DDR3L-1600MHz / soldered to systemboard, no sockets						Chipset	Intel SoC (System on Chip) platform
Optical Storage	None M.2 Solid State Drive (SSD)						Smart card reader	None
Widescreen display	Some: 14.0" (355mm) HD+ (1600x900) , 250 nits, 400:1 contrast ratio						Multicard reader	None
Multi-touch	Some: 14.0" (355mm) WQHD (2560x1440) , 300 nits, 700:1 contrast ratio, IPS						Ports	Two USB 3.0 (one Always On), MiniDP, HDMI, Ethernet extension connector, Lenovo OneLink connector, Micro-SIM card tray (WWAN upg / WWAN model only)
Camera	Some: Capacitive-type multi-touch, supports 10-finger gesture, 270 nits						Monitor Cable	Some: Mini DisplayPort to VGA Monitor Cable
Light sensor	HD720p resolution, low light sensitive, face tracking, fixed focus, gesture input						WLAN ⁴	7260 b/g/n+BT: Intel Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 a/b/g/n+BT: Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 card 7260 ac+BT: Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 card
Graphics	Intel HD Graphics 4400 or 5000						WWAN (optional)	Upg: Wireless WAN upgradable EM7355: Sierra Wireless EM7355, Qualcomm® Gobi™ 4G LTE/ HSPA+/EVDO/GSM/GPRS/EDGE, GPS
Dimensions ³	WQHD (WxDxH):		13.03" x 8.92" x 0.70";		331.0mm x 226.5mm x 17.72mm		SIM card (optional)	AT&T / Verizon: AT&T® / Verizon® LTE (4G), contract required with service provider Select: User selectable, contract required with service provider
	HD+ (WxDxH):		13.03" x 8.93" x 0.71";		331.0mm x 226.8mm x 18.16mm		Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter
	WQHD Touch (WxDxH):		13.03" x 8.94" x 0.73";		331.0mm x 227.1mm x 18.46mm		Ethernet	Ethernet Extension cable
Weight ²	Models	WQHD	HD+	WQHD Touch				
	Weight	2.82 lb / 1.28kg	2.96 lb / 1.34kg	3.15 lb / 1.43kg				
Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum						NFC	Optional: Near Field Communication
Battery type	Integrated Lithium Polymer 8-cell (45Wh) RapidCharge battery						Security	Power-on / hard disk / supervisor password, security keyhole, reset switch
Max battery life ¹⁰	Integrated battery: up to 9 hr						Security chip	Trusted Platform Module, TCG 1.2-compliant
AC Adapter	45W AC Adapter, 65W Slim AC Adapter, or 65W AC Adapter						vPro (optional)	Intel vPro Technology
RapidCharge	AC Adapter	45W	65W Slim	65W				
	Charge to 80%	1.0hr	50min	50min				
	Charge to 100%	2.3hr	2.1hr	2.1hr				
Audio support	HD Audio, Realtek® ALC3232 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack						Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor
							Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 P64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit
							Limited warranty ¹²	1-year - depot / 3-years (1-yr battery) - depot / 3-years (1-year battery) onsite

See footnotes for more detailed information

(MQ1-2) © Lenovo



Lenovo® ThinkPad X1 Carbon (3rd Gen)



Lenovo ThinkPad X1 Carbon (3rd Gen)



Lenovo ThinkPad X1 Carbon (3rd Gen)



Lenovo ThinkPad X1 Carbon (3rd Gen)



Lenovo ThinkPad X1 Carbon (3rd Gen)

ThinkPad X1 Carbon (3rd Gen) Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i5 / i7 Processor							Intel HD Graphics 5500	None	Two USB 3.0 (one Always On), Mini DisplayPort, HDMI, Ethernet extension connector, Lenovo OneLink connector <i>Optional:</i> Mini DisplayPort to VGA Monitor Cable											
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory Speed				DDR3L-1600										
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB	Intel HD Graphics 5500														
	i5-5300U			2.3 GHz	2.9 GHz	3MB															
	i7-5500U			2.4 GHz	3 GHz	4MB															
i7-5600U	2.6 GHz			3.2 GHz	4MB																
Processor Graphics																					
Graphics	Intel HD Graphics 5500 in processor, external digital monitor support via Mini DisplayPort or HDMI™ (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable); supports three independent displays; Max resolution: 3840x2160 (Mini DisplayPort) @60Hz; 4096x2304 (HDMI) @24Hz							Keyboard UltraNav™	6-row, LED backlit, spill-resistant, multimedia Fn keys TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch												
Chipset	Intel SoC (System on Chip) platform							Security	Power-on password, hard disk password, supervisor password, security keyhole, reset switch												
Memory	4GB or 8GB / PC3-12800 1600MHz DDR3L / soldered to systemboard, no sockets							Security chip ThinkEngine	Trusted Platform Module, TCG 1.2-compliant Delivers improved thermal and power efficiency, up to 30 day standby, faster resume time, enhanced security, as well as anti-tampering measures												
Display	<i>Some:</i> 14.0" (355mm) FHD (1920x1080), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 400:1 contrast ratio <i>Some:</i> 14.0" (355mm) WQHD (2560x1440), anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 700:1 contrast ratio, IPS, 170° viewing angle							vPro (<i>optional</i>)	Intel vPro Technology												
Multi-touch (<i>opt</i>)	Capacitive-type multi-touch, supports 10-finger gesture, 270 nits							Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor												
Storage	M.2 Solid State Drive (SSD), PCIe 2.0 x4 or SATA							Battery type	Integrated Lithium Polymer 8-cell (50Wh) RapidCharge battery												
Optical	None							Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>FHD</th> <th>WQHD</th> <th>WQHD Touch</th> </tr> </thead> <tbody> <tr> <td>Battery life</td> <td>10.9 hr</td> <td>9.9 hr</td> <td>9.9 hr</td> </tr> </tbody> </table>	Models	FHD	WQHD	WQHD Touch	Battery life	10.9 hr	9.9 hr	9.9 hr				
Models	FHD	WQHD	WQHD Touch																		
Battery life	10.9 hr	9.9 hr	9.9 hr																		
Ethernet	Gigabit Ethernet via Ethernet extension cable							AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter												
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter							RapidCharge	<table border="1"> <thead> <tr> <th>AC adapter</th> <th>45W</th> <th>65W Slim</th> <th>65W</th> </tr> </thead> <tbody> <tr> <td>Charge to 80%</td> <td>1.1hr</td> <td>55min</td> <td>55min</td> </tr> <tr> <td>Charge to 100%</td> <td>2.5hr</td> <td>2.3hr</td> <td>2.3hr</td> </tr> </tbody> </table>	AC adapter	45W	65W Slim	65W	Charge to 80%	1.1hr	55min	55min	Charge to 100%	2.5hr	2.3hr	2.3hr
AC adapter	45W	65W Slim	65W																		
Charge to 80%	1.1hr	55min	55min																		
Charge to 100%	2.5hr	2.3hr	2.3hr																		
WLAN ⁴	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> 11b/g/n, Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 card 11a/b/g/n, Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT adapter, M.2 card 11ac, Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT adapter, M.2 card 							Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center Lenovo SHAREit ThinkVantage Product Recovery Rescue and Recovery™ ThinkVantage System Update PC Device Stage Adobe® Reader® Evernote® Skype™ Maxthon Cloud Browser Microsoft® Office preloaded; purchase a product key to activate Norton™ Internet Security (30 days of virus definitions) 	<i>Some:</i> Windows 8.1 64-bit Pro 64-bit <ul style="list-style-type: none"> Lenovo Solution Center Lenovo SHAREit Lenovo Companion ThinkVantage System Update PC Device Stage Weather Channel Evernote Maxthon Cloud Browser Bing Translator Norton Studio Microsoft Office preloaded; purchase a product key to activate Norton Internet Security (30 days of virus definitions) 											
WWAN (<i>optional</i>)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> Wireless WAN upgradable Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card 																				
SIM card (<i>opt</i>)	AT&T® or Verizon® LTE (4G), contract required with service provider																				
Dimensions ³	<i>WQHD (WxDxH):</i> 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm <i>FHD (WxDxH):</i> 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm <i>WQHD Touch (WxDxH):</i> 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm																				
Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>FHD</th> <th>WQHD</th> <th>WQHD Touch</th> </tr> </thead> <tbody> <tr> <td>Weight</td> <td>2.996 lb / 1.359 kg</td> <td>2.877 lb / 1.305 kg</td> <td>3.175 lb / 1.44 kg</td> </tr> </tbody> </table>							Models	FHD	WQHD	WQHD Touch	Weight	2.996 lb / 1.359 kg	2.877 lb / 1.305 kg	3.175 lb / 1.44 kg						
Models	FHD	WQHD	WQHD Touch																		
Weight	2.996 lb / 1.359 kg	2.877 lb / 1.305 kg	3.175 lb / 1.44 kg																		
Case material	<i>Display cover:</i> Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; <i>Bottom:</i> Magnesium/Aluminum							Limited warranty ¹²	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> 1-year depot repair service 3-year/1-yr battery depot repair service 3-year/1-yr battery limited onsite service²⁴ 3-year/1-yr battery limited onsite service, IWS (International Warranty Service¹⁷) 												
Environment	EPEAT™ Gold; ENERGY STAR® 6.1; RoHS-compliant																				

ThinkPad X1 Carbon (3rd Gen) 20BS (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BS002WUS	i5-5200U	No	HD 5500	4GBx1	14" FHD	No	128G SSD	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20BS0034US	i5-5300U	vPro	HD 5500	4GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20BS002VUS	i5-5200U	No	HD 5500	4GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20BS0037US	i5-5200U	No	HD 5500	4GBx1	14" FHD	No	180G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20BS003AUS	i5-5200U	No	HD 5500	4GBx1	14" FHD	No	128G SSD	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20BS0033US	i5-5300U	vPro	HD 5500	4GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20BS003CUS	i5-5300U	vPro	HD 5500	4GBx1	14" FHD	No	180G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20BS002YUS	i5-5300U	vPro	HD 5500	8GBx1	14" FHD	No	240G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20BS0032US	i5-5300U	vPro	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20BS0039US	i5-5300U	vPro	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20BS002TUS	i7-5600U	vPro	HD 5500	8GBx1	14" FHD	No	360G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20BS002UUS	i7-5600U	vPro	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20BS0031US	i7-5600U	vPro	HD 5500	8GBx1	14" FHD	No	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20BS003BUS	i7-5600U	vPro	HD 5500	8GBx1	14" FHD	No	512G SSD PCIe	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15
20BS003DUS	i7-5600U	vPro	HD 5500	8GBx1	14" FHD	No	240G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 DG Win7	3-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(3rd Gen\) Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i5 / i7 Processor	Dimensions ³	WQHD (WxDxH): 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm FHD (WxDxH): 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm WQHD Touch (WxDxH): 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm																																		
	<table border="1"> <thead> <tr> <th>Processor</th> <th># of Cores</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory Speed</th> </tr> </thead> <tbody> <tr> <td>i5-5200U</td> <td rowspan="5">2</td> <td>2.2 GHz</td> <td>2.7 GHz</td> <td>3MB</td> <td rowspan="5">DDR3L-1600</td> </tr> <tr> <td>i5-5300U</td> <td>2.3 GHz</td> <td>2.9 GHz</td> <td>3MB</td> </tr> <tr> <td>i7-5500U</td> <td>2.4 GHz</td> <td>3 GHz</td> <td>4MB</td> </tr> <tr> <td>i7-5600U</td> <td>2.6 GHz</td> <td>3.2 GHz</td> <td>4MB</td> </tr> </tbody> </table>	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed	i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600	i5-5300U	2.3 GHz	2.9 GHz	3MB	i7-5500U	2.4 GHz	3 GHz	4MB	i7-5600U	2.6 GHz	3.2 GHz	4MB	Weight ²	<table border="1"> <thead> <tr> <th>Models</th> <th>FHD</th> <th>WQHD</th> <th>WQHD Touch</th> </tr> </thead> <tbody> <tr> <td>Weight</td> <td>2.996 lb / 1.359 kg</td> <td>2.877 lb / 1.305 kg</td> <td>3.175 lb / 1.44 kg</td> </tr> </tbody> </table>			Models	FHD	WQHD	WQHD Touch	Weight	2.996 lb / 1.359 kg	2.877 lb / 1.305 kg	3.175 lb / 1.44 kg
Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache	Memory Speed																																
i5-5200U	2	2.2 GHz	2.7 GHz	3MB	DDR3L-1600																																
i5-5300U		2.3 GHz	2.9 GHz	3MB																																	
i7-5500U		2.4 GHz	3 GHz	4MB																																	
i7-5600U		2.6 GHz	3.2 GHz	4MB																																	
Models		FHD	WQHD	WQHD Touch																																	
Weight	2.996 lb / 1.359 kg	2.877 lb / 1.305 kg	3.175 lb / 1.44 kg																																		
Graphics	Intel HD Graphics 5500	Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum																																		
Chipset	Intel SoC (System on Chip) platform	Camera	HD720p resolution, low light sensitive, fixed focus, gesture input																																		
Memory	4GB or 8GB / PC3-12800 1600MHz DDR3L / soldered to systemboard, no sockets	Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack																																		
Display	Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 400:1 contrast ratio Some: 14.0" (355mm) WQHD (2560x1440), 300 nits, 700:1 contrast ratio, IPS	Keyboard	6-row, LED backlit, spill-resistant, multimedia Fn keys UltraNav™																																		
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 nits	Security	Power-on / hard disk / supervisor password, security keyhole, reset switch																																		
Storage	M.2 Solid State Drive (SSD), PCIe 2.0 x4 or SATA	Security chip	Trusted Platform Module, TCG 1.2-compliant																																		
Optical	None	vPro (optional)	Intel vPro Technology																																		
Ethernet	Gigabit Ethernet via Ethernet extension cable	Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor																																		
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	Battery type	Integrated Lithium Polymer 8-cell (50Wh) RapidCharge battery																																		
WLAN ⁴	7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card	Max battery life ¹⁰	<table border="1"> <thead> <tr> <th>Models</th> <th>FHD</th> <th>WQHD</th> <th>WQHD Touch</th> </tr> </thead> <tbody> <tr> <td>Battery life</td> <td>10.9 hr</td> <td>9.9 hr</td> <td>9.9 hr</td> </tr> </tbody> </table>			Models	FHD	WQHD	WQHD Touch	Battery life	10.9 hr	9.9 hr	9.9 hr																								
Models	FHD	WQHD	WQHD Touch																																		
Battery life	10.9 hr	9.9 hr	9.9 hr																																		
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card	AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter																																		
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider	RapidCharge	<table border="1"> <thead> <tr> <th>AC adapter</th> <th>45W</th> <th>65W Slim</th> <th>65W</th> </tr> </thead> <tbody> <tr> <td>Charge to 80%</td> <td>1.1hr</td> <td>55min</td> <td>55min</td> </tr> <tr> <td>Charge to 100%</td> <td>2.5hr</td> <td>2.3hr</td> <td>2.3hr</td> </tr> </tbody> </table>			AC adapter	45W	65W Slim	65W	Charge to 80%	1.1hr	55min	55min	Charge to 100%	2.5hr	2.3hr	2.3hr																				
AC adapter	45W	65W Slim	65W																																		
Charge to 80%	1.1hr	55min	55min																																		
Charge to 100%	2.5hr	2.3hr	2.3hr																																		
Multicard reader	None	Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Win8.1 64: Windows 8.1 64-bit Win8.1 P64: Windows 8.1 Pro 64-bit																																		
Ports	Two USB 3.0 (one Always On), Mini DisplayPort, HDMI, Ethernet extension connector, Lenovo OneLink connector	Limited warranty ¹²	1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS																																		
Monitor cable	Optional: Mini DisplayPort to VGA Monitor Cable																																				

See footnotes for more detailed information

(MQ2-1) © Lenovo

ThinkPad X1 Carbon (3rd Gen) 20BS (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Model	Processor	vPro	Graphics	Memory (soldered)	Display	Multi-touch	Storage	WLAN & Bluetooth	WWAN	SIM card	Monitor cable	Camera	Backlit key-board	Finger-print reader	Battery cells	Power adapter (watt)	Preload	Base warranty (year)	Global	Ann date (m/y)
20BS002XUS	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	1-depot	No	01/15
20BS0030US	i5-5300U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	256G SSD Opal2	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	No	01/15
20BS0036US	i5-5300U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	240G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	No	01/15
20BS003FUS	i5-5300U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	No	01/15
20BS0035US	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	512G SSD PCIe	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	No	01/15
20BS0038US	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	256G SSD Opal2	7265 ac+BT	EM7345	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	No	01/15
20BS003EUS	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	256G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	No	01/15
20BS003GUS	i7-5600U	vPro	HD 5500	8GBx1	14" WQHD IPS	MT	240G SSD Opal2	7265 ac+BT	Upg	None	None	720p	Backlit	Finger	8(50wh)	65W	Win8.1 P64	3-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad X1 Carbon \(3rd Gen\) Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i5 / i7 Processor					Dimensions ³ WQHD (WxDxH): 13.03" x 8.92" x 0.70"; 331.0mm x 226.5mm x 17.72mm FHD (WxDxH): 13.03" x 8.93" x 0.71"; 331.0mm x 226.8mm x 18.16mm WQHD Touch (WxDxH): 13.03" x 8.94" x 0.73"; 331.0mm x 227.1mm x 18.46mm												
	Processor	# of Cores	Base Frequency	Max Turbo Frequency	Cache		Memory Speed											
	i5-5200U	2	2.2 GHz	2.7 GHz	3MB		DDR3L-1600											
	i5-5300U		2.3 GHz	2.9 GHz	3MB													
	i7-5500U		2.4 GHz	3 GHz	4MB													
i7-5600U	2.6 GHz		3.2 GHz	4MB														
Weight ²	Models	FHD	WQHD	WQHD Touch	Weight	2.996 lb / 1.359 kg	2.877 lb / 1.305 kg	3.175 lb / 1.44 kg										
Case material	Display cover: Carbon-Fiber Reinforced Plastic + Glass-Fiber Reinforced Plastic; Bottom: Magnesium/Aluminum																	
Graphics	Intel HD Graphics 5500					Camera	HD720p resolution, low light sensitive, fixed focus, gesture input											
Chipset	Intel SoC (System on Chip) platform					Audio support	HD Audio, Realtek® ALC3232 codec / stereo speakers, 1 watt x 2 / dual array microphone, combo audio/microphone jack											
Memory	4GB or 8GB / PC3-12800 1600MHz DDR3L / soldered to systemboard, no sockets					Keyboard	6-row, LED backlit, spill-resistant, multimedia Fn keys											
Display	Some: 14.0" (355mm) FHD (1920x1080), 300 nits, 400:1 contrast ratio Some: 14.0" (355mm) WQHD (2560x1440), 300 nits, 700:1 contrast ratio, IPS					UltraNav™	TrackPoint® pointing device and buttonless glass surface touchpad, multi-touch											
Multi-touch (opt)	Capacitive-type multi-touch, supports 10-finger gesture, 270 nits					Security	Power-on / hard disk / supervisor password, security keyhole, reset switch											
Storage	M.2 Solid State Drive (SSD), PCIe 2.0 x4 or SATA					Security chip	Trusted Platform Module, TCG 1.2-compliant											
Optical	None					vPro (optional)	Intel vPro Technology											
Ethernet	Gigabit Ethernet via Ethernet extension cable					Fingerprint reader	Fingerprint reader on the keyboard bezel, swipe sensor											
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter					Battery type	Integrated Lithium Polymer 8-cell (50Wh) RapidCharge battery											
WLAN ⁴	7265 b/g/n+BT: Intel Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 a/b/g/n+BT: Intel Dual Band Wireless-N 7265, 2x2, Wi-Fi + BT, M.2 card 7265 ac+BT: Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT, M.2 card					Max battery life ¹⁰	Models	FHD	WQHD	WQHD Touch	Battery life	10.9 hr	9.9 hr	9.9 hr				
WWAN (optional)	Upg: Wireless WAN upgradable N5321: Wireless WAN, Ericsson® N5321, HSPA+ 21Mbps/GSM/GPRS/EDGE, GPS, M.2 card EM7345: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 card					AC adapter	45W AC adapter, 65W Slim AC adapter, or 65W AC adapter											
SIM card (opt)	AT&T® or Verizon® LTE (4G), contract required with service provider					RapidCharge	AC adapter	45W	65W Slim	65W	Charge to 80%	1.1hr	55min	55min	Charge to 100%	2.5hr	2.3hr	2.3hr
Multicard reader	None					Preload	Win8.1 DG Win7: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit											
Ports	Two USB 3.0 (one Always On), Mini DisplayPort, HDMI, Ethernet extension connector, Lenovo OneLink connector					Win8.1 64:	Windows 8.1 64-bit											
Monitor cable	Optional: Mini DisplayPort to VGA Monitor Cable					Win8.1 P64:	Windows 8.1 Pro 64-bit											
Limited warranty ¹²						1-year depot / 3-year (1-yr battery) depot / 3-year (1-year battery) onsite / 3-year (1-year battery) onsite, IWS												

See footnotes for more detailed information

(MQ2-2) © Lenovo

ThinkPad Edge E431



Lenovo® ThinkPad Edge E431



Lenovo ThinkPad Edge E431



Lenovo ThinkPad Edge E431



Lenovo ThinkPad Edge E531



Lenovo ThinkPad Edge E531



Lenovo ThinkPad Edge E531
with Numeric Keypad

ThinkPad Edge E431 6277 (Intel) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Top color	Finger print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
6277-DGU	i5-3320M	4GBx1	14.0" HD	720p	320G 5400	Intel 2230 + BT	None	Black	None	6	48	Prem 64	01/14
6277-DFU	i3-3120M	4GBx1	14.0" HD	720p	320G 7200	TP 11a/b/g/n + BT	None	Black	None	6	48	Prem 64	01/14

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-3320M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology	Preloaded operating system²⁰ - Genuine Windows® 7 Home Premium 64 Preloaded applications (only some listed) • Adobe® Reader® • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™	
M.2 SSD	None	
Widescreen display	14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio	
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator	
Graphics	Intel HD Graphics 3000 or Intel HD Graphics 4000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution: 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz</i>	
Keyboard	6-row, spill-resistant, multimedia Fn keys	
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³	
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch	
ThinkLight™	None	
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.04-1.15"; 344mm x 239mm x 26.3-29.3mm	
Weight ²	<i>6-cell:</i> from 4.70 lb (2.13kg)	
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom	
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type ³⁷	Lithium Ion 6-cell	
Battery - life ¹⁰	<i>6-cell (48Whr):</i> up to 6.3 hr <i>6-cell (62Whr):</i> up to 8.2 hr	
Chipset	Mobile Intel HM77 Express Chipset	
ExpressCard	None	
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port (supports optional 4X10A06077) external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card	One PCI Express Half Mini Card slot	
PCIe WLAN ⁴	<i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + BT combo adapter <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter	
M.2 Card	One M.2 Card slot for support of SSD	
M.2 WWAN	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card	
Ethernet	Realtek® RTL8111F Gigabit Network Connection	
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2 / Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	None	
Fingerprint reader	<i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² For Lenovo ²² service upgrade options, please go to QP-TA sheet

See footnotes for more detailed information
US model(s) announced January 7, 2014

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(LIN1-5) January 2014

ThinkPad Edge E431 6277 (Intel) - TopSeller (Windows 8)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Top color	Finger print reader	Battery cells	Battery /Wh	Preload	Ann date (mm/yy)
6277-58U	i3-3120M	4GBx1	14.0" HD	720p	320G 7200	Intel 2230 + BT	None	Black	None	6	48	Win7 Pro64	04/13
6277-59U	i3-3120M	4GBx1	14.0" HD	720p	320G 7200	Intel 2230 + BT	None	Black	None	6	48	Win8 Pro64	04/13
6277-5AU	i5-3230M	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	Finger	6	48	Win7 Pro64	04/13
6277-5BU	i5-3230M	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	Finger	6	48	Win8 Pro64	04/13
6277-5CU	i7-3632QM	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	Finger	6	48	Win7 Pro64	04/13
6277-5DU	i7-3632QM	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	Finger	6	48	Win8 Pro64	04/13
6277-5EU	i3-3120M	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	Finger	6	48	Win8 Pro64	04/13
6277-5FU	i3-2348M	4GBx1	14.0" HD	720p	320G 5400	TP 11b/g/n + BT	None	Black	None	6	48	Win7 Pro64	04/13
6277-5GU	i3-2348M	2GBx1	14.0" HD	720p	320G 7200	TP 11b/g/n + BT	None	Black	None	6	48	Win7 Pro64	04/13
6277-5HU	i5-3230M	4GBx1	14.0" HD	720p	128G SSD	Intel 2230 + BT	None	Black	Finger	6	48	Win7 Pro64	04/13
6277-5JU	i5-3230M	4GBx1	14.0" HD	720p	128G SSD	Intel 2230 + BT	None	Black	Finger	6	48	Win8 Pro64	04/13
6277-5KU	i5-3230M	4+2GB	14.0" HD	720p	1TB 5400	Intel 2230 + BT	None	Black	Finger	6	48	Win8 64	04/13
6277-74U	i3-3120M	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	Finger	6	48	Win7 Pro64	04/13
6277-75U	i5-3230M	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	24GB	Black	Finger	6	48	Win7 Pro64	04/13
6277-76U	i5-3230M	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	24GB	Black	Finger	6	48	Win8 Pro64	04/13
6277-77U	i5-3230M	4+2GB	14.0" HD	720p	1TB 5400	Intel 2230 + BT	None	Black	Finger	6	48	Win8 Pro64	04/13
6277-78U	i5-3230M	4+2GB	14.0" HD	720p	1TB 5400	Intel 2230 + BT	None	Black	Finger	6	48	Win7 Pro64	04/13
6277-CBU	i3-3130M	4GBx1	14.0" HD	720p	500G 7200	TP 11b/g/n + BT	None	Black	None	6	48	Win7 Pro64	08/13

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-2348M processor (2 cores, 2.30GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-3130M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-3632QM processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology	Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 64-bit - <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Lenovo SimpleTap • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™	
M.2 SSD	<i>Some:</i> M.2 Solid State Drive (SSD), via M.2 Card slot	
Widescreen display	14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio	
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator	
Graphics	Intel HD Graphics 3000 or Intel HD Graphics 4000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution: 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz</i>	
Keyboard	6-row, spill-resistant, multimedia Fn keys	
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³	
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch	
ThinkLight™	None	
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.04-1.15"; 344mm x 239mm x 26.3-29.3mm	
Weight ²	<i>6-cell:</i> from 4.70 lb (2.13kg)	
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom	
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type ³⁷	Lithium Ion 6-cell	
Battery - life ¹⁰	<i>6-cell (48Whr):</i> up to 6.3 hr <i>6-cell (62Whr):</i> up to 8.2 hr	
Chipset	Mobile Intel HM77 Express Chipset	
ExpressCard	None	
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port (supports optional 4X10A06077) external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card	One PCI Express Half Mini Card slot	
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1, Wi-Fi + BT combo adapter <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter	
M.2 Card	One M.2 Card slot for support of SSD	
M.2 WWAN	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card	
Ethernet	Realtek® RTL8111F Gigabit Network Connection	
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2 / Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	None	
Fingerprint reader	<i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² For Lenovo ²² service upgrade options, please go to QP-TA sheet

See footnotes for more detailed information
US model(s) announced April 30, or August 20, 2013

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(LIN1-1) August 2013

ThinkPad Edge E431 6277 (Intel) - TopSeller (Windows 8) - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Top color	Finger print reader	Battery cells	Battery /Wh	Preload	Ann date (mm/yy)
6277-9QU	i7-3632QM	8GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	Finger	6	48	Win7 Pro64	06/13
6277-9RU	i7-3632QM	8GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	Finger	6	48	Win8 Pro64	06/13
6277-AUU	i3-3120M	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	None	6	48	Win8 64	06/13
6277-AVU	i5-3230M	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	Finger	6	48	Win8 64	06/13
6277-AWU	i3-2348M	4GBx1	14.0" HD	720p	320G 5400	TP 11b/g/n + BT	None	Black	None	6	48	Win8 Pro64	06/13
6277-AXU	i3-2348M	2GBx1	14.0" HD	720p	320G 5400	TP 11b/g/n + BT	None	Black	None	6	48	Win8 Pro64	06/13
6277-AYU	i7-3632QM	8GBx1	14.0" HD	720p	128G SSD	Intel 2230 + BT	None	Black	Finger	6	48	Win8 Pro64	06/13
6277-AZU	i7-3632QM	8GBx1	14.0" HD	720p	128G SSD	Intel 2230 + BT	None	Black	Finger	6	48	Win7 Pro64	06/13
6277-B2U	i3-3110M	4GBx1	14.0" HD	720p	320G 5400	TP 11b/g/n + BT	None	Black	None	6	48	Win7 Pro64	06/13
6277-B3U	i3-3110M	4GBx1	14.0" HD	720p	320G 5400	TP 11b/g/n + BT	None	Black	None	6	48	Win8 Pro64	06/13
6277-BTU	i3-3110M	2GBx1	14.0" HD	720p	320G 7200	TP 11b/g/n + BT	None	Black	None	6	48	Win7 Pro64	07/13
6277-BUU	i3-3110M	2GBx1	14.0" HD	720p	500G 7200	TP 11b/g/n + BT	None	Black	None	6	48	Win7 Pro64	07/13
6277-BVU	i3-3110M	4GBx1	14.0" HD	720p	500G 7200	TP 11b/g/n + BT	None	Black	None	6	48	Win7 Pro64	07/13
6277-BWU	i7-3632QM	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	None	6	48	Win8 Pro64	07/13
6277-BXU	i3-3120M	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	None	6	48	Win7 Pro64	07/13
6277-BYU	i5-3230M	4GBx1	14.0" HD	720p	500G 7200	Intel 2230 + BT	None	Black	None	6	48	Win7 Pro64	07/13
6277-DEU	i3-3120M	4GBx1	14.0" HD	720p	320G 7200	TP 11a/b/g/n + BT	None	Black	None	6	48	Win8 64	01/14

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-2348M processor (2 cores, 2.30GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i3-3110M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-3632QM processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology	Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 64-bit - <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Lenovo SimpleTap • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™	
M.2 SSD	None	
Widescreen display	14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio	
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator	
Graphics	Intel HD Graphics 3000 or Intel HD Graphics 4000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution:</i> 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz	
Keyboard TrackPoint®	6-row, spill-resistant, multimedia Fn keys TrackPoint pointing device, Internet Scroll Bar ¹³	
Touchpad ThinkLight™	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None	
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.04-1.15"; 344mm x 239mm x 26.3-29.3mm	
Weight ²	6-cell: from 4.70 lb (2.13kg)	
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom	
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type ³⁷	Lithium Ion 6-cell	
Battery - life ¹⁰	6-cell (48Whr): up to 6.3 hr 6-cell (62Whr): up to 8.2 hr	
Chipset	Mobile Intel HM77 Express Chipset	
ExpressCard	None	
Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, one USB 2.0 (powered), OneLink Docking port (supports optional 4X10A06077) external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card	One PCI Express Half Mini Card slot	
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1, Wi-Fi + BT combo adapter <i>Some:</i> 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, 2x2, Wi-Fi + BT combo adapter <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter	
M.2 Card	One M.2 Card slot for support of SSD	
M.2 WWAN	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card	
Ethernet	Realtek® RTL8111F Gigabit Network Connection	
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2 / Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	None	
Fingerprint reader	<i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² For Lenovo ²² service upgrade options, please go to QP-TA sheet

See footnotes for more detailed information

US model(s) announced June 11, June 25, or July 16, 2013 or January 7, 2014

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(LIN1-3) January 2014

ThinkPad Edge E431 6277 (Intel) - Optimus (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Discrete graphics	Camera	Disk SATA GB ⁶ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Top color	Finger print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
6277-CCU	i5-3230M	4GBx1	14.0" HD	710M	720p	500G 7200	Intel 2230 + BT	None	Black	None	6	48	Win7 Pro64	08/13

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology										Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Lenovo SimpleTap • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets										
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™										
M.2 SSD	None										
Widescreen display	14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio										
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator										
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA GeForce® 710M , PCI Express® x 8, 1GB memory, DirectX® 11.1, NVIDIA PureVideo® HD technology, External monitor support via analog VGA DB-15 connector / digital HDMI connector <i>Max external resolution:</i> 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz										
Keyboard	6-row, spill-resistant, multimedia Fn keys										
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³										
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch										
ThinkLight™	None										
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.04-1.15"; 344mm x 239mm x 26.3-29.3mm										
Weight ²	6-cell: from 4.70 lb (2.13kg)										
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom										
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic										
Battery - type ³⁷	Lithium Ion 6-cell										
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 8.0 hr										
Chipset	Mobile Intel HM77 Express Chipset										
ExpressCard	None										
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)										
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port (supports optional 4X10A06077) external monitor (VGA DB-15, HDMI), ethernet (RJ-45)										
PCIe Mini Card	One PCI Express Half Mini Card slot										
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1, Wi-Fi + BT combo adapter <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter										
M.2 Card	One M.2 Card slot for support of SSD										
M.2 WWAN	None										
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card										
Ethernet	Realtek® RTL8111F Gigabit Network Connection										
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2 / Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack										
Security	Power-on password, hard disk password, supervisor password, security keyhole										
Security chip	None										
Fingerprint reader	None										
Limited warranty ¹² 1-year - depot repair service / service upgrades ²² available											Supports ThinkVantage® technologies
											90-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
											For Lenovo ²² service upgrade options, please go to QP-TA sheet

See footnotes for more detailed information
US model(s) announced August 20, 2013

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(LIN1-4) August 2013

ThinkPad Edge E431 6886 (Intel) - TopSeller (Win 8) - MultiTouch

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Top color	Finger print reader	Battery cells	Battery /Wh	Preload	Ann date (mm/yy)
6886-2WU	i3-3120M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 2230 + BT	None	black	Finger	6	48	Win8 Pro64	04/13
6886-2XU	i5-3230M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 2230 + BT	None	black	Finger	6	48	Win8 Pro64	04/13
6886-2YU	i7-3632QM	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 2230 + BT	None	black	Finger	6	48	Win8 Pro64	04/13
6886-3XU	i3-3120M	4GBx1	14.0" HD Touch	720p	320G 7200	Intel 2230 + BT	None	black	None	6	48	Win8 Pro64	04/13
6886-44U	i3-2348M	4GBx1	14.0" HD Touch	720p	320G 5400	Intel 2230 + BT	None	black	Finger	6	48	Win8 Pro64	06/13
6886-45U	i3-2348M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 2230 + BT	None	black	Finger	6	48	Win8 Pro64	06/13
6886-46U	i5-3230M	4GBx1	14.0" HD Touch	720p	128G SSD	Intel 2230 + BT	None	black	Finger	6	48	Win8 Pro64	06/13
6886-47U	i7-3632QM	8GBx1	14.0" HD Touch	720p	128G SSD	Intel 2230 + BT	None	black	Finger	6	48	Win8 Pro64	06/13
6886-48U	i7-3632QM	8GBx1	14.0" HD Touch	720p	500G 7200	Intel 2230 + BT	None	black	Finger	6	48	Win8 Pro64	06/13
6886-4HU	i3-3110M	4GBx1	14.0" HD Touch	720p	320G 5400	Intel 2230 + BT	None	black	Finger	6	48	Win8 Pro64	08/13
6886-4JU	i3-3110M	4GBx1	14.0" HD Touch	720p	320G 5400	Intel 2230 + BT	None	black	None	6	48	Win8 Pro64	08/13
6886-4KU	i3-3110M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 2230 + BT	None	black	Finger	6	48	Win8 Pro64	08/13
6886-4LU	i3-3110M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 2230 + BT	None	black	None	6	48	Win8 Pro64	08/13
6886-4MU	i3-3120M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 2230 + BT	None	black	Finger	6	48	Win8 64	10/13
6886-4NU	i5-3230M	4GBx1	14.0" HD Touch	720p	128G SSD	Intel 2230 + BT	None	black	Finger	6	48	Win8 64	10/13
6886-4PU	i7-3632QM	8GBx1	14.0" HD Touch	720p	128G SSD	Intel 2230 + BT	None	black	Finger	6	48	Win8 64	10/13

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-2348M processor (2 cores, 2.30GHz, 3MB cache), Intel HD Graphics 3000 , DDR3 memory controller (up to 1333MHz), HT technology Intel Core i3-3110M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-3632QM processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4000 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology	Preloaded operating system ²⁰ - Some: Windows 8 64-bit - Some: Windows 8 Pro 64-bit Preloaded applications ¹⁴ (only some listed) • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Password Manager • Fingerprint Software (fingerprint models) • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate • Skype™
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™	
M.2 SSD	None	
Widescreen display	14.0" (355mm) HD (1366x768) color , anti-glare, 10-point touch screen LED backlight, 180 nits, 16:9 aspect ratio, 500:1 contrast ratio	
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator	
Graphics	Intel HD Graphics 3000 or Intel HD Graphics 4000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution: 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz</i>	
Keyboard	6-row, spill-resistant, multimedia Fn keys	
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³	
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch	
ThinkLight™	None	
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.17-1.29"; 344mm x 239mm x 29.7-32.7mm	
Weight ²	<i>6-cell:</i> from 5.36 lb (2.43kg)	
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom	
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type ³⁷	Lithium Ion 6-cell	
Battery - life ¹⁰	<i>6-cell (48Whr):</i> up to 6.0 hr <i>6-cell (62Whr):</i> up to 7.6 hr	
Chipset	Mobile Intel HM77 Express Chipset	
ExpressCard	None	
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port (supports optional 4X10A06077) external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card	One PCI Express Half Mini Card slot	
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter	Supports ThinkVantage® technologies
M.2 Card	One M.2 Card slot for support of SSD	
M.2 WWAN	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
Ethernet	Realtek® RTL8111F Gigabit Network Connection	
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2 / Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	None	
Fingerprint reader	<i>Some:</i> UPEK Fingerprint reader on palm rest, swipe sensor	For Lenovo ²² service upgrade options, please go to QP-TA sheet
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	

See footnotes for more detailed information
US model(s) announced April 30, June 11, August 20, or October 15, 2013

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ThinkPad E440



Lenovo® ThinkPad E440
with MultiTouch Screen



Lenovo ThinkPad E440
with MultiTouch Screen



Lenovo ThinkPad E440



Lenovo ThinkPad E440



Lenovo ThinkPad E440



Lenovo ThinkPad E440

ThinkPad E440 20C5 (Intel) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Top color	Finger print reader	Battery cells	Battery /Wh	Preload	Ann date (mm/yy)
20C5005KUS	i5-4200M	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 64	01/14
20C5005AUS	i5-4200M	4GBx1	14.0" HD	720p	128G SSD	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	01/14
20C5004XUS	i3-4000M	4GBx1	14.0" HD	720p	320G 7200	Intel 7260 + BT	None	None	Black	None	6	48	Win7 Pro64	01/14
20C50059US	i5-4200M	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	01/14
20C50051US	i5-4200M	4GBx1	14.0" HD	720p	128G SSD	Intel 7260 + BT	None	None	Black	Finger	6	48	Win7 Pro64	01/14
20C50058US	i3-4000M	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	01/14
20C5005BUS	i7-4702MQ	8GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	01/14
20C5005JUS	i3-4000M	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	None	6	48	Win8 64	01/14
20C50056US	i3-4000M	4GBx1	14.0" HD	720p	320G 7200	Intel 7260 + BT	None	None	Black	None	6	48	Win8 Pro64	01/14
20C50058US	i7-4702MQ	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	01/14
20C50055US	i7-4702MQ	8GBx1	14.0" HD	720p	128G SSD	Intel 7260 + BT	None	None	Black	Finger	6	48	Win7 Pro64	01/14
20C50057US	i7-4702MQ	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	01/14
20C50052US	i3-4000M	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win7 Pro64	01/14
20C50053US	i5-4200M	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	16GB	None	Black	Finger	6	48	Win7 Pro64	01/14
20C5005HUS	i5-4200M	4+2GB	14.0" HD	720p	1TB 5400	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 64	01/14
20C50054US	i5-4200M	4+2GB	14.0" HD	720p	1TB 5400	Intel 7260 + BT	None	None	Black	Finger	6	48	Win7 Pro64	01/14
20C5004YUS	i5-4200M	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win7 Pro64	01/14
20C5008CUS	i3-4000M	2GBx1	14.0" HD	720p	320G 7200	Intel 7260 + BT	None	None	Black	None	6	48	Win7 Pro64	01/14
20C500BVUS	i5-4200M	4GBx1	14.0" HD	720p	128G SSD	Intel 7260 ac + BT	None	None	Black	Finger	6	48	Win7 Pro64	05/14
20C500BUUS	i5-4200M	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 ac + BT	None	None	Black	Finger	6	48	Win7 Pro64	05/14

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i7-4702MQ processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4600, DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology	Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 64-bit - <i>Some:</i> Windows 8 Pro 64-bit
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Preloaded applications (only some listed, exclude No OS models) - Windows 7 models • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	
M.2 SSD	<i>Some:</i> M.2 Solid State Drive (SSD), via M.2 Card slot	
Widescreen display	14.0" (355mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio	
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator	
Graphics	Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display	
Keyboard	6-row, spill-resistant, multimedia Fn keys	
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³	
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch	
ThinkLight™	None	
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.04-1.15"; 344 x 239mm x 26.3-29.3mm	
Weight ²	<i>6-cell:</i> from 4.69 lb (2.13kg)	
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom	
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type ³⁷	Lithium Ion 6-cell	
Battery - life ¹⁰	<i>6-cell (48Whr):</i> up to 6.3 hr <i>6-cell (62Whr):</i> up to 8.2 hr	
Chipset	Mobile Intel HM87 Express Chipset	
ExpressCard	None	
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card	One PCI Express Half Mini Card slot	
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2	
M.2 Card	One M.2 Card slot for support of SSD	
M.2 WWAN	None	
SIM card	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card	
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection	
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	Trusted Platform Module, TCG 1.2-compliant	
Fingerprint reader	<i>Some:</i> Fingerprint reader on palm rest, swipe sensor	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

See footnotes for more detailed information

ThinkPad E440 20C5 (Intel) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁵ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Top color	Finger print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
20C500AWUS	i3-4100M	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win7 Pro64	05/14
20C500AYUS	i7-4712MQ	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win7 Pro64	05/14
20C500B3US	i3-4100M	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	05/14
20C500B5US	i7-4712MQ	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	05/14
20C500B4US	i5-4210M	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	05/14
20C500AXUS	i5-4210M	4GBx1	14.0" HD	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win7 Pro64	05/14

Positioning Processor	<p><i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-4100M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4210M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4712MQ processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4600, DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology</p>										<p>Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit</p>			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets										<p>Preloaded applications (only some listed, exclude No OS models) - Windows 7 models</p> <ul style="list-style-type: none"> • Adobe® Reader® <p>- Windows 8 models</p> <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage <p>- All models</p> <ul style="list-style-type: none"> • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate 			
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™													
M.2 SSD	None													
Widescreen display Camera	<p>14.0" (355mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio HD720p resolution, face track, low light sensitive, fixed focus, LED indicator</p>													
Graphics	<p>Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display</p>													
Keyboard TrackPoint® Touchpad ThinkLight™	<p>6-row, spill-resistant, multimedia Fn keys TrackPoint pointing device, Internet Scroll Bar¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None</p>													
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.04-1.15"; 344 x 239mm x 26.3-29.3mm													
Weight ²	6-cell: from 4.69 lb (2.13kg)													
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom													
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic													
Battery - type ³⁷	Lithium Ion 6-cell													
Battery - life ¹⁰	6-cell (48Whr): up to 6.3 hr 6-cell (62Whr): up to 8.2 hr													
Chipset ExpressCard Multicard Reader Ports	<p>Mobile Intel HM87 Express Chipset None 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)</p>													
PCIe Mini Card PCIe WLAN ⁴	<p>One PCI Express Half Mini Card slot Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2</p>													
M.2 Card M.2 WWAN SIM card Bluetooth™ Ethernet Audio support	<p>One M.2 Card slot for support of SSD None None Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card Realtek® RTL8111GUS Gigabit Network Connection High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack</p>										<p>Supports ThinkVantage® technologies</p>			
Security Security chip Fingerpring reader	<p>Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor</p>										<p>65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹²</p>			
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available													

See footnotes for more detailed information

ThinkPad E440 20C5 (Intel) - TopSeller (MultiTouch)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁵ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Top color	Finger-print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
20C5005GUS	i7-4702MQ	8GBx1	14.0" HD Touch	720p	128G SSD	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	01/14
20C5005CUS	i3-4000M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	01/14
20C5005DUS	i5-4200M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	01/14
20C5005FUS	i5-4200M	4GBx1	14.0" HD Touch	720p	128G SSD	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	01/14
20C5005EUS	i7-4702MQ	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8 Pro64	01/14
20C5008AUS	i5-4200M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8.1 Pro64	01/14
20C50088US	i7-4702MQ	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8.1 Pro64	01/14
20C50089US	i7-4702MQ	8GBx1	14.0" HD Touch	720p	128G SSD	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8.1 Pro64	01/14
20C5008BUS	i5-4200M	4GBx1	14.0" HD Touch	720p	128G SSD	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8.1 Pro64	01/14
20C50087US	i3-4000M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8.1 Pro64	01/14
20C5008UUS	i3-4000M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8.1 64	03/14
20C5008VUS	i5-4200M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8.1 64	03/14
20C500B2US	i7-4712QM	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8.1 Pro64	05/14
20C500B1US	i5-4210M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8.1 Pro64	05/14
20C500B0US	i3-4100M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8.1 Pro64	05/14
20C500BSUS	i3-4100M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8.1 64	05/14
20C500BTUS	i5-4210M	4GBx1	14.0" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Black	Finger	6	48	Win8.1 64	05/14

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-4100M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-4210M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4702MQ processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4600, DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4712MQ processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4600, DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology	Preloaded operating system²⁰ - Some: Windows 8 Pro 64-bit - Some: Windows 8.1 64-bit - Some: Windows 8.1 Pro 64-bit Preloaded applications (only some listed) • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™	
M.2 SSD	None	
Widescreen display	14.0" (355mm) HD (1366x768) , anti-glare, 10-point touch screen LED backlight, 180 nits, 16:9 aspect ratio	
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator	
Graphics	Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display	
Keyboard	6-row, spill-resistant, multimedia Fn keys	
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³	
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch	
ThinkLight™	None	
Dimensions ³	14.0W" (WxDxH): 13.54" x 9.41" x 1.17-1.27"; 344 x 239mm x 29.7-32.3mm	
Weight ²	<i>6-cell:</i> from 5.36 lb (2.43kg)	
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom	
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type ³⁷	Lithium Ion 6-cell	
Battery - life ¹⁰	<i>6-cell (48Whr):</i> up to 6.3 hr <i>6-cell (62Whr):</i> up to 8.2 hr	
Chipset	Mobile Intel HM87 Express Chipset	
ExpressCard	None	
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card	One PCI Express Half Mini Card slot	
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2	
M.2 Card	One M.2 Card slot for support of SSD	
M.2 WWAN	None	
SIM card	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card	
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection	
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	Trusted Platform Module, TCG 1.2-compliant	
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

See footnotes for more detailed information



Lenovo® ThinkPad E450



Lenovo ThinkPad E450



Lenovo ThinkPad E450

ThinkPad E450 Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th or 5th Generation Intel® Core™ i3 / i5 / i7 Processor								Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC)	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics		Two USB 3.0, one USB 2.0 (Always On), Ethernet (RJ-45), external monitor (HDMI), Lenovo OneLink connector	
	i3-4005U	2	4	1.7 GHz	-	3MB	DDR3L-1600	HD4400		None	
	i3-5005U	2	4	2.0 GHz	-	3MB		HD5500		Camera	
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500		HD720p resolution, fixed focus	
i7-5500U	2	4	2.4 GHz	3.0 GHz	4MB	HD5500		Audio support			
										HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio / microphone jack	
Graphics	Intel HD Graphics in processor only, or AMD Radeon R5 M240 Graphics, 1GB DDR3 memory, AMD Radeon R7 M260 Graphics, 2GB DDR3 memory, digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display Max resolution: 1920x1080 (HDMI) @60Hz								Keyboard	6-row, spill-resistant, multimedia Fn keys	
									UltraNav™	TrackPoint® pointing device and multi-touch with 3+2 buttons click pad	
Chipset	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								ThinkLight™	None	
									Security chip	Power-on password, hard disk password, supervisor password, security keyhole <i>Some:</i> Trusted Platform Module, TCG 1.2-compliant	
Memory									vPro	None	
Display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 14.0" (355mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio								Fingerprint reader	<i>Some:</i> Fingerprint reader on the keyboard bezel, swipe sensor	
									NFC	None	
Multi-touch	<i>Some:</i> supports 10-finger gesture								Battery type	Li-Ion 6-cell (47Wh)	
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> Hybrid drive with 8GB NAND flash memory								Battery life	6-cell (47Wh): up to 9.0 hr	
									Optical	None	
M.2 SSD									AC adapter	<i>Some:</i> 45-watt AC adapter (Integrated Graphics) <i>Some:</i> 65-watt AC adapter (Discrete Graphics)	
Ethernet	Intel WGI218V Gigabit Ethernet Connection								Preload	<i>Some:</i> No operating system	
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter									<i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit	
WLAN	<i>One of the following, configurable by model:</i> • Intel Wireless-AC 3160, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card • RTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • BCM43162, Broadcom 11-AC, 1x1, Wi-Fi + BT combo adapter, M.2 Card									• Lenovo Solution Center	
WWAN	None									• Lenovo SHAREit	
SIM card	None									• Lenovo Companion	
Smart Card Read ExpressCard	None									• ThinkVantage System Update	
Dimensions	<i>None Touch (WxDxH):</i> 13.35" x 9.41" x 0.94"; 339mm x 239mm x 24mm <i>6-cell None Touch:</i> from 4.00 lb (1.81kg)									• PC Device Stage	
										• Weather Channel	
Weight										• Evernote	
Case color	Graphite Black									• Maxthon Cloud Browser	
Case Material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic								• Norton Studio		
									• Microsoft Office preloaded; purchase a product key to activate		
									• Norton Internet Security (30 days of virus definitions)		
									Limited warranty		
									1-year - depot repair service / service upgrades available		
									Environment		
									EPEAT™ Gold; ENERGY STAR®; RoHS-compliant		

See footnotes for more detailed information

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ThinkPad E450 20DC - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Camera	Keyboard	TPM	Finger print reader	Battery cells(wh)	Power adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DC003FUS	I3-4005U	No	HD 4400	4GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	No	6 (47wh)	45W	Win8.1 64	1-depot	No	01/15
20DC003JUS	I3-4005U	No	HD 4400	4GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	No	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DC003KUS	I3-4005U	No	HD 4400	8GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DC003LUS	I3-4005U	No	HD 4400	8GBx1	14.0" HD	None	1TB 5400	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DC003SUS	I5-5200U	No	HD 5500	4GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DC003TUS	I5-5200U	No	HD 5500	4GBx1	14.0" HD	None	1TB 5400	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DC003UUS	I5-5200U	No	HD 5500	8GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DC003VUS	I5-5200U	No	HD 5500	8GBx1	14.0" HD	None	1TB 5400	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DC003PUS	I3-5005U	No	HD 5500	4GBx1	14.0" HD	None	1TB 5400	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DC003NUS	I3-5005U	No	HD 5500	4GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DC003MUS	I3-5005U	No	HD 5500	4GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 64	1-depot	No	01/15
20DC003QUS	I3-5005U	No	HD 5500	8GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DC003RUS	I3-5005U	No	HD 5500	8GBx1	14.0" HD	None	1TB 5400	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DC004CUS	I5-5200U	No	HD 5500	4GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004HUS	I5-5200U	No	HD 5500	4GBx1	14.0" HD	None	1TB 5400	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004TUS	I5-5200U	No	HD 5500	8GBx1	14.0" FHD	None	1TB 5400	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC003WUS	I3-4005U	No	HD 4400	4GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC0049US	I3-5005U	No	HD 5500	8GBx1	14.0" HD	None	1TB 5400	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004NUS	I5-5200U	No	HD 5500	8GBx1	14.0" HD	None	128GB SSD	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004EUS	I5-5200U	No	HD 5500	4GBx1	14.0" FHD	None	500GB 7200	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad E450 Platform Specifications sheet](#)

Processor	4th or 5th Generation Intel® Core™ i3 / i5 / i7 Processor	Dimensions Weight	<i>None Touch(WxDxH):</i> 13.35" x 9.41" x 0.94"; 339mm x 239mm x 24mm 6-cell <i>None Touch:</i> from 4.00 lb (1.81kg)																														
	<table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory speed</th> <th>Processor Graphics</th> </tr> </thead> <tbody> <tr> <td>i3-4005U</td> <td>2</td> <td>4</td> <td>1.7 GHz</td> <td>-</td> <td>3MB</td> <td rowspan="3">DDR3L-1600</td> <td>HD4400</td> </tr> <tr> <td>i3-5005U</td> <td>2</td> <td>4</td> <td>2.0 GHz</td> <td>-</td> <td>3MB</td> <td>HD5500</td> </tr> <tr> <td>i5-5200U</td> <td>2</td> <td>4</td> <td>2.2 GHz</td> <td>2.7 GHz</td> <td>3MB</td> <td>HD5500</td> </tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics	i3-4005U	2	4	1.7 GHz	-	3MB	DDR3L-1600	HD4400	i3-5005U	2	4	2.0 GHz	-	3MB	HD5500	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB	HD5500	Case color	Graphite Black
Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics																										
i3-4005U	2	4	1.7 GHz	-	3MB	DDR3L-1600	HD4400																										
i3-5005U	2	4	2.0 GHz	-	3MB		HD5500																										
i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500																										
		Case Matera	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic																														
Graphics	Intel HD Graphics in processor only, or digital monitor support via HDMI™ (supporting HDCP to output protected content)	Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																														
Chipset	Intel SoC (System on Chip) platform	Ports	Two USB 3.0, one USB 2.0 (Always On), Ethernet (RJ-45), external monitor (HDMI), Lenovo OneLink connector																														
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Monitor cable	None																														
Display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 14.0" (355mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio	Camera	HD720p resolution, fixed focus																														
Multi-touch	Some: supports 10-finger gesture	Audio support	HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio / microphone jack																														
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™	Keyboard	6-row, spill-resistant, multimedia Fn keys TrackPoint® pointing device and multi-touch with 3+2 buttons click pad ThinkLight™																														
Optical	None None None	Security	Power-on password, hard disk password, supervisor password, security keyhole																														
Ethernet	Intel WGI218V Gigabit Ethernet Connection	Security chip	Some: Trusted Platform Module, TCG 1.2-compliant																														
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	vPro	None																														
WLAN	One of the following, configurable by model: • Intel Wireless-AC 3160, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card	Fingerprint reader	Some: Fingerprint reader on the keyboard bezel, swipe sensor																														
WWAN	None	NFC	None																														
SIM card	None	Battery type	Li-Ion 6-cell (47Wh)																														
		Battery life	6-cell (47Wh): up to 9.0 hr																														
		AC adapter	45-watt AC adapter (Integrated Graphics)																														
		Preload	Some: No operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit	Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit																													
		Limited warranty	1-year - depot repair service / service upgrades available																														
		Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant																														

See footnotes for more detailed information

ThinkPad E450 20DC - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Camera	Keyboard	TPM	Finger print reader	Battery cells(wh)	Power adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DC003XUS	I5-5200U	No	HD 5500	4GBx1	14.0" HD	None	128GB SSD	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004QUS	I5-5200U	No	HD 5500	8GBx1	14.0" HD	None	1TB 5400	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004FUS	I5-5200U	No	HD 5500	4GBx1	14.0" FHD	None	128GB SSD	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004PUS	I5-5200U	No	HD 5500	8GBx1	14.0" FHD	None	128GB SSD	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC0046US	I3-5005U	No	HD 5500	4GBx1	14.0" HD	None	1TB 5400	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC0048US	I3-5005U	No	HD 5500	8GBx1	14.0" HD	None	500GB 7200	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC0043US	I3-4005U	No	HD 4400	8GBx1	14.0" HD	None	1TB 5400	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004DUS	I5-5200U	No	HD 5500	4GBx1	14.0" HD	None	500GB 7200	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004KUS	I5-5200U	No	HD 5500	8GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC0042US	I3-4005U	No	HD 4400	8GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC0045US	I3-5005U	No	HD 5500	4GBx1	14.0" HD	None	500GB 7200	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004SUS	I5-5200U	No	HD 5500	8GBx1	14.0" HD	None	1TB 5400	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004GUS	I5-5200U	No	HD 5500	4GBx1	14.0" HD	None	1TB 5400	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC0047US	I3-5005U	No	HD 5500	8GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004MUS	I5-5200U	No	HD 5500	8GBx1	14.0" FHD	None	500GB 7200	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC0041US	I3-4005U	No	HD 4400	4GBx1	14.0" HD	None	1TB 5400	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004LUS	I5-5200U	No	HD 5500	8GBx1	14.0" HD	None	500GB 7200	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC0044US	I3-5005U	No	HD 5500	4GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC004JUS	I5-5200U	No	HD 5500	4GBx1	14.0" FHD	None	1TB 5400	None	7265 ac+BT4.0	None	None	720p	Keyboard	TPM	Finger	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DC0040US	I3-4005U	No	HD 4400	4GBx1	14.0" HD	None	500GB 7200	None	3160 ac+BT4.0	None	None	720p	Keyboard	TPM	No	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad E450 Platform Specifications sheet](#)

Processor	4th or 5th Generation Intel® Core™ i3 / i5 / i7 Processor	Dimensions Weight	None Touch(WxDxH): 13.35" x 9.41" x 0.94"; 339mm x 239mm x 24mm 6-cell None Touch: from 4.00 lb (1.81kg)																																
	<table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory speed</th> <th>Processor Graphics</th> </tr> </thead> <tbody> <tr> <td>i3-4005U</td> <td>2</td> <td>4</td> <td>1.7 GHz</td> <td>-</td> <td>3MB</td> <td></td> <td>HD4400</td> </tr> <tr> <td>i3-5005U</td> <td>2</td> <td>4</td> <td>2.0 GHz</td> <td>-</td> <td>3MB</td> <td>DDR3L-1600</td> <td>HD5500</td> </tr> <tr> <td>i5-5200U</td> <td>2</td> <td>4</td> <td>2.2 GHz</td> <td>2.7 GHz</td> <td>3MB</td> <td></td> <td>HD5500</td> </tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics	i3-4005U	2	4	1.7 GHz	-	3MB		HD4400	i3-5005U	2	4	2.0 GHz	-	3MB	DDR3L-1600	HD5500	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500	Case color	Graphite Black
Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics																												
i3-4005U	2	4	1.7 GHz	-	3MB		HD4400																												
i3-5005U	2	4	2.0 GHz	-	3MB	DDR3L-1600	HD5500																												
i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500																												
		Case Matera	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic																																
Graphics	Intel HD Graphics in processor only, or digital monitor support via HDMI™ (supporting HDCP to output protected content)	Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																																
Chipset	Intel SoC (System on Chip) platform	Ports	Two USB 3.0, one USB 2.0 (Always On), Ethernet (RJ-45), external monitor (HDMI), Lenovo OneLink connector																																
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Monitor cable	None																																
Display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 14.0" (355mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio	Camera	HD720p resolution, fixed focus																																
Multi-touch	Some: supports 10-finger gesture	Audio support	HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio / microphone jack																																
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™	Keyboard	6-row, spill-resistant, multimedia Fn keys																																
Optical	None	UltraNav™	TrackPoint® pointing device and multi-touch with 3+2 buttons click pad																																
M.2 SSD	None	ThinkLight™	None																																
Ethernet	Intel WGI218V Gigabit Ethernet Connection	Security	Power-on password, hard disk password, supervisor password, security keyhole																																
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	Security chip	Some: Trusted Platform Module, TCG 1.2-compliant																																
WLAN	One of the following, configurable by model: • Intel Wireless-AC 3160, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card	vPro	None																																
		Fingerprint reader	Some: Fingerprint reader on the keyboard bezel, swipe sensor																																
WWAN	None	NFC	None																																
SIM card	None	Battery type	Li-Ion 6-cell (47Wh)																																
		Battery life	6-cell (47Wh): up to 9.0 hr																																
		AC adapter	45-watt AC adapter (Integrated Graphics)																																
		Preload	Some: No operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit	Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit																															
		Limited warranty	1-year - depot repair service / service upgrades available																																
		Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant																																

See footnotes for more detailed information

ThinkPad E450 20DC (Radeon) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Camera	Keyboard	TPM	Finger print reader	Battery cells(wh)	Power adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DC0099US	I7-5500U	No	R7 M260	4GBx1	14.0" HD	None	500GB 7200	None	7265 ac+BT4.0	None	None	720p	Keyboard	No	Finger	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DC0050US	I7-5500U	No	R7 M260	8GBx1	14.0" FHD	None	128GB SSD	None	7265 ac+BT4.0	None	None	720p	Keyboard	No	Finger	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DC004YUS	I7-5500U	No	R7 M260	8GBx1	14.0" HD	None	500GB 7200	None	7265 ac+BT4.0	None	None	720p	Keyboard	No	Finger	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DC004VUS	I7-5500U	No	R7 M260	4GBx1	14.0" FHD	None	128GB SSD	None	7265 ac+BT4.0	None	None	720p	Keyboard	No	Finger	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DC003YUS	I7-5500U	No	R7 M260	8GBx1	14.0" HD	None	128GB SSD	None	7265 ac+BT4.0	None	None	720p	Keyboard	No	Finger	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DC004WUS	I7-5500U	No	R7 M260	4GBx1	14.0" HD	None	1TB 5400	None	7265 ac+BT4.0	None	None	720p	Keyboard	No	Finger	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DC004XUS	I7-5500U	No	R7 M260	4GBx1	14.0" FHD	None	1TB 5400	None	7265 ac+BT4.0	None	None	720p	Keyboard	No	Finger	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DC0051US	I7-5500U	No	R7 M260	8GBx1	14.0" FHD	None	1TB 5400	None	7265 ac+BT4.0	None	None	720p	Keyboard	No	Finger	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DC004UUS	I7-5500U	No	R7 M260	4GBx1	14.0" FHD	None	500GB 7200	None	7265 ac+BT4.0	None	None	720p	Keyboard	No	Finger	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad E450 Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i5 / i7 Processor								Dimensions Weight Case color Case Matera	None Touch(WxDxH): 13.35" x 9.41" x 0.94"; 339mm x 239mm x 24mm 6-cell None Touch: from 4.00 lb (1.81kg) Graphite Black PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics		
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB	DDR3L-1600	HD5500	Multicard Reader Ports Monitor cable Camera Audio support	
	i7-5500U	2	4	2.4 GHz	3.0 GHz	4MB		HD5500		
Graphics	AMD Radeon R7 M260 Graphics, 2GB DDR3 memory, digital monitor support via HDMI™ (supporting HDCP to output protected content)								Two USB 3.0, one USB 2.0 (Always On), Ethernet (RJ-45), external monitor (HDMI), Lenovo OneLink connector	
Chipset	Intel SoC (System on Chip) platform								None	
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								HD720p resolution, fixed focus	
Display	Some: 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 14.0" (355mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio								TrackPoint® pointing device and multi-touch with 3+2 buttons click pad	
Multi-touch	Some: supports 10-finger gesture								ThinkLight™	
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: Hybrid drive with 8GB NAND flash memory								Security Security chip vPro Fingerprint reader NFC	
Optical	None								Power-on password, hard disk password, supervisor password, security keyhole	
M.2 SSD	None								None	
Ethernet	Intel WGI218V Gigabit Ethernet Connection								Some: Fingerprnt reader on the keyboard bezel, swipe sensor	
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								None	
WLAN	One of the following, configurable by model: • Intel Wireless-AC 3160, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card								Li-Ion 6-cell (47Wh) 6-cell (47Wh): up to 9.0 hr 65-watt AC adapter (Discrete Graphics)	
WWAN	None								Preload	
SIM card	None								Some: No operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit	
									Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit	
									Limited warranty	
									1-year - depot repair service / service upgrades available	
									Environment	
									EPEAT™ Gold; ENERGY STAR®; RoHS-compliant	

See footnotes for more detailed information



Lenovo® ThinkPad E455



Lenovo ThinkPad E455



Lenovo ThinkPad E455

ThinkPad E455 Platform Specifications

Product Specifications Reference (PSREF)

Processor	AMD Accelerated Processor A6, A8, or A10 APU								Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC)	
	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Graphics		Two USB 3.0, one USB 2.0 (Always On), Ethernet (RJ-45), HDMI, Lenovo OneLink connector, combo audio / microphone jack	
	A6-7000	2	2	2.2 GHz	3.0 GHz	1MB	DDR3L-1600	R4 HD		None	
	A8-7100	4	4	1.8 GHz	3.0 GHz	4MB		R5 M240		Camera	
A10-7300	4	4	1.9 GHz	3.2 GHz	4MB	R7 M260DX (R6+R5 M240)		HD720p resolution, fixed focus Audio support HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio / microphone jack			
Graphics	AMD Radeon™ R4 HD Graphics in processor only, AMD Radeon R5 M240 Graphics, 2GB DDR3 memory, or Dual Graphics support for A10 APU digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display Max resolution: 1920x1080 (HDMI) @60Hz								Keyboard	6-row, spill-resistant, multimedia Fn keys	
Chipset	AMD A76M FCH Chipset								UltraNav™	TrackPoint® pointing device and multi-touch with 3+2 buttons click pad	
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								ThinkLight™	None	
Display	<i>Some:</i> 14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio <i>Some:</i> 14.0" (355mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio								Security chip	Power-on password, hard disk password, supervisor password, security keyhole	
Multi-touch	None								vPro	None	
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> Hybrid drive with 8GB NAND flash memory								Fingerprint reader	None	
Optical M.2 SSD	None								NFC	None	
Ethernet Bluetooth™	Realtek® RTL8111GUS Gigabit Ethernet Connection Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Battery type	Li-Ion 6-cell (47Wh)	
WWAN	None								Battery life	Up to 6.5 hr	
WLAN	<i>One of the following, configurable by model:</i> • RTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • BCM43162, Broadcom 11-AC, 1x1, Wi-Fi + BT combo adapter, M.2 Card								AC adapter	<i>Some:</i> 45-watt AC adapter (Integrated Graphics) <i>Some:</i> 65-watt AC adapter (Discrete Graphics)	
SIM card	None								Preload	<i>Some:</i> No operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit	
Smart Card Read ExpressCard	None									<ul style="list-style-type: none"> • Lenovo Solution Center • Lenovo SHAREit • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • PC Device Stage • Adobe® Reader® • Evernote® • Skype™ • Maxthon Cloud Browser • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) 	
Dimensions	<i>None Touch(WxDxH):</i> 13.34" x 9.40" x 0.94" (339mm x 239mm x 24mm)								Limited warranty	1-year - depot repair service / service upgrades available	
Weight	From 4.00 lb (1.81kg)								Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant	
Case color	Graphite black										
Case Material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										

See footnotes for more detailed information

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ThinkPad E455 20DE (Integrated) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Camera	Keyboard	TPM	Finger print reader	Battery cells(wh)	Power adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DE001PUS	A6-7000	No	R4 HD	4GBx1	14.0" HD	None	500GB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DE001DUS	A6-7000	No	R4 HD	4GBx1	14.0" HD	None	1TB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DE001CUS	A6-7000	No	R4 HD	8GBx1	14.0" HD	None	500GB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DE001KUS	A6-7000	No	R4 HD	8GBx1	14.0" HD	None	1TB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DE001BUS	A6-7000	No	R4 HD	4GBx1	14.0" HD	None	500GB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DE0017US	A6-7000	No	R4 HD	4GBx1	14.0" HD	None	1TB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DE001AUS	A6-7000	No	R4 HD	8GBx1	14.0" HD	None	500GB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15
20DE001GUS	A6-7000	No	R4 HD	8GBx1	14.0" HD	None	1TB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	45W	Win8.1 P64	1-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad E455 Platform Specifications sheet](#)

Processor	AMD Accelerated Processor A6 APU	Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																
	<table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Clock Speed</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory speed</th> <th>Graphics</th> </tr> </thead> <tbody> <tr> <td>A6-7000</td> <td>2</td> <td>2</td> <td>2.2 GHz</td> <td>3.0 GHz</td> <td>1MB</td> <td>DDR3L-1600</td> <td>R4 HD</td> </tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Graphics	A6-7000	2	2	2.2 GHz	3.0 GHz	1MB	DDR3L-1600	R4 HD	Ports	Two USB 3.0, one USB 2.0 (Always On), Ethernet (RJ-45), HDMI, Lenovo OneLink connector, combo audio / microphone jack
Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Graphics												
A6-7000	2	2	2.2 GHz	3.0 GHz	1MB	DDR3L-1600	R4 HD												
Graphics	AMD Radeon™ R4 HD Graphics in processor only	Monitor cable	None																
Chipset	AMD A76M FCH Chipset	Camera	HD720p resolution, fixed focus																
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Audio support	HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio / microphone jack																
Display	14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio	Keyboard	6-row, spill-resistant, multimedia Fn keys																
Multi-touch	None	UltraNav™	TrackPoint® pointing device and multi-touch with 3+2 buttons click pad																
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: Hybrid drive with 8GB NAND flash memory	ThinkLight™	None																
Optical	None	Security	Power-on password, hard disk password, supervisor password, security keyhole																
M.2 SSD	None	Security chip	None																
Ethernet	Realtek® RTL8111GUS Gigabit Ethernet Connection	vPro	None																
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	Fingerprint reader	None																
WLAN	One of the following, configurable by model: • RTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • BCM43162, Broadcom 11-AC, 1x1, Wi-Fi + BT combo adapter, M.2 Card	NFC	None																
Dimensions	None Touch(WxDxH): 13.34" x 9.40" x 0.94" (339mm x 239mm x 24mm)	Battery type	Li-Ion 6-cell (47Wh)																
Weight	From 4.00 lb (1.81kg)	Battery life	Up to 6.5 hr																
Case color	Graphite black	AC adapter	45-watt AC adapter (Integrated Graphics)																
Case Material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic	Preload	Some: No operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit																
		Limited warranty	1-year - depot repair service / service upgrades available																
		Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant																

See footnotes for more detailed information

ThinkPad E455 20DE (Discrete) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Camera	Keyboard	TPM	Finger print reader	Battery cells(wh)	Power adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/ly)
20DE001HUS	A8-7100	No	R5 M240	4GBx1	14.0" HD	None	500GB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DE001QUS	A8-7100	No	R5 M240	4GBx1	14.0" HD	None	1TB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DE001MUS	A8-7100	No	R5 M240	8GBx1	14.0" HD	None	1TB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DE001FUS	A10-7300	No	R7 M260DX	4GBx1	14.0" HD	None	500GB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DE0019US	A10-7300	No	R7 M260DX	4GBx1	14.0" HD	None	1TB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DE001EUS	A10-7300	No	R7 M260DX	8GBx1	14.0" HD	None	1TB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DE0016US	A10-7300	No	R7 M260DX	4GBx1	14.0" HD	None	500GB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	65W	Win8.1 P64	1-depot	No	01/15
20DE001JUS	A10-7300	No	R7 M260DX	8GBx1	14.0" HD	None	1TB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	65W	Win8.1 P64	1-depot	No	01/15
20DE0018US	A8-7100	No	R5 M240	4GBx1	14.0" HD	None	500GB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	65W	Win8.1 P64	1-depot	No	01/15
20DE001LUS	A8-7100	No	R5 M240	4GBx1	14.0" HD	None	1TB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	65W	Win8.1 P64	1-depot	No	01/15
20DE001NUS	A8-7100	No	R5 M240	8GBx1	14.0" HD	None	1TB 5400	None	RTL bgn+BT4.0	None	None	720p	Keyboard	No	No	6 (47wh)	65W	Win8.1 P64	1-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad E455 Platform Specifications sheet](#)

Processor	AMD Accelerated Processor A8, or A10 APU	Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																							
	<table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Clock Speed</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory speed</th> <th>Graphics</th> </tr> </thead> <tbody> <tr> <td>A8-7100</td> <td>4</td> <td>4</td> <td>1.8 GHz</td> <td>3.0 GHz</td> <td>4MB</td> <td rowspan="2">DDR3L-1600</td> <td>R5 M240</td> </tr> <tr> <td>A10-7300</td> <td>4</td> <td>4</td> <td>1.9 GHz</td> <td>3.2 GHz</td> <td>4MB</td> <td>R7 M260DX (R6+R5 M240)</td> </tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Graphics	A8-7100	4	4	1.8 GHz	3.0 GHz	4MB	DDR3L-1600	R5 M240	A10-7300	4	4	1.9 GHz	3.2 GHz	4MB	R7 M260DX (R6+R5 M240)	Ports	Two USB 3.0, one USB 2.0 (Always On), Ethernet (RJ-45), HDMI, Lenovo OneLink connector, combo audio / microphone jack
Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Graphics																			
A8-7100	4	4	1.8 GHz	3.0 GHz	4MB	DDR3L-1600	R5 M240																			
A10-7300	4	4	1.9 GHz	3.2 GHz	4MB		R7 M260DX (R6+R5 M240)																			
Graphics	AMD Radeon R5 M240 Graphics, 2GB DDR3 memory, or Dual Graphics support for A10 APU	Monitor cable	None																							
Chipset	AMD A76M FCH Chipset	Camera	HD720p resolution, fixed focus																							
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Audio support	HD Audio, Conexant [®] CX20751 codec, Dolby [®] Advanced Audio™ v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio / microphone jack																							
Display	14.0" (355mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio	Keyboard	6-row, spill-resistant, multimedia Fn keys																							
Multi-touch	None	UltraNav™	TrackPoint [®] pointing device and multi-touch with 3+2 buttons click pad																							
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> Hybrid drive with 8GB NAND flash memory	ThinkLight™	None																							
Optical	None	Security	Power-on password, hard disk password, supervisor password, security keyhole																							
M.2 SSD	None	Security chip	None																							
Ethernet	Realtek [®] RTL8111GUS Gigabit Ethernet Connection	vPro	None																							
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	Fingerprint reader	None																							
WLAN	<i>One of the following, configurable by model:</i> • RTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • BCM43162, Broadcom 11-AC, 1x1, Wi-Fi + BT combo adapter, M.2 Card	NFC	None																							
Dimensions	<i>None Touch (WxDxH):</i> 13.34" x 9.40" x 0.94" (339mm x 239mm x 24mm)	Battery type	Li-Ion 6-cell (47Wh)																							
Weight	From 4.00 lb (1.81kg)	Battery life	Up to 6.5 hr																							
Case color	Graphite black	AC adapter	65-watt AC adapter (Discrete Graphics)																							
Case Material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic	Preload	<i>Some:</i> No operating system <i>Some:</i> Windows [®] 7 Professional 64-bit <i>Some:</i> Windows 8.1 64-bit Pro 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit																							
		Limited warranty	1-year - depot repair service / service upgrades available																							
		Environment	EPEAT™ Gold; ENERGY STAR [®] ; RoHS-compliant																							

See footnotes for more detailed information

ThinkPad Edge E531 6885 (Intel) - TopSeller (Windows 8)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Numeric Keypad	Top color	Finger-print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
6885-28U	i7-3632QM	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win7 Pro64	04/13
6885-2BU	i5-3230M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win7 Pro64	04/13
6885-5DU	i3-3120M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win7 Pro64	04/13
6885-5TU	i3-3120M	4GBx1	15.6" HD	720p	320G 7200	Intel 2230 + BT	None	Numpad	Black	None	6	48	Win7 Pro64	04/13
6885-5UU	i3-3120M	4GBx1	15.6" HD	720p	320G 7200	Intel 2230 + BT	None	Numpad	Black	None	6	48	Win8 Pro64	04/13
6885-5VU	i5-3230M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win8 Pro64	04/13
6885-5WU	i7-3632QM	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win8 Pro64	04/13
6885-5ZU	i3-3120M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win8 Pro64	04/13
6885-62U	i5-3230M	4GBx1	15.6" HD	720p	128G SSD	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win7 Pro64	04/13
6885-63U	i5-3230M	4GBx1	15.6" HD	720p	128G SSD	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win8 Pro64	04/13
6885-64U	i5-3230M	4+2GB	15.6" HD	720p	1TB 5400	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win8 64	04/13
6885-65U	i5-3230M	4+2GB	15.6" HD	720p	1TB 5400	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win7 Pro64	04/13
6885-66U	i5-3230M	4+2GB	15.6" HD	720p	1TB 5400	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win8 Pro64	04/13
6885-84U	i5-3230M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	24GB	Numpad	Black	Finger	6	48	Win8 Pro64	04/13
6885-88U	i5-3230M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	24GB	Numpad	Black	Finger	6	48	Win7 Pro64	04/13
6885-9ZU	i7-3632QM	8GBx1	15.6" FHD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win8 Pro64	06/13
6885-A2U	i7-3632QM	8GBx1	15.6" FHD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win7 Pro64	06/13
6885-A3U	i7-3632QM	8GBx1	15.6" FHD	720p	128G SSD	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win7 Pro64	06/13
6885-A4U	i7-3632QM	8GBx1	15.6" FHD	720p	128G SSD	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win8 Pro64	06/13
6885-BGU	i3-3120M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	None	6	48	Win8 64	06/13
6885-BHU	i5-3230M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	Finger	6	48	Win8 64	06/13

Positioning Processor	<p><i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-3632QM processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology</p>										<p>Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 64-bit - Some: Windows 8 Pro 64-bit</p>
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets										<p>Preloaded applications (only some listed) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Lenovo Simple Tap • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate</p>
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™										
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 Card slot										
Widescreen display	Some: 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio Some: 15.6" (396mm) FHD (1920x1080) color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio										
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator										
Graphics	Intel HD Graphics 4000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; Max external resolution: 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz										
Keyboard TrackPoint®	6-row, spill-resistant, multimedia Fn keys, numeric keypad										
Touchpad ThinkLight™	TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None										
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm										
Weight ²	6-cell: from 5.4 lb (2.46kg)										
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom										
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic										
Battery - type ³⁷	Lithium Ion 6-cell										
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 8.1 hr										
Chipset	Mobile Intel HM77 Express Chipset										
ExpressCard	None										
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)										
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port (supports optional 4X10A06077) external monitor (VGA DB-15, HDMI), ethernet (RJ-45)										
PCIe Mini Card	One PCI Express Half Mini Card slot										Supports ThinkVantage® technologies
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2										
M.2 Card	One M.2 Card slot for support of SSD										65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
M.2 WWAN	None										
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card										For Lenovo ²² service upgrade options, please go to QP-TA sheet
Ethernet	Realtek® RTL8111F Gigabit Network Connection										
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2 / Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack										
Security	Power-on password, hard disk password, supervisor password, security keyhole										
Security chip	None										
Fingerprint reader	Some: UPEK Fingerprint reader on palm rest, swipe sensor										
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available										

See footnotes for more detailed information
 US model(s) announced April 30 or June 11, 2013

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ThinkPad Edge E531 6885 (Intel) - TopSeller (Windows 8) - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Numeric Keypad	Top color	Finger-print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
6885-5XU	i3-2348M	4GBx1	15.6" HD	720p	320G 5400	TP 11b/g/n + BT	None	Numpad	Black	None	6	48	Win7 Pro64	04/13
6885-5YU	i3-2348M	2GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n + BT	None	Numpad	Black	None	6	48	Win7 Pro64	04/13
6885-BJU	i3-2348M	4GBx1	15.6" HD	720p	320G 5400	TP 11b/g/n + BT	None	Numpad	Black	None	6	48	Win8 Pro64	06/13
6885-BKU	i3-2348M	2GBx1	15.6" HD	720p	320G 5400	TP 11b/g/n + BT	None	Numpad	Black	None	6	48	Win8 Pro64	06/13
6885-BMU	i3-3110M	4GBx1	15.6" HD	720p	320G 5400	TP 11b/g/n + BT	None	Numpad	Black	None	6	48	Win7 Pro64	06/13
6885-BNU	i3-3110M	4GBx1	15.6" HD	720p	320G 5400	TP 11b/g/n + BT	None	Numpad	Black	None	6	48	Win8 Pro64	06/13
6885-CCU	i3-3110M	2GBx1	15.6" HD	720p	320G 7200	TP 11b/g/n + BT	None	Numpad	Black	None	6	48	Win7 Pro64	07/13
6885-CDU	i3-3110M	2GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n + BT	None	Numpad	Black	None	6	48	Win7 Pro64	07/13
6885-CEU	i3-3110M	4GBx1	15.6" HD	720p	500G 7200	TP 11b/g/n + BT	None	Numpad	Black	None	6	48	Win7 Pro64	07/13
6885-CFU	i7-3632QM	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	None	6	48	Win7 Pro64	07/13
6885-CGU	i3-3120M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	None	6	48	Win7 Pro64	07/13
6885-CHU	i5-3230M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	None	6	48	Win7 Pro64	07/13
6885-D8U	i3-3110M	2GBx1	15.6" HD	720p	320G 5400	TP 11b/g/n + BT	None	Numpad	Black	None	6	48	Win8 Pro64	08/13
6885-DAU	i3-3130M	4GBx1	15.6" HD	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	None	6	48	Win7 Pro64	08/13

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-2348M processor (2 cores, 2.30GHz, 3MB cache), Intel HD Graphics 3000, DDR3 memory controller (up to 1333MHz), HT technology Intel Core i3-3110M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-3120M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-3130M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-3632QM processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology	Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Lenovo SimpleTap • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™	
M.2 SSD	None	
Widescreen display	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio	
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator	
Graphics	Intel HD Graphics 3000 or Intel HD Graphics 4000 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution: 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz</i>	
Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad	
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³	
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch	
ThinkLight™	None	
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm	
Weight ²	<i>6-cell:</i> from 5.4 lb (2.46kg)	
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom	
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic	
Battery - type ³⁷	Lithium Ion 6-cell	
Battery - life ¹⁰	<i>6-cell (48Whr):</i> up to 6.2 hr <i>6-cell (62Whr):</i> up to 8.1 hr	
Chipset	Mobile Intel HM77 Express Chipset	
ExpressCard	None	
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port (supports optional 4X10A06077) external monitor (VGA DB-15, HDMI), ethernet (RJ-45)	
PCIe Mini Card	One PCI Express Half Mini Card slot	
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1, Wi-Fi + BT combo adapter <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, 2x2, Wi-Fi + BT combo adapter	
M.2 Card	One M.2 Card slot for support of SSD	Supports ThinkVantage® technologies
M.2 WWAN	None	
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card	65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
Ethernet	Realtek® RTL8111F Gigabit Network Connection	
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2 / Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack	
Security	Power-on password, hard disk password, supervisor password, security keyhole	
Security chip	None	
Fingerprint reader	None	
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available	For Lenovo ²² service upgrade options, please go to QP-TA sheet

See footnotes for more detailed information

US model(s) announced April 30, June 11, June 25, July 16, or August 20, 2013

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ThinkPad Edge E531 6885 (Intel) - Optimus (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Discrete graphics	Camera	Disk SATA GB ³ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Numeric Keypad	Top color	Finger print reader	Bat-tery cells	Bat-tery Wh	Preload	Ann date (mm/yy)
6885-D9U	i5-3230M	4GBx1	15.6" HD	710M	720p	500G 7200	Intel 2230 + BT	None	Numpad	Black	None	6	48	Win7 Pro64	08/13

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i5-3230M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology										Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 64-bit Preloaded applications (only some listed) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Lenovo SimpleTap • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets										
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System™										
M.2 SSD	None										
Widescreen display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio, 500:1 contrast ratio <i>Some:</i> 15.6" (396mm) FHD (1920x1080) color , anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, 500:1 contrast ratio										
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator										
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4000 in processor, and NVIDIA GeForce® 710M , PCI Express® x 8, 1GB memory, DirectX® 11.1, or NVIDIA GeForce® GT740M , PCI Express® x 8, 2GB memory, DirectX® 11.1, NVIDIA PureVideo® HD technology, External monitor support via analog VGA DB-15 connector / digital HDMI connector <i>Max external resolution: 2048x1536 (VGA)@75Hz; 1920x1200 (HDMI)@60Hz</i>										
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None										
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm <i>6-cell:</i> from 5.5 lb (2.49kg)										
Weight ²	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom										
Case color	Acrylonitrile-Butadiene-Styrene (ABS) plastic										
Case material	Lithium Ion 6-cell										
Battery - type ³⁷	<i>6-cell (48Whr):</i> up to 6.2 hr										
Battery - life ¹⁰	<i>6-cell (62Whr):</i> up to 8.0 hr										
Chipset	Mobile Intel HM77 Express Chipset										
ExpressCard	None										
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)										
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)										
PCIe Mini Card	One PCI Express Mini Card slot										
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2										
M.2 Card	One M.2 Card slot for support of SSD										
M.2 WWAN	None										
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card										
Ethernet	Realtek® RTL8111F Gigabit Network Connection										
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2 / Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack										
Security	Power-on password, hard disk password, supervisor password, security keyhole										
Security chip	None										
Fingerprint reader	None										
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available										
	Supports ThinkVantage® technologies										
	90-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²										
	For Lenovo ²² service upgrade options, please go to QP-TA sheet										

See footnotes for more detailed information
US model(s) announced August 20, 2013

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Lenovo® ThinkPad E540



Lenovo ThinkPad E540



Lenovo ThinkPad E540
with Numeric Keypad



Lenovo ThinkPad E540
with Touch Screen



Lenovo ThinkPad E540
with Touch Screen



Lenovo ThinkPad E540
with Touch Screen

ThinkPad E540 20C6 (Intel) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Numeric Keypad	Top color	Finger-print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
20C60058US	i7-4702MQ	8GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C6005DUS	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C60057US	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	16GB	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C6005SUS	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 64	01/14
20C6005GUS	i7-4702MQ	8GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C6005EUS	i5-4200M	4GBx1	15.6" HD	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C6005BUS	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C60053US	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C60054US	i3-4000M	4GBx1	15.6" HD	720p	320G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6	48	Win7 Pro64	01/14
20C6005RUS	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6	48	Win8 64	01/14
20C6005HUS	i7-4702MQ	8GBx1	15.6" HD	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C6005AUS	i3-4000M	4GBx1	15.6" HD	720p	320G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6	48	Win8 Pro64	01/14
20C6005CUS	i7-4702MQ	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C6005EUS	i5-4200M	4+2GB	15.6" HD	720p	1TB 5400	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C6005QUS	i5-4200M	4+2GB	15.6" HD	720p	1TB 5400	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 64	01/14
20C60059US	i7-4702MQ	8GBx1	15.6" HD	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C60056US	i5-4200M	4+2GB	15.6" HD	720p	1TB 5400	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C6005EUS	i7-4702MQ	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C6005FUS	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	16GB	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C600DVUS	i5-4200M	4GBx1	15.6" HD	720p	128G SSD	Intel 7260 ac + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	05/14
20C600DUUS	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 ac + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	05/14

Positioning Processor	<p><i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i7-4702MQ processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4600, DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology</p>											<p>Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 64-bit - <i>Some:</i> Windows 8 Pro 64-bit</p>
Memory	<p>16GB max⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets</p>											<p>Preloaded applications (only some listed) - Windows 7 models • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate</p>
Optical SATA disk	<p>DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™</p>											
M.2 SSD	<p><i>Some:</i> M.2 Solid State Drive (SSD), via M.2 Card slot</p>											
Widescreen display	<p>15.6" (396mm) HD (1366x768), anti-glare, LED backlight, 200 nits, 16:9 aspect ratio</p>											
Camera	<p>HD720p resolution, face track, low light sensitive, fixed focus, LED indicator</p>											
Graphics	<p>Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display</p>											
Keyboard TrackPoint®	<p>6-row, spill-resistant, multimedia Fn keys, numeric keypad</p>											
Touchpad	<p>TrackPoint pointing device, Internet Scroll Bar¹³</p>											
ThinkLight™	<p>UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch</p>											
None	<p>None</p>											
Dimensions ³	<p>15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm 6-cell: from 5.4 lb (2.46kg)</p>											
Weight ²	<p>Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom</p>											
Case color	<p>Acrylonitrile-Butadiene-Styrene (ABS) plastic</p>											
Case material	<p>Lithium Ion 6-cell</p>											
Battery - type ³⁷	<p>6-cell (48Whr): up to 6.2 hr</p>											
Battery - life ¹⁰	<p>6-cell (62Whr): up to 7.4 hr</p>											
Chipset	<p>Mobile Intel HM87 Express Chipset</p>											
ExpressCard	<p>None</p>											
Multicard Reader	<p>4-in-1 reader (MMC, SD, SDHC, SDXC)</p>											
Ports	<p>Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)</p>											
PCIe Mini Card	<p>One PCI Express Half Mini Card slot</p>											
PCIe WLAN ⁴	<p><i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2</p>											
M.2 Card	<p>One M.2 Card slot for support of SSD</p>											
M.2 WWAN	<p>None</p>											
SIM card	<p>None</p>											
Bluetooth™	<p>Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card</p>											
Ethernet	<p>Realtek® RTL8111GUS Gigabit Network Connection</p>											
Audio support	<p>High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack</p>											
Security	<p>Power-on password, hard disk password, supervisor password, security keyhole</p>											
Security chip	<p>Trusted Platform Module, TCG 1.2-compliant</p>											
Fingerprint reader	<p><i>Some:</i> Fingerprint reader on palm rest, swipe sensor</p>											
Limited warranty ¹²	<p>1-year - depot repair service / service upgrades²² available</p>											
	<p>Supports ThinkVantage® technologies</p>											
	<p>65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹²</p>											

See footnotes for more detailed information

ThinkPad E540 20C6 (Intel) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Numeric Keypad	Top color	Finger-print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
20C6008TUS	i5-4200M	4+2GB	15.6" HD	720p	1TB 5400	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C60096US	i7-4702MQ	8GBx1	15.6" HD	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C6008VUS	i3-4000M	2GBx1	15.6" HD	720p	320G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6	48	Win7 Pro64	01/14
20C60097US	i5-4200M	4+2GB	15.6" HD	720p	1TB 5400	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C6008UUS	i5-4200M	4GBx1	15.6" HD	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C6008RUS	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	16GB	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C60092US	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	16GB	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C6008YUS	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6	48	Win8 Pro64	01/14
20C60093US	i7-4702MQ	8GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C6008RUS	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C6008QUS	i7-4702MQ	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C6008XUS	i7-4702MQ	8GBx1	15.6" HD	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C60091US	i5-4200M	4GBx1	15.6" HD	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C60090US	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C6008WUS	i3-4000M	4GBx1	15.6" HD	720p	320G 7200	Intel 7260 + BT	None	None	Numpad	Black	None	6	48	Win7 Pro64	01/14
20C6008SUS	i5-4200M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	01/14
20C60095US	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C60094US	i7-4702MQ	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win8 Pro64	01/14
20C600AAUS	i3-4000M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6	48	Win7 Pro64	02/14

Positioning Processor	<p><i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i7-4702MQ processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4600, DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology</p>											<p>Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit</p>
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets											<p>Preloaded applications (only some listed) - Windows 7 models • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate</p>
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™											
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 Card slot											
Widescreen display	15.6" (396mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio											
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator											
Graphics	Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display											
Keyboard TrackPoint®	6-row, spill-resistant, multimedia Fn keys, numeric keypad											
Touchpad ThinkLight™	TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None											
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm 6-cell: from 5.4 lb (2.46kg)											
Weight ²	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom											
Case color	Acrylonitrile-Butadiene-Styrene (ABS) plastic											
Battery - type ³⁷	Lithium Ion 6-cell											
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr											
Chipset	Mobile Intel HM87 Express Chipset											
ExpressCard	None											
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)											
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)											
PCIe Mini Card	One PCI Express Half Mini Card slot											
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2											
M.2 Card	One M.2 Card slot for support of SSD											
M.2 WWAN	None											
SIM card	None											
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card											
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection											
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack											
Security	Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	Trusted Platform Module, TCG 1.2-compliant											
Fingerprint reader	Some: Fingerprint reader on palm rest, swipe sensor											
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available											<p>Supports ThinkVantage® technologies</p> <p>65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service¹⁷ 24 hour x 7 day¹⁸ toll-free support during the warranty period¹²</p>

See footnotes for more detailed information

US model(s) announced January 21, or February 18, 2014

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ThinkPad E540 20C6 (Intel) - TopSeller - III

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Numeric Keypad	Top color	Finger print reader	Bat-tery cells /Wh	Bat-tery Preload	Ann date (mm/yy)
20C600C9US	i7-4712MQ	8GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	05/14
20C600C4US	i3-4100M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	05/14
20C600C5US	i5-4210M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	05/14
20C600C8US	i5-4210M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8 Pro64	05/14
20C600C7US	i3-4100M	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8 Pro64	05/14
20C600C6US	i7-4712MQ	4GBx1	15.6" HD	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win7 Pro64	05/14

Positioning Processor	<p><i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-4100M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4210M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4712MQ processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4600, DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology</p>											<p>Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 Pro 64-bit</p>
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets											<p>Preloaded applications (only some listed) - Windows 7 models • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate</p>
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™											
M.2 SSD	None											
Widescreen display	15.6" (396mm) HD (1366x768) , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Camera HD720p resolution, face track, low light sensitive, fixed focus, LED indicator											
Graphics	Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display											
Keyboard TrackPoint®	6-row, spill-resistant, multimedia Fn keys, numeric keypad											
Touchpad ThinkLight™	TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None											
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm											
Weight ²	6-cell: from 5.4 lb (2.46kg)											
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom											
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic											
Battery - type ³⁷	Lithium Ion 6-cell											
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr											
Chipset	Mobile Intel HM87 Express Chipset											
ExpressCard	None											
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)											
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)											
PCIe Mini Card	One PCI Express Half Mini Card slot											
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2											
M.2 Card	One M.2 Card slot for support of SSD											
M.2 WWAN	None											
SIM card	None											
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card											
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection											
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack											
Security	Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	Trusted Platform Module, TCG 1.2-compliant											
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor											
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available											Supports ThinkVantage® technologies 65-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 6.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²

See footnotes for more detailed information

ThinkPad E540 20C6 (Intel) - TopSeller (MultiTouch)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	SIM card	Numeric Keypad	Top color	Finger reader	Bat- tery cells /Wh	Bat- tery Preload	Ann date (mm/yy)
20C6005KUS	i5-4200M	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8 Pro64	01/14
20C6005PUS	i7-4702MQ	8GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8 Pro64	01/14
20C6005LUS	i7-4702MQ	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8 Pro64	01/14
20C6005MUS	i5-4200M	4GBx1	15.6" HD Touch	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8 Pro64	01/14
20C6005NUS	i7-4702MQ	8GBx1	15.6" HD Touch	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8 Pro64	01/14
20C6008NUS	i5-4200M	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 Pro64	01/14
20C6008MUS	i5-4200M	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 Pro64	01/14
20C6008LUS	i7-4702MQ	8GBx1	15.6" HD Touch	720p	128G SSD	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 Pro64	01/14
20C6008JUS	i3-4000M	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 Pro64	01/14
20C6008KUS	i7-4702MQ	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 Pro64	01/14
20C600BAUS	i5-4200M	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 64	03/14
20C600B9US	i3-4000M	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 64	03/14
20C600CBUS	i5-4210M	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 Pro64	05/14
20C600CCUS	i3-4100M	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 Pro64	05/14
20C600CAUS	i7-4712MQ	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 Pro64	05/14
20C600DTUS	i5-4210M	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 64	05/14
20C600DSUS	i3-4100M	4GBx1	15.6" HD Touch	720p	500G 7200	Intel 7260 + BT	None	None	Numpad	Black	Finger	6 48	Win8.1 64	05/14
Positioning Processor	<p><i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> Intel® Core™ i3-4000M processor (2 cores, 2.40GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-4100M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200M processor (2 cores, 2.50GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i5-4210M processor (2 cores, 2.60GHz, 3MB cache), Intel HD Graphics 4600, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4702MQ processor (4 cores, 2.20GHz, 6MB cache), Intel HD Graphics 4600, DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology Intel Core i7-4712MQ processor (4 cores, 2.30GHz, 6MB cache), Intel HD Graphics 4600, DDR3L memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology</p>											<p>Preloaded operating system²⁰ - Some: Windows 8 Pro 64-bit - Some: Windows 8.1 64-bit - Some: Windows 8.1 Pro 64-bit</p> <p>Preloaded applications (only some listed) • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate</p>		
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets													
Optical SATA disk	DVD burner, 9.5mm high, fixed, not removable, tray-in Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 9.5mm high, removable, upgradable, Active Protection System™													
M.2 SSD	None													
Widescreen display	15.6" (396mm) HD (1366x768) , anti-glare, 10-point touch screen LED backlight, 200 nits, 16:9 aspect ratio													
Camera	HD720p resolution, face track, low light sensitive, fixed focus, LED indicator													
Graphics	Intel HD Graphics 4600 in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display													
Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad													
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³													
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch													
ThinkLight™	None													
Dimensions ³	15.6W" (WxDxH): 14.84" x 9.84" x 1.05-1.17"; 377 x 250mm x 26.6-29.6mm													
Weight ²	6-cell: from 5.4 lb (2.46kg)													
Case color	Matte black or Matte red (top), trimmed with a thin silver band (side); black bottom													
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic													
Battery - type ³⁷	Lithium Ion 6-cell													
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr 6-cell (62Whr): up to 7.4 hr													
Chipset	Mobile Intel HM87 Express Chipset													
ExpressCard	None													
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)													
Ports	Two USB 3.0, one USB 2.0 (powered), OneLink Docking port external monitor (VGA DB-15, HDMI), ethernet (RJ-45)													
PCIe Mini Card	One PCI Express Half Mini Card slot													
PCIe WLAN ⁴	11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2													
M.2 Card	One M.2 Card slot for support of SSD													
M.2 WWAN	None													
SIM card	None													
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card													
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection													
Audio support	High Definition (HD) Audio, Conexant CX20751-21Z codec / stereo speakers, Dolby Advanced Audio v2 certified / Stereo digital microphone, combo audio/mic jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	Trusted Platform Module, TCG 1.2-compliant													
Fingerprint reader	Fingerprint reader on palm rest, swipe sensor													
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available													

See footnotes for more detailed information

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ThinkPad Edge E545



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Lenovo ThinkPad Edge E545

ThinkPad Edge E545 20B2 (AMD) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁸ rpm	PCIe Mini Card WLAN / BT	PCIe Mini Card WWAN /mSATA	Card Numeric Keypad	Top color	Micro-phone	Finger print reader	Battery cells	Preload	Ann date (mm/yy)
20B2001CUS	A6-5350M	4GBx1	15.6" HD	720p	320G 5400	TP 11b/g/n	None	Numpad	Matte black	Stereo	None	6	Prem 64	01/14
20B2001DUS	A6-5350M	2GBx1	15.6" HD	720p	320G 5400	TP 11b/g/n	None	Numpad	Matte black	Stereo	None	6	Prem 64	01/14

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> AMD Accelerated Processor A6-5350M (dual-core, 2.90GHz, 1MB L2 cache), integrated AMD Radeon HD 8450G Graphics, AMD Turbo Core technology (up to 3.50GHz), integrated DDR3 memory controller (up to 1600MHz)										Preloaded operating system²⁰ - Genuine Windows [®] 7 Home Premium 64			
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets										Preloaded applications (only some listed) • Adobe [®] Reader [®] • Norton [™] Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate			
Optical SATA disk	DVD burner, 12.7mm high, fixed, not removable, tray-in Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System [™]													
mSATA [™] SSD	None													
Widescreen display	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio													
Camera	HD720p resolution, low light sensitive, fixed focus, LED indicator													
Graphics	AMD Radeon HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI [™] (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution: 1920x1200 (HDMI) @60Hz</i>													
Keyboard	<i>Matte black (top):</i> 6-row, spill-resistant, multimedia Fn keys, numeric keypad													
TrackPoint [®]	TrackPoint pointing device, Internet Scroll Bar ¹³													
Touchpad	UltraNav [™] , wide touchpad below keyboard, Tap Zones, multi-touch													
ThinkLight [™]	None													
Dimensions ³	<i>Matte black or Matte red (top):</i> 15.6W" (WxDxH): 14.84" x 9.65" x 1.12-1.35"; 377 x 245mm x 28.5-34.3mm													
Weight ²	6-cell: from 5.2 lb (2.37kg)													
Case color	Matte black (top), trimmed with a thin silver band (side); black bottom													
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic													
Battery - type ³⁷	Lithium Ion 6-cell													
Battery - life ¹⁰	6-cell (48Whr): up to 6.2 hr													
Chipset	AMD A76M FCH													
ExpressCard	None													
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)													
Ports	Three USB 3.0, one USB 2.0 (powered), external monitor (VGA DB-15, HDMI), ethernet (RJ-45)													
PCIe Mini Card	One PCI Express Mini Card slot													
WLAN ⁴	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1													
WWAN	None													
Modem	None													
Bluetooth [™]	None										Supports ThinkVantage [®] technologies			
Ethernet	Realtek [®] RTL8111F Gigabit Network Connection										65-watt AC adapter EPEAT [™] Gold rating ENERGY STAR [®] 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²			
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2/ Stereo digital microphone or Mono digital microphone, combo audio/mic jack													
Security	Power-on password, hard disk password, supervisor password, security keyhole													
Security chip	None													
Fingerprint reader	None													
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available													

See footnotes for more detailed information
US model(s) announced January 7, 2014

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(GLN11-4) January 2014

ThinkPad Edge E545 20B2 (AMD) - TopSeller (Windows 8)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ³ rpm	PCIe Mini Card WLAN / BT	PCIe Mini Card WWAN /mSATA	Mini Card Numeric Keypad	Top color	Micro-phone	Finger print reader	Battery cells	Preload	Ann date (mm/yy)
20B2000SUS	A10-5750M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win8 64	08/13
20B20010US	A8-4500M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win7 Pro64	08/13
20B2000VUS	A6-5350M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win8 64	08/13
20B20011US	A6-5350M	4GBx1	15.6" HD	720p	320G 5400	TP 11b/g/n	None	Numpad	Matte black	Stereo	None	6	Win7 Pro64	08/13
20B2000KUS	A8-5550M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win7 Pro64	08/13
20B2000XUS	A10-5750M	8GBx1	15.6" HD	720p	1TB 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win7 Pro64	08/13
20B20012US	A6-5350M	4GBx1	15.6" HD	720p	320G 5400	TP 11b/g/n	None	Numpad	Matte black	Stereo	None	6	Win8 64	08/13
20B2000WUS	A8-5550M	8GBx1	15.6" HD	720p	1TB 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win7 Pro64	08/13
20B2000YUS	A10-5750M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win7 Pro64	08/13
20B2000RUS	A10-5750M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win8 Pro64	08/13
20B2000UUS	A6-5350M	4GBx1	15.6" HD	720p	320G 5400	TP 11b/g/n	None	Numpad	Matte black	Stereo	None	6	Win8 64	08/13
20B2000TUS	A8-4500M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win8 64	08/13
20B2000QUS	A8-5550M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n + BT	None	Numpad	Matte black	Stereo	None	6	Win8 Pro64	08/13
20B2001BUS	A6-5350M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n	None	Numpad	Matte black	Stereo	None	6	Win8 64	10/13
20B2001AUS	A6-5350M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n	None	Numpad	Matte black	Stereo	None	6	Win8 Pro64	10/13
20B20019US	A6-5350M	4GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n	None	Numpad	Matte black	Stereo	None	6	Win7 Pro64	10/13
20B2001FUS	A8-5550M	4GBx1	15.6" HD	720p	1TB 5400	TP 11b/g/n	None	Numpad	Matte black	Stereo	None	6	Win7 Pro64	03/14
20B2001EUS	A8-5550M	8GBx1	15.6" HD	720p	500G 5400	TP 11b/g/n	None	Numpad	Matte black	Stereo	None	6	Win7 Pro64	03/14

Positioning Processor	<p><i>Sophisticated design with quality, durability and reliability for SMB customers; two spindles</i> AMD Accelerated Processor A6-5350M (dual-core, 2.90GHz, 1MB L2 cache), integrated AMD Radeon HD 8450G Graphics, AMD Turbo Core technology (up to 3.50GHz), integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A8-4500M (quad-core, 1.90GHz, 4MB L2 cache), integrated AMD Radeon HD 7640G Graphics, AMD Turbo Core technology (up to 2.80GHz), integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A8-5550M (quad-core, 2.10GHz, 4MB L2 cache), integrated AMD Radeon HD 8550G Graphics, AMD Turbo Core technology (up to 3.10GHz), integrated DDR3 memory controller (up to 1600MHz) AMD Accelerated Processor A10-5750M (quad-core, 2.50GHz, 4MB L2 cache), integrated AMD Radeon HD 8650G Graphics, AMD Turbo Core technology (up to 3.50GHz), integrated DDR3 memory controller (up to 1600MHz)</p>										Preloaded operating system ²⁰
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets										<ul style="list-style-type: none"> - Some: Windows[®] 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 64-bit - Some: Windows 8 Pro 64-bit
Optical SATA disk	DVD burner, 12.7mm high, fixed, not removable, tray-in Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm or 9.5mm high, removable, upgradable, Active Protection System TM										<p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> - Windows 7 models • Adobe[®] Reader[®]
mSATA TM SSD	None										<ul style="list-style-type: none"> - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage
Widescreen display	15.6" (396mm) HD (1366x768) color , anti-glare, LED backlight, 220 nits, 16:9 aspect ratio										<ul style="list-style-type: none"> - All models (exclude DOS and No OS models) • ThinkVantage System Update • NortonTM Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate
Camera	HD720p resolution, low light sensitive, fixed focus, LED indicator										
Graphics	<p>AMD Radeon HD Graphics in processor, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMITM (supporting HDCP to output protected content); supports dual independent display; <i>Max external resolution: 1920x1200 (HDMI) @60Hz</i></p>										
Keyboard	<i>Matte black (top):</i> 6-row, spill-resistant, multimedia Fn keys, numeric keypad										
TrackPoint [®]	TrackPoint pointing device, Internet Scroll Bar ¹³										
Touchpad	UltraNav TM , wide touchpad below keyboard, Tap Zones, multi-touch										
ThinkLight TM	None										
Dimensions ³	<i>Matte black or Matte red (top):</i> 15.6W" (WxDxH): 14.84" x 9.65" x 1.12-1.35"; 377 x 245mm x 28.5-34.3mm										
Weight ²	<i>6-cell:</i> from 5.2 lb (2.37kg)										
Case color	Matte black (top), trimmed with a thin silver band (side); black bottom										
Case material	Acrylonitrile-Butadiene-Styrene (ABS) plastic										
Battery - type ³⁷	Lithium Ion 6-cell										
Battery - life ¹⁰	<i>6-cell (48Whr):</i> up to 6.2 hr										
Chipset	AMD A76M FCH										
ExpressCard	None										
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)										
Ports	Three USB 3.0, one USB 2.0 (powered), external monitor (VGA DB-15, HDMI), ethernet (RJ-45)										
PCIe Mini Card WLAN ⁴	One PCI Express Mini Card slot <i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, 1x1 <i>Some:</i> 11b/g/n, PCIe Half Mini Card, ThinkPad 11b/g/n, Wi-Fi + Bluetooth combo adapter, 1x1										
WWAN	None										
Modem	None										
Bluetooth TM	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card										Supports ThinkVantage [®] technologies
Ethernet	Realtek [®] RTL8111F Gigabit Network Connection										65-watt AC adapter EPEAT TM Gold rating ENERGY STAR [®] 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 2 watt x 2/ Stereo digital microphone or Mono digital microphone, combo audio/mic jack										
Security	Power-on password, hard disk password, supervisor password, security keyhole										
Security chip	None										
Fingerprint reader	None										
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available										

See footnotes for more detailed information
 US model(s) announced August 20, or October 15, 2013; or March 11, 2014

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 (GLN11-3) March 2014



Lenovo® ThinkPad E550



Lenovo ThinkPad E550



Lenovo ThinkPad E550

ThinkPad E550 Platform Specifications

Product Specifications Reference (PSREF)

Processor	4th or 5th Generation Intel® Core™ i3 / i5 / i7 Processor								Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC)					
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics		Two USB 3.0 (one Always On), one USB 2.0, Ethernet (RJ-45), external monitor (VGA DB-15, HDMI), Lenovo OneLink connector					
	i3-4005U	2	4	1.7 GHz	-	3MB	DDR3L-1600	HD4400		None					
	i3-5005U	2	4	2.0 GHz	-	3MB		HD5500		Camera					
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500		<i>Some:</i> HD720p resolution, fixed focus					
i7-5500U	2	4	2.4 GHz	3.0 GHz	4MB	HD5500		<i>Some:</i> 3D camera, Intel RealSense™ 3D Camera with MIC							
Graphics	Intel HD Graphics in processor only, or AMD Radeon R7 M260 Graphics, 2GB DDR3 memory, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display Max resolution: 1920x1080 (HDMI) @60Hz								Keyboard UltraNav™ ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint® pointing device and multi-touch with 3+2 buttons click pad None					
	Chipset Memory	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Security Security chip vPro Fingerprint reader NFC	Power-on password, hard disk password, supervisor password, security keyhole <i>Some:</i> Trusted Platform Module, TCG 1.2-compliant None <i>Some:</i> Fingerprint reader on the keyboard bezel, swipe sensor None				
		Display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio								Battery type Battery life AC adapter	Li-Ion 6-cell (48Wh) 6-cell (48Wh): up to 9.0 hr <i>Some:</i> 45-watt AC adapter (Integrated Graphics) <i>Some:</i> 65-watt AC adapter (Discrete Graphics)			
			Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio									Preload	<i>Some:</i> No operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit		
		Multi-touch	<i>Some:</i> supports 10-finger gesture								Optical M.2 SSD		<ul style="list-style-type: none"> • Lenovo Solution Center • Lenovo SHAREit • Lenovo Companion • ThinkVantage System Update • PC Device Stage • Weather Channel • Evernote • Maxthon Cloud Browser • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions) 		
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> Hybrid drive with 8GB NAND flash memory <i>Some:</i> DVD burner, 9.0mm high, removable <i>Some:</i> Blank Bezel None								<ul style="list-style-type: none"> • Rescue and Recovery™ • ThinkVantage System Update • PC Device Stage • Adobe® Reader® • Evernote® • Skype™ • Maxthon Cloud Browser • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions) 						
Ethernet Bluetooth™	Intel WGI218V Gigabit Ethernet Connection Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Limited warranty			1-year - depot repair service / service upgrades available			
WLAN	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> • Intel Wireless-AC 3160, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card • RTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • BCM43162, Broadcom 11-AC, 1x1, Wi-Fi + BT combo adapter, M.2 Card 								Environment		EPEAT™ Gold; ENERGY STAR®; RoHS-compliant				
WWAN	None								Dimensions <i>None Touch (WxDxH):</i> 14.84" x 10.08" x 1.06"; 377mm x 256mm x 27mm Weight <i>6-cell None Touch:</i> from 5.21 lb (2.35kg) Case color Graphite Black Case Material PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic						
SIM card	None														
Smart Card Read ExpressCard	None None														
Dimensions Weight Case color Case Material															

See footnotes for more detailed information

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(GDN1-Spec) January 2015

ThinkPad E550 20DF - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Camera	Keyboard	TPM	Finger print reader	Battery cells(wh)	Power adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DF0033US	I3-4005U	No	HD 4400	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	No	6 (48wh)	45W	Win8.1 64	1-depot	No	01/15
20DF0043US	I3-4005U	No	HD 4400	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	No	6 (48wh)	45W	Win8.1 P64	1-depot	No	01/15
20DF0044US	I3-4005U	No	HD 4400	8GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	No	6 (48wh)	45W	Win8.1 P64	1-depot	No	01/15
20DF0045US	I3-4005U	No	HD 4400	8GBx1	15.6" HD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 P64	1-depot	No	01/15
20DF0046US	I3-4005U	No	HD 4400	8GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 P64	1-depot	No	01/15
20DF004BUS	I5-5200U	No	HD 5500	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 P64	1-depot	No	01/15
20DF004CUS	I5-5200U	No	HD 5500	4GBx1	15.6" HD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 P64	1-depot	No	01/15
20DF004DUS	I5-5200U	No	HD 5500	8GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 P64	1-depot	No	01/15
20DF004EUS	I5-5200U	No	HD 5500	8GBx1	15.6" HD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 P64	1-depot	No	01/15
20DF002WUS	I3-5005U	No	HD 5500	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 64	1-depot	No	01/15
20DF0049US	I3-5005U	No	HD 5500	8GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 P64	1-depot	No	01/15
20DF004AUS	I3-5005U	No	HD 5500	8GBx1	15.6" HD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 P64	1-depot	No	01/15
20DF0048US	I3-5005U	No	HD 5500	4GBx1	15.6" HD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 P64	1-depot	No	01/15
20DF0047US	I3-5005U	No	HD 5500	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 P64	1-depot	No	01/15
20DF003EUS	I3-5005U	No	HD 5500	8GBx1	15.6" HD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003AUS	I3-5005U	No	HD 5500	4GBx1	15.6" HD	None	1TB 5400	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF0035US	I3-4005U	No	HD 4400	4GBx1	15.6" HD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF0034US	I3-4005U	No	HD 4400	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	No	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003BUS	I3-5005U	No	HD 5500	4GBx1	15.6" HD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003HUS	I5-5200U	No	HD 5500	4GBx1	15.6" HD	None	128GB SSD	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003LUS	I5-5200U	No	HD 5500	4GBx1	15.6" HD	None	1TB 5400	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad E550 Platform Specifications sheet](#)

Processor	4th or 5th Generation Intel® Core™ i3 / i5 / i7 Processor	Dimensions Weight Case color Case Matera	<i>None Touch(WxDxH):</i> 14.84" x 10.08" x 1.06"; 377mm x 256mm x 27mm <i>6-cell None Touch:</i> from 5.21 lb (2.35kg) Graphite Black PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic																														
	<table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory speed</th> <th>Processor Graphics</th> </tr> </thead> <tbody> <tr> <td>i3-4005U</td> <td>2</td> <td>4</td> <td>1.7 GHz</td> <td>-</td> <td>3MB</td> <td rowspan="3">DDR3L-1600</td> <td>HD4400</td> </tr> <tr> <td>i3-5005U</td> <td>2</td> <td>4</td> <td>2.0 GHz</td> <td>-</td> <td>3MB</td> <td>HD5500</td> </tr> <tr> <td>i5-5200U</td> <td>2</td> <td>4</td> <td>2.2 GHz</td> <td>2.7 GHz</td> <td>3MB</td> <td>HD5500</td> </tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics	i3-4005U	2	4	1.7 GHz	-	3MB	DDR3L-1600	HD4400	i3-5005U	2	4	2.0 GHz	-	3MB	HD5500	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB	HD5500	Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0 (one Always On), one USB 2.0, Ethernet (RJ-45), external monitor (VGA DB-15, HDMI), Lenovo OneLink connector
Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics																										
i3-4005U	2	4	1.7 GHz	-	3MB	DDR3L-1600	HD4400																										
i3-5005U	2	4	2.0 GHz	-	3MB		HD5500																										
i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500																										
Graphics	Intel HD Graphics in processor only, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content)	Monitor cable	None																														
Chipset	Intel SoC (System on Chip) platform	Camera	HD720p resolution, fixed focus																														
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Audio support	HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / JBL speakers, 2W x 2 / dual array microphone, combo audio / microphone jack																														
Display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio	Keyboard UltraNav™ ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint® pointing device and multi-touch with 3+2 buttons click pad None																														
Multi-touch	Some: supports 10-finger gesture	Security Security chip vPro Fingerprint reader NFC	Power-on password, hard disk password, supervisor password, security keyhole Some: Trusted Platform Module, TCG 1.2-compliant None Some: Fingerprint reader on the keyboard bezel, swipe sensor None																														
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: Hybrid drive with 8GB NAND flash memory	Battery type Battery life AC adapter	Li-Ion 6-cell (48Wh) 6-cell (48Wh): up to 9.0 hr 45-watt AC adapter (Integrated Graphics)																														
Optical	DVD burner, 9.0mm high, removable None	Preload	Some: No operating system Some: Windows® 7 Professional 64 Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit																														
Ethernet	Intel WGI218V Gigabit Ethernet Connection	Limited warranty	1-year - depot repair service / service upgrades available																														
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	Environment	EEPEAT™ Gold; ENERGY STAR®; RoHS-compliant																														
WLAN	One of the following, configurable by model: • Intel Wireless-AC 3160, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card																																
WWAN	None																																
SIM card	None																																

See footnotes for more detailed information

ThinkPad E550 20DF - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Camera	Keyboard	TPM	Finger print reader	Battery cells(wh)	Power adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DF003SUS	I5-5200U	No	HD 5500	8GBx1	15.6" FHD	None	128GB SSD	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF0036US	I3-4005U	No	HD 4400	8GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003MUS	I5-5200U	No	HD 5500	4GBx1	15.6" FHD	None	1TB 5400	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003JUS	I5-5200U	No	HD 5500	4GBx1	15.6" FHD	None	128GB SSD	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003TUS	I5-5200U	No	HD 5500	8GBx1	15.6" HD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003UUS	I5-5200U	No	HD 5500	8GBx1	15.6" HD	None	1TB 5400	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003CUS	I3-5005U	No	HD 5500	8GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003DUS	I3-5005U	No	HD 5500	8GBx1	15.6" HD	None	500GB 7200	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003RUS	I5-5200U	No	HD 5500	8GBx1	15.6" HD	None	128GB SSD	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003PUS	I5-5200U	No	HD 5500	8GBx1	15.6" HD	None	500GB 7200	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003FUS	I5-5200U	No	HD 5500	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003KUS	I5-5200U	No	HD 5500	4GBx1	15.6" HD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003VUS	I5-5200U	No	HD 5500	8GBx1	15.6" FHD	None	1TB 5400	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF0038US	I3-5005U	No	HD 5500	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF0037US	I3-4005U	No	HD 4400	8GBx1	15.6" HD	None	1TB 5400	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF002YUS	I3-4005U	No	HD 4400	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003QUS	I5-5200U	No	HD 5500	8GBx1	15.6" FHD	None	500GB 7200	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003NUS	I5-5200U	No	HD 5500	8GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF0039US	I3-5005U	No	HD 5500	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF0030US	I5-5200U	No	HD 5500	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	3160 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15
20DF003GUS	I5-5200U	No	HD 5500	4GBx1	15.6" FHD	None	500GB 7200	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	TPM	Finger	6 (48wh)	45W	Win8.1 DG Win7	1-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad E550 Platform Specifications sheet](#)

Processor	4th or 5th Generation Intel® Core™ i3 / i5 / i7 Processor	Dimensions Weight Case color Case Matera	<i>None Touch(WxDxH):</i> 14.84" x 10.08" x 1.06"; 377mm x 256mm x 27mm <i>6-cell None Touch:</i> from 5.21 lb (2.35kg) Graphite Black PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic																														
	<table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Base Frequency</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory speed</th> <th>Processor Graphics</th> </tr> </thead> <tbody> <tr> <td>i3-4005U</td> <td>2</td> <td>4</td> <td>1.7 GHz</td> <td>-</td> <td>3MB</td> <td rowspan="3">DDR3L -1600</td> <td>HD4400</td> </tr> <tr> <td>i3-5005U</td> <td>2</td> <td>4</td> <td>2.0 GHz</td> <td>-</td> <td>3MB</td> <td>HD5500</td> </tr> <tr> <td>i5-5200U</td> <td>2</td> <td>4</td> <td>2.2 GHz</td> <td>2.7 GHz</td> <td>3MB</td> <td>HD5500</td> </tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics	i3-4005U	2	4	1.7 GHz	-	3MB	DDR3L -1600	HD4400	i3-5005U	2	4	2.0 GHz	-	3MB	HD5500	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB	HD5500	Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0 (one Always On), one USB 2.0, Ethernet (RJ-45), external monitor (VGA DB-15, HDMI), Lenovo OneLink connector
Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics																										
i3-4005U	2	4	1.7 GHz	-	3MB	DDR3L -1600	HD4400																										
i3-5005U	2	4	2.0 GHz	-	3MB		HD5500																										
i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500																										
Graphics	Intel HD Graphics in processor only, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content)	Monitor cable Camera Audio support	None HD720p resolution, fixed focus HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / JBL speakers, 2W x 2 / dual array microphone, combo audio / microphone jack																														
Chipset Memory	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets	Keyboard UltraNav™ ThinkLight™	6-row, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint® pointing device and multi-touch with 3+2 buttons click pad None																														
Display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio	Security Security chip vPro Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Some: Trusted Platform Module, TCG 1.2-compliant None Some: Fingerprint reader on the keyboard bezel, swipe sensor																														
Multi-touch	Some: supports 10-finger gesture	NFC	None																														
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: Hybrid drive with 8GB NAND flash memory	Battery type Battery life AC adapter	Li-Ion 6-cell (48Wh) 6-cell (48Wh): up to 9.0 hr 45-watt AC adapter (Integrated Graphics)																														
Optical M.2 SSD	DVD burner, 9.0mm high, removable None	Preload	Some: No operating system Some: Windows® 7 Professional 64 Some: Windows 8.1 Pro 64-bit																														
Ethernet Bluetooth™	Intel WGI218V Gigabit Ethernet Connection Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	Limited warranty	preinstalled through downgrade rights in Windows 8.1 Pro 64-bit 1-year - depot repair service / service upgrades available																														
WLAN	One of the following, configurable by model: • Intel Wireless-AC 3160, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card	Environment	EPPEAT™ Gold; ENERGY STAR®; RoHS-compliant																														
WWAN	None																																
SIM card	None																																

See footnotes for more detailed information

ThinkPad E550 20DF (Radeon) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Camera	Keyboard	TPM	Finger print reader	Battery cells(wh)	Power adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DF002XUS	I7-5500U	No	R7 M260	8GBx1	15.6" HD	None	128GB SSD	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 P64	1-depot	No	01/15
20DF0042US	I7-5500U	No	R7 M260	8GBx1	15.6" FHD	None	1TB 5400	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DF003XUS	I7-5500U	No	R7 M260	4GBx1	15.6" FHD	None	128GB SSD	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DF0041US	I7-5500U	No	R7 M260	8GBx1	15.6" FHD	None	128GB SSD	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DF0040US	I7-5500U	No	R7 M260	8GBx1	15.6" FHD	None	500GB 7200	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DF003YUS	I7-5500U	No	R7 M260	4GBx1	15.6" FHD	None	1TB 5400	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DF0031US	I7-5500U	No	R7 M260	4GBx1	15.6" HD	None	500GB 7200	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DF0032US	I7-5500U	No	R7 M260	8GBx1	15.6" HD	None	128GB SSD	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15
20DF003WUS	I7-5500U	No	R7 M260	4GBx1	15.6" FHD	None	500GB 7200	DVD±RW	7265 ac+BT4.0	None	None	720p	Numpad	None	Finger	6 (48wh)	65W	Win8.1 DG Win7	1-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad E550 Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor								Dimensions	<i>None Touch(WxDxH):</i> 14.84" x 10.08" x 1.06"; 377mm x 256mm x 27mm		
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics	Weight	<i>6-cell None Touch:</i> from 5.21 lb (2.35kg)		
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB	DDR3L-1600	HD5500	Case color	Graphite Black		
	i7-5500U	2	4	2.4 GHz	3.0 GHz	4MB		HD5500	Case Matera	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic		
Graphics	AMD Radeon R7 M260 Graphics, 2GB DDR3 memory, external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content)								Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
									Ports	Two USB 3.0 (one Always On), one USB 2.0, Ethernet (RJ-45), external monitor (VGA DB-15, HDMI), Lenovo OneLink connector		
Chipset	Intel SoC (System on Chip) platform								Monitor cable	None		
									Camera	HD720p resolution, fixed focus		
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Audio support	HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / JBL speakers, 2W x 2 / dual array microphone, combo audio / microphone jack		
Display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio								Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad		
									UltraNav™ ThinkLight™	TrackPoint® pointing device and multi-touch with 3+2 buttons click pad None		
Multi-touch	Some: supports 10-finger gesture								Security	Power-on password, hard disk password, supervisor password, security keyhole		
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: Hybrid drive with 8GB NAND flash memory								vPro	None		
									Fingerprint reader	Some: Fingerprint reader on the keyboard bezel, swipe sensor		
Optical	DVD burner, 9.0mm high, removable None								NFC	None		
									Battery type	Li-Ion 6-cell (48Wh)		
Ethernet	Intel WGI218V Gigabit Ethernet Connection Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Battery life	6-cell (48Wh): up to 9.0 hr		
									AC adapter	65-watt AC adapter (Discrete Graphics)		
Bluetooth™									Preload	Some: No operating system		Some: Windows 8.1 64-bit
									Some: Windows® 7 Professional 64		Some: Windows 8.1 Pro 64-bit preinstalled through downgrade rights in Windows 8.1 Pro 64-bit	
WLAN	One of the following, configurable by model: • Intel Wireless-AC 3160, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card								Limited warranty	1-year - depot repair service / service upgrades available		
WWAN	None								Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant		
SIM card	None											

See footnotes for more detailed information



Lenovo® ThinkPad E555



Lenovo ThinkPad E555



Lenovo ThinkPad E555

ThinkPad E555 Platform Specifications

Product Specifications Reference (PSREF)

Processor	AMD Accelerated Processor A6, A8, A10, or FX APU							Graphics	Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)	
	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed		Ports	Two USB 3.0 (one Always On), one USB 2.0, VGA DB-15, HDMI, Ethernet (RJ-45), Lenovo OneLink connector, combo audio/microphone jack	
	A6-7000	2	2	2.2 GHz	3.0 GHz	1MB	DDR3L-1600		Monitor cable	None	
	A6-7000	2	2	2.2 GHz	3.0 GHz	1MB			Camera	HD720p resolution, fixed focus	
	A8-7100	4	4	1.8 GHz	3.0 GHz	4MB			Audio support	HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack	
	A8-7100	4	4	1.8 GHz	3.0 GHz	4MB			Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad	
	A10-7300	4	4	1.9 GHz	3.2 GHz	4MB			UltraNav™	TrackPoint® pointing device and multi-touch with 3+2 buttons click pad	
FX-7500	4	4	2.1 GHz	3.3 GHz	4MB	ThinkLight™		None			
							Security chip	Power-on password, hard disk password, supervisor password, security keyhole			
Graphics	AMD Radeon™ R4 or R5 HD Graphics in processor only, AMD Radeon R5 M240 Graphics, 2GB DDR3 memory, or Dual Graphics support for A10 and FX APU external analog monitor support via VGA DB-15 connector and digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display							Security chip	None		
								vPro	None		
Chipset	AMD A76M FCH Chipset							Fingerprint reader	None		
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets							NFC	None		
Display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color, anti-glare, LED backlight, 200 nits, 16:9 aspect ratio <i>Some:</i> 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 220 nits, 16:9 aspect ratio							Battery type	Li-Ion 6-cell (48Wh)		
Multi-touch								None			
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> Hybrid drive with 8GB NAND flash memory							AC adapter	<i>Some:</i> 45-watt AC adapter (Integrated Graphics) <i>Some:</i> 65-watt AC adapter (Discrete Graphics)		
Optical								<i>Some:</i> DVD burner, 9.0mm high, fixed <i>Some:</i> Blank Bezel			
M.2 SSD	None								<ul style="list-style-type: none"> • Lenovo Solution Center • Lenovo Support • Lenovo Companion • ThinkVantage System Update • Lenovo Reach (Window 8.1 model) • Hightail - Metro (Window 8.1 model) • PC Device Stage • AccuWeather • Amazon Kindle • Nitro Pro • Evernote • Skype™ • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink PowerDVD • Cyberlink Power2Go • Cyberlink PowerProducer 		
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection								<ul style="list-style-type: none"> • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • Lenovo Reach • PC Device Stage • Nitro Pro • Evernote® • Skype™ • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink PowerDVD • Cyberlink Power2Go • Cyberlink PowerProducer 		
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								<ul style="list-style-type: none"> • Rara Streaming • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions) • Cyberlink PowerDVD • Cyberlink Power2Go • Cyberlink PowerProducer 		
WLAN	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> • RTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card • BCM943162, Broadcom 11-AC, 1x1, Wi-Fi + BT combo adapter, M.2 Card 							Limited warranty	1-year - depot repair service / service upgrades available		
WWAN	None							Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant		
SIM card	None										
Smart Card Read	None										
ExpressCard	None										
Dimensions	<i>All (WxDxH):</i> 14.84" x 10.04" x 1.07" (377mm x 255mm x 27.1mm)										
Weight	From 5.20 lb (2.36kg)										
Case color	Graphite black										
Case Material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic										

See footnotes for more detailed information

ThinkPad E555 20DH (AMD) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Graphics	Memory	Display	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Camera	Keyboard	Finger print reader	Battery cells(wh)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DH0028US	A6-7000	R4 HD	4GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 P64	1-Depot	No	01/15
20DH002EUS	A6-7000	R4 HD	8GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15
20DH002GUS	A8-7100	R5 HD	8GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 P64	1-Depot	No	01/15
20DH002FUS	A8-7100	R5 HD	4GBx1	15.6" HD	500G 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15
20DH002BUS	A8-7100	R5 HD	8GBx1	15.6" HD	500G 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15
20DH002LUS	A6-7000	R4 HD	8GBx1	15.6" HD	500G 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15
20DH002RUS	A6-7000	R4 HD	8GBx1	15.6" HD	500G 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 P64	1-Depot	No	01/15
20DH002HUS	A8-7100	R5 HD	8GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15
20DH002MUS	A8-7100	R5 HD	4GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 P64	1-Depot	No	01/15
20DH002DUS	A6-7000	R4 HD	4GBx1	15.6" HD	500G 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 P64	1-Depot	No	01/15
20DH002QUS	A6-7000	R4 HD	4GBx1	15.6" HD	500G 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15
20DH002SUS	A8-7100	R5 HD	4GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15
20DH002JUS	A6-7000	R4 HD	8GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 P64	1-Depot	No	01/15
20DH002AUS	A6-7000	R4 HD	4GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15
20DH002UUS	A8-7100	R5 HD	4GBx1	15.6" HD	500G 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 P64	1-Depot	No	01/15
20DH002KUS	A8-7100	R5 HD	8GBx1	15.6" HD	500G 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 P64	1-Depot	No	01/15

• For detailed platform specifications, please see [ThinkPad E555 Platform Specifications sheet](#)

Processor	AMD Accelerated Processor A6, A8 APU								Multicard Reader Ports 4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0 (one Always On), one USB 2.0, VGA DB-15, HDMI, Ethernet (RJ-45), Lenovo OneLink connector, combo audio/microphone jack
	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Graphics	
	A6-7000	2	2	2.2 GHz	3.0 GHz	1MB	DDR3L-1600	R4 HD	
A8-7100	4	4	1.8 GHz	3.0 GHz	4MB	R5 HD			
Graphics	AMD Radeon™ R4 or R5 HD Graphics in processor only								Monitor cable None
Chipset	AMD A76M FCH Chipset								Camera HD720p resolution, fixed focus
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								
Display	<i>Some:</i> 15.6" (396mm) HD (1366x768) color, anti-glare, 200 nits <i>Some:</i> 15.6" (396mm) FHD (1920x1080) color, anti-glare, 220 nits								Keyboard 6-row, spill-resistant, multimedia Fn keys, numeric keypad
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, removable, Active Protection System™ <i>Some:</i> Hybrid drive with 8GB NAND flash memory								UltraNav™ TrackPoint® pointing device and multi-touch with 3+2 buttons click pad
Optical	<i>Some:</i> DVD burner, 9.0mm high, fixed <i>Some:</i> Blank Bezel								ThinkLight™ None
M.2 SSD	None								Security Power-on password, hard disk password, supervisor password, security keyhole
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection								Security chip None
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								vPro None
WLAN	RTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card								Fingerprint reader None
WWAN	None								NFC None
SIM card	None								Battery type Li-Ion 6-cell (48Wh)
Dimensions	<i>All (WxDxH):</i> 14.84" x 10.04" x 1.07" (377mm x 255mm x 27.1mm)								Battery life Up to 6.3 hr
Weight	From 5.20 lb (2.36kg)								AC adapter 45-watt AC adapter (Integrated Graphics)
Case color	Graphite black								Preload <i>Some:</i> No operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
Case Material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic								<i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit
Limited warranty									1-year - depot repair service / service upgrades available
Environment									EPEAT™ Gold; ENERGY STAR®; RoHS-compliant

See footnotes for more detailed information

ThinkPad E555 20DH (AMD) - Discrete (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Graphics	Memory	Display	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Camera	Keyboard	Finger print reader	Battery cells(wh)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DH002PUS	A10-7300	R7 M260DX	4GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15
20DH002CUS	A10-7300	R7 M260DX	8GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15
20DH0029US	A10-7300	R7 M260DX	8GBx1	15.6" HD	1TB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 P64	1-Depot	No	01/15
20DH002NUS	A10-7300	R7 M260DX	4GBx1	15.6" HD	500GB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 P64	1-Depot	No	01/15
20DH002TUS	A10-7300	R7 M260DX	4GBx1	15.6" HD	500GB 5400	DVD±RW	RTL bgn+BT	No	No	720p	Numpad	No	6(48wh)	Win8.1 DG Win7	1-Depot	No	01/15

• For detailed platform specifications, please see [ThinkPad E555 Platform Specifications sheet](#)

Processor	AMD Accelerated Processor A6, A8, A10, or FX APU								Dimensions	All (WxDxH): 14.84" x 10.04" x 1.07" (377mm x 255mm x 27.1mm)		
	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Graphics	Weight	From 5.20 lb (2.36kg)		
	A6-7000	2	2	2.2 GHz	3.0 GHz	1MB	DDR3L-1600	R5 M240	Case color	Graphite black		
	A8-7100	4	4	1.8 GHz	3.0 GHz	4MB		R5 M240	Case Material	PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic		
	A10-7300	4	4	1.9 GHz	3.2 GHz	4MB		R7 M260DX (R6+R5 M240)	Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)		
FX-7500	4	4	2.1 GHz	3.3 GHz	4MB	R7 M265DX (R7+R5 M240)		Ports	Two USB 3.0 (one Always On), one USB 2.0, VGA DB-15, HDMI, Ethernet (RJ-45), Lenovo OneLink connector, combo audio/microphone jack			
								Monitor cable	None			
Graphics	AMD Radeon R5 M240 Graphics, 2GB DDR3 memory, or Dual Graphics support for A10 and FX APU								Camera	HD720p resolution, fixed focus		
Chipset	AMD A76M FCH Chipset								Audio support	HD Audio, Conexant® CX20751 codec, Dolby® Advanced Audio™ v4 / stereo speakers, 2W x 2 / dual array microphone, combo audio/microphone jack		
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Keyboard	6-row, spill-resistant, multimedia Fn keys, numeric keypad		
Display	Some: 15.6" (396mm) HD (1366x768) color, anti-glare, 200 nits Some: 15.6" (396mm) FHD (1920x1080) color, anti-glare, 220 nits								UltraNav™	TrackPoint® pointing device and multi-touch with 3+2 buttons click pad		
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, Active Protection System™ Some: Hybrid drive with 8GB NAND flash memory								ThinkLight™	None		
Optical	Some: DVD burner, 9.0mm high, fixed Some: Blank Bezel								Security	Power-on password, hard disk password, supervisor password, security keyhole		
M.2 SSD	None								Security chip	None		
Ethernet	Realtek® RTL8111GUS Gigabit Network Connection								vPro	None		
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Fingerprint reader	None		
WLAN	RTL8723BE, Realtek 11b/g/n, 1x1, Wi-Fi + Bluetooth combo adapter, M.2 Card								NFC	None		
WWAN	None								Battery type	Li-Ion 6-cell (48Wh)		
SIM card	None								Battery life	Up to 6.3 hr		
									AC adapter	65-watt AC adapter (Discrete Graphics)		
									Preload	Some: No operating system Some: Windows® 7 Professional 64 Some: Windows 8.1 Pro 64-bit preinstalled through downgrade rights in Windows 8.1 Pro 64-bit		
									Limited warranty	1-year - depot repair service / service upgrades available		
									Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant		

See footnotes for more detailed information

ThinkPad S431



Lenovo® ThinkPad S431



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ThinkPad S431 20AX (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁵ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Top color	Finger-print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
20AX0000US	i3-3227U	4GBx1	14.0" HD	720p	500G 7200	TP 11a/b/g/n + BT	24G	Black	Finger	4	46	Win7 Pro64	06/13
20AX0001US	i5-3337U	4GBx1	14.0" HD	720p	500G 7200	TP 11a/b/g/n + BT	24G	Black	Finger	4	46	Win7 Pro64	06/13
20AX000MUS	i7-3687U	8GBx1	14.0" HD	720p	500G 7200	TP 11a/b/g/n + BT	24G	Black	Finger	4	46	Win7 Pro64	06/13
20AX000NUS	i3-3227U	4GBx1	14.0" HD	720p	500G 7200	TP 11a/b/g/n + BT	24G	Black	Finger	4	46	Win8 Pro64	06/13
20AX000PUS	i5-3337U	4GBx1	14.0" HD	720p	500G 7200	TP 11a/b/g/n + BT	24G	Black	Finger	4	46	Win8 Pro64	06/13
20AX000QUS	i7-3687U	8GBx1	14.0" HD	720p	500G 7200	TP 11a/b/g/n + BT	24G	Black	Finger	4	46	Win8 Pro64	06/13
20AX000RUS	i3-3227U	4GBx1	14.0" HD	720p	320G 7200	TP 11a/b/g/n + BT	None	Black	Finger	4	46	Win7 Pro64	06/13
20AX000SUS	i3-3227U	4GBx1	14.0" HD	720p	320G 7200	TP 11a/b/g/n + BT	None	Black	Finger	4	46	Win8 Pro64	06/13
20AX004KUS	i5-3437U	4GBx1	14.0" HD	720p	500G 7200	TP 11a/b/g/n + BT	24G	Black	Finger	4	46	Win7 Pro64	11/13

Positioning Processor	<p><i>Sophisticated design with quality, durability and reliability for SMB customers; one spindles</i> Intel® Core™ i3-3227U processor (2 cores, 1.90GHz, 3MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i5-3437U processor (2 cores, 1.90GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.90GHz), HT technology Intel Core i7-3687U processor (2 cores, 2.10GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology</p>										<p>Preloaded operating system²⁰ - Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - Some: Windows 8 Pro 64-bit</p> <p>Preloaded applications (only some listed) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Adobe® Reader®</p> - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate
Memory	8GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket										
Optical SATA disk	None Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high Some: Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Active Protection System™										
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 Card slot										
Widescreen display	14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio										
Camera	HD720p resolution, low light sensitive, fixed focus, LED indicator										
Graphics	Intel HD Graphics 4000 in processor, external digital monitor support via HDMI™ (supporting HDCP to output protected content); Max external resolution: 1920x1200 (HDMI)@60Hz										
Keyboard	6-row, spill-resistant, multimedia Fn keys, LED backlight										
TrackPoint®	TrackPoint pointing device, Internet Scroll Bar ¹³										
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch										
ThinkLight™	None										
Dimensions ³	14.0W" (WxDxH): 13.11" x 8.86" x 0.81"; 332.8mm x 224.8mm x 20.3mm										
Weight ²	4-cell: from 3.92 lb (1.78kg)										
Case color	Black or silver (top); black bottom										
Case material	Sand Blast Aluminum										
Battery - type ³⁷	Li-Polymer 4-cell (46Whr)										
Battery - life ¹⁰	MobileMark 2007: Windows 7: up to 9.1 hr MobileMark 2012: Windows 8: up to 5.9 hr										
Chipset	Mobile Intel HM76 Express Chipset										
ExpressCard	None										
Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)										
Ports	One USB 3.0, one USB 3.0 (powered), OneLink Docking port (supports optional 4X10A06077) external monitor (HDMI), ethernet (RJ-45)										
PCIe Mini Card	One PCI Express Mini Card slot										
PCIe WLAN ⁴	11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, Wi-Fi + Bluetooth combo adapter, 2x2										
M.2 Card	One M.2 Card slot for support of WWAN card or SSD										
M.2 WWAN	None										
Bluetooth™	Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card										
Ethernet	Realtek® RTL8111F Gigabit Network Connection										
Audio support	High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 1.5 watt x 2 / Dolby® Home Theater® v4 / dual array microphone, combo audio/mic jack										
Security	Power-on password, hard disk password, supervisor password, security keyhole										
Security chip	Trusted Platform Module, TCG 1.2-compliant										
Fingerprint reader	UPEK Fingerprint reader on palm rest, swipe sensor										
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available										Supports ThinkVantage® technologies 65-watt AC adapter ENERGY STAR® compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² For Lenovo ²² service upgrade options, please go to QP-TA sheet

See footnotes for more detailed information
 US model(s) announced June 4, or November 19, 2013

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ThinkPad S431 20AX (AMD HD) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ⁵ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD	Top color	Finger-print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
20AX003WUS	i3-3217U	4GBx1	14.0" HD+	720p	500G 7200	TP 11a/b/g/n + BT	24G	Black	Finger	4	46	Win7 Pro64	07/13

Positioning Processor	<i>Sophisticated design with quality, durability and reliability for SMB customers; one spindles Intel® Core™ i3-3217U processor (2 cores, 1.80GHz, 3MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology</i>										Preloaded operating system²⁰ - <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit - <i>Some:</i> Windows 8 Pro 64-bit Preloaded applications (only some listed) - Windows 7 models • Access Connections™ • ThinkVantage Power Manager • ThinkVantage Tools • Adobe® Reader® - Windows 8 models • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage - All models • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate
Memory	8GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket										
Optical SATA disk	None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Active Protection System™										
M.2 SSD	M.2 Solid State Drive (SSD), via M.2 Card slot										
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, LED backlight, 250 nits, 16:9 aspect ratio										
Camera	HD720p resolution, low light sensitive, fixed focus, LED indicator										
Graphics	AMD Radeon™ HD 8670M Graphics, 1GB memory external digital monitor support via HDMI™; <i>Max external resolution: 1920x1200 (HDMI) @60Hz</i>										
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, LED backlight TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None										
Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰	14.0W" (WxDxH): 13.11" x 8.86" x 0.81"; 332.8mm x 224.8mm x 20.3mm 4-cell: from 3.92 lb (1.78kg) Black or silver (top); black bottom Sand Blast Aluminum Li-Polymer 4-cell (46Whr) <i>MobileMark 2007: Windows 7: up to 7.2 hr</i> <i>MobileMark 2012: Windows 8: up to 5.2 hr</i>										
Chipset ExpressCard Multicard Reader Ports	Mobile Intel HM76 Express Chipset None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, one USB 3.0 (powered), OneLink Docking port (supports optional 4X10A06077) external monitor (HDMI), ethernet (RJ-45)										
PCIe Mini Card PCIe WLAN ⁴ M.2 Card M.2 WWAN Bluetooth™ Ethernet Audio support	One PCI Express Mini Card slot 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, Wi-Fi + Bluetooth combo adapter, 2x2 One M.2 Card slot for support of WWAN card or SSD None Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card Realtek® RTL8111F Gigabit Network Connection High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 1.5 watt x 2 / Dolby® Home Theater® v4 / dual array microphone, combo audio/mic jack										Supports ThinkVantage® technologies
Security Security chip Fingerprint reader	Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant UPEK Fingerprint reader on palm rest, swipe sensor										65-watt AC adapter ENERGY STAR® compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available										For Lenovo ²² service upgrade options, please go to QP-TA sheet

See footnotes for more detailed information
US model(s) announced July 2, 2013

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ThinkPad S431 20AX (TopSeller) - MultiTouch

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Wide-screen display	Camera	Disk SATA GB ³ rpm	PCIe Mini Card WLAN / BT	M.2 Card WWAN /SSD Top color	Finger print reader	Bat-tery cells	Bat-tery /Wh	Preload	Ann date (mm/yy)
20AX000VUS	i7-3687U	8GBx1	14.0" HD+ Touch	720p	500G 7200	TP 11a/b/g/n + BT	24G Black	Finger	4	46	Win8 Pro64	08/13
20AX000TUS	i3-3227U	4GBx1	14.0" HD+ Touch	720p	500G 7200	TP 11a/b/g/n + BT	24G Black	Finger	4	46	Win8 Pro64	08/13
20AX000UUS	i5-3337U	4GBx1	14.0" HD+ Touch	720p	500G 7200	TP 11a/b/g/n + BT	24G Black	Finger	4	46	Win8 Pro64	08/13

Positioning Processor	<p><i>Sophisticated design with quality, durability and reliability for SMB customers; one spindles</i> Intel® Core™ i3-3227U processor (2 cores, 1.90GHz, 3MB Cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i7-3687U processor (2 cores, 2.10GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology</p>										<p>Preloaded operating system²⁰ - Windows 8 Pro 64-bit</p> <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate
Memory	8GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket										
Optical SATA disk	None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, removable, upgradable, Active Protection System™										
M.2 SSD	M.2 Solid State Drive (SSD), via M.2 Card slot										
Widescreen display	<i>Some:</i> 14.0" (355mm) HD (1366x768) color , anti-glare, LED backlight, 200 nits, 16:9 aspect ratio <i>Some:</i> 14.0" (355mm) HD+ (1600x900) color , anti-glare, 10-point touch screen LED backlight, 220 nits, 16:9 aspect ratio										
Camera	HD720p resolution, low light sensitive, fixed focus, LED indicator										
Graphics	Intel HD Graphics 4000 in processor, external digital monitor support via HDMI™ (supporting HDCP to output protected content); <i>Max external resolution:</i> 1920x1200 (HDMI)@60Hz										
Keyboard TrackPoint® Touchpad ThinkLight™	6-row, spill-resistant, multimedia Fn keys, LED backlight TrackPoint pointing device, Internet Scroll Bar ¹³ UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch None										
Dimensions ³ Weight ² Case color Case material Battery - type ³⁷ Battery - life ¹⁰	14.0W" (WxDxH): 13.10" x 8.85" x 0.87"; 332.8mm x 224.8mm x 22.1mm 4-cell: from 4.10 lb (1.86kg) Black or silver (top); black bottom Sand Blast Aluminum Li-Polymer 4-cell (46Whr) <i>MobileMark 2007:</i> Windows 7: up to 6.7 hr <i>MobileMark 2012:</i> Windows 8: up to 4.9 hr										
Chipset ExpressCard Multicard Reader Ports	Mobile Intel HM76 Express Chipset None 4-in-1 reader (MMC, SD, SDHC, SDXC) One USB 3.0, one USB 3.0 (powered), OneLink Docking port (supports optional 4X10A06077) external monitor (HDMI), ethernet (RJ-45)										
PCIe Mini Card PCIe WLAN ⁴ M.2 Card M.2 WWAN Bluetooth™ Ethernet Audio support Security Security chip Fingerprint reader	One PCI Express Mini Card slot 11a/b/g/n, PCIe Half Mini Card, ThinkPad 11a/b/g/n, Wi-Fi + Bluetooth combo adapter, 2x2 One M.2 Card slot for support of WWAN card or SSD None Bluetooth 4.0 wireless, integrated in selected WLAN PCIe Half Mini Card Realtek® RTL8111F Gigabit Network Connection High Definition (HD) Audio, Conexant 20671 codec / stereo speakers, 1.5 watt x 2 / Dolby® Home Theater® v4 / dual array microphone, combo audio/mic jack Power-on password, hard disk password, supervisor password, security keyhole Trusted Platform Module, TCG 1.2-compliant Fingerprint reader on palm rest, swipe sensor										Supports ThinkVantage® technologies 65-watt AC adapter ENERGY STAR® compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available										For Lenovo ²² service upgrade options, please go to QP-TA sheet

See footnotes for more detailed information
 US model(s) announced August 13, 2013

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Lenovo Quick Pick (<http://www.lenovoquickpick.com>) is an options and services configurator for Lenovo systems.

For the options and services information on ThinkPad Laptops, please see below:

<p>ThinkPad L440 http://www.lenovoquickpick.com/usa/system/thinkpad/l-series/l440</p> <p>ThinkPad L540 http://www.lenovoquickpick.com/usa/system/thinkpad/l-series/l540</p>	<p>ThinkPad L450 http://www.lenovoquickpick.com/usa/system/thinkpad/l-series/l450</p>
<p>ThinkPad T440 http://www.lenovoquickpick.com/usa/system/thinkpad/t-series/t440</p> <p>ThinkPad T440p http://www.lenovoquickpick.com/usa/system/thinkpad/t-series/t440p</p> <p>ThinkPad T440s http://www.lenovoquickpick.com/usa/system/thinkpad/t-series/t440s</p>	<p>ThinkPad T450 http://www.lenovoquickpick.com/usa/system/thinkpad/t-series/t450</p> <p>ThinkPad T450s http://www.lenovoquickpick.com/usa/system/thinkpad/t-series/t450s</p>
<p>ThinkPad T540p http://www.lenovoquickpick.com/usa/system/thinkpad/t-series/t540p</p> <p>ThinkPad W540 http://www.lenovoquickpick.com/usa/system/thinkpad/w-series/w540</p>	<p>ThinkPad T550 http://www.lenovoquickpick.com/usa/system/thinkpad/t-series/t550</p> <p>ThinkPad W541 http://www.lenovoquickpick.com/usa/system/thinkpad/w-series/w541</p> <p>ThinkPad W550s http://www.lenovoquickpick.com/usa/system/thinkpad/w-series/w550s</p>
<p>ThinkPad 11e http://www.lenovoquickpick.com/usa/system/thinkpad/other-thinkpad/thinkpad-11e-windows</p> <p>ThinkPad 11e Chromebook http://www.lenovoquickpick.com/usa/system/thinkpad/other-thinkpad/thinkpad-11e-chrome</p> <p>ThinkPad X240 http://www.lenovoquickpick.com/usa/system/thinkpad/x-series/x240</p> <p>ThinkPad X1 Carbon (2nd Gen) http://www.lenovoquickpick.com/usa/system/thinkpad/x-series/x1-carbon-2nd-gen</p>	<p>ThinkPad X250 http://www.lenovoquickpick.com/usa/system/thinkpad/x-series/x250</p> <p>ThinkPad X1 Carbon (3rd Gen) http://www.lenovoquickpick.com/usa/system/thinkpad/x-series/x1-carbon-3rd-gen</p>
<p>ThinkPad E440 http://www.lenovoquickpick.com/usa/system/thinkpad/e-series/edge-e440</p> <p>ThinkPad E540 http://www.lenovoquickpick.com/usa/system/thinkpad/e-series/edge-e540</p> <p>ThinkPad E545 http://www.lenovoquickpick.com/usa/system/thinkpad/e-series/edge-e545</p>	
<p>ThinkPad S431 http://www.lenovoquickpick.com/usa/system/thinkpad/s-series/s431</p>	

Disclaimer

Lenovo provides the information in the Product Specifications Reference (PSREF) withdrawn product books on an "AS-IS" basis. Because the actual products have been withdrawn from marketing, the information in these withdrawn product books is no longer maintained or updated. The referenced footnote numbering may not correspond with the listed footnotes.

PSREF books for the withdrawn systems:

http://www.lenovo.com/psref/psrefs_withdrawn.html

Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, go to http://support.lenovo.com/en_US/product-service/warranty-status/WarrantyPolicies.page. Lenovo makes no representation or warranty regarding third party products or services.

Footnotes:

- ¹ Power management, including Intel® SpeedStep® Technology, reduces processor speed when in battery mode.
- ² **Weight** includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.
- ³ **Thinness** may vary at certain points on the system.
- ⁴ **Wireless capability:** Requires compatible wireless-enabled options sold separately.
- ⁵ **TAA:** ThinkPad notebook is compliant with the U.S. Federal Government's country-of-origin requirements prescribed in 48 C.F.R. Subpart 25.4; Trade Act Agreement (TAA) model.
- ⁶ **Public network download modem speeds** are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.
- ⁷ **Maximum memory capacity** may require the replacement of standard component with largest supported component available. On ThinkPad systems, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by a 32-bit operating system will be limited to 3GB. This limitation does not exist with 64-bit operating systems.
- ⁸ **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.
- ¹⁰ **Battery:** These model numbers achieved the battery life based on MobileMark® 2012 during testing. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.
- ¹¹ **External monitor:** This system supports a maximum of two external monitors. The integrated display(s) must be disabled to support two external monitors.
- ¹² **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.
- ¹⁴ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.
- ¹⁶ **Activating Verizon Wireless Service:** Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service, airtime, and early termination charges may apply. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.
- ¹⁷ **International Warranty Service (IWS)** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.
- ¹⁹ **Depot repair service:** The customer may be asked certain diagnostic questions before a courier is sent. Your ThinkPad purchase includes this depot repair service, available in the U.S. during the limited warranty period.
- ²⁰ **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.
- ²² **Lenovo Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. For ThinkPad notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor. P/U means pick-up. See Lenovo Warranty Services terms and conditions for complete details and restrictions.
- ²³ **Activating AT&T Wireless Service:** Requires separate agreement with AT&T, subject to service agreement, rate plan and coverage maps. AT&T, not Lenovo, is solely responsible for service. Coverage not available in all areas; AT&T BroadbandConnect available in select metropolitan markets. Special credit and tenure restrictions and additional charges may apply to international roaming. A network connection, third-party software, additional hardware, and/or subscription to a third-party service may be required for certain solutions/applications. Additional restrictions apply, including early termination fee; see www.wireless.att.com for details. To activate call Lenovo Wireless Activation Hot Line at 1-877-299-4710.
- ²⁶ **Full-size keyboard:** As defined by ISO/IEC 15412.
- ³⁰ **Measures only maximum** data transfer rate, not application performance. Many factors affect application performance.

²⁴ **Limited onsite service systems** are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.

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ThinkPad®

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Visit www.lenovo.com/psref for the latest version of Product Specifications Reference.

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Summary of Changes

This section describes the technical changes made in this edition.

This edition might also include minor corrections and editorial changes which are not identified.

February 11, 2015 - Version 468

Additions in this update

▶ **New product(s)**

ThinkPad Yoga 12 models announced February 2015

▶ **New model(s)**

ThinkPad Yoga 11e new models announced February 2015

▶ **Others**

None

Changes in this update

▶ None

Withdrawals in this update

▶ **Withdrawn product(s)**

None



Lenovo ThinkPad 10



Lenovo ThinkPad 10



Lenovo ThinkPad 10



Lenovo ThinkPad 10



Lenovo ThinkPad 10

ThinkPad 10 Platform Specifications

Product Specifications Reference (PSREF)

Positioning	<i>Touchscreen tablet with a full PC experience and superior versatility</i>									Light sensor	Ambient Light Sensor, InterSil ISL29023
Processor	Intel® Atom Processor									G-sensor/ eCompass	3D accelerometer and 3D magnetometer module, AKM AK8963C
	Processor Number	# of Cores	# of Threads	Clock Speed	Burst Frequency	Cache	Memory speed	Processor Graphics	Intel vPro Technology	Gyroscope	3-axis gyroscope
	Z3795	4	4	1.6 GHz	2.4 GHz	2MB	LP DDR3-1067	Intel HD Graphics	No	Audio support	Realtek® ALC5672 codec / stereo speakers, 0.5 watt x 2 / 3 digital microphones, combo audio/microphone jack
Memory	<i>Some:</i> 2GB / 1067MHz LPDDR3, mobile DDR / soldered to systemboard <i>Some:</i> 4GB / 1067MHz LPDDR3, mobile DDR / soldered to systemboard <i>All:</i> no sockets, dual-channel capable									Media capable	Audio formats: MP3, AAC, AAC+, eAAC+, WAV, PCM, WMA Video formats: MPEG-4, H.263, H.264, VC-1, WMV9, Xvid
Optical	None									WLAN ⁴	11a/b/g/n ²⁸ wireless, ThinkPad 11a/b/g/n, 2x2, WiFi + Bluetooth combo chip
Ultrabay	None									WWAN	<i>Optional:</i> Sierra Wireless EM7345, 4G LTE/HSPA/GSM/GPRS/EDGE, GPS
Storage	64GB or 128GB / eMMC (embedded Multi Media Card) flash memory on board									SIM card (<i>Micro</i>)	<i>Optional:</i> AT&T / Verizon / T-Mobile, contract required with service provider
Storage extension	One microSD Card slot, supports up to 64GB									GNSS	Global Navigation Satellite System
Graphics	Intel HD Graphics in processor, supports 1080p video out via micro-HDMI™ connector, HDCP-compliant									Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter
Display	10.1" (256.5mm) WUXGA (1920x1200) TFT color , anti-reflective display with Corning® Gorilla® Glass, LED backlight, 400 nits, 16:10 aspect ratio, 800:1 contrast ratio, IPS, WideView (170° viewing), MultiTouch screen supports ten-finger gesture									Ethernet	None
Tablet pen	ThinkPad 10 Digitizer Pen, supports hover, tip, and pressure modes / a button for selection / no batteries required (no Pen holder in Form Factor design)									NFC	<i>Optional:</i> Near Field Communication
Camera	<i>Front camera:</i> 2.0-megapixel, fixed focus <i>Rear camera:</i> 8.0-megapixel, auto focus, flash LED									Security	None
Video capture	1080p video capture									Security chip	<i>All:</i> Trusted Platform Module, TPM 2.0 FW (firmware) <i>Optional:</i> Trusted Platform Module, TCG 1.2-compliant
Control buttons	Windows button, Power button, volume control button, rotation lock switch, reset switch									vPro & iAMT	None
Keyboard	<i>Optional:</i> ThinkPad 10 Classic keyboard (Mechanical) or ThinkPad 10 Touch Case (Membrane)									Fingerprint reader	<i>Optional:</i> Fingerprint reader on the A Cover
Dimensions ³	10.09" x 6.96" x 0.35"; 256.5mm x 177.0mm x 8.95mm 10.09" x 6.96" x 0.67"; 256.5mm x 177.0mm x 16.95mm (with SCR)									Limited warranty ¹²	1-year - depot repair service/ service upgrades ²² available
Weight ²	<i>WiFi only:</i> from 1.32 lb (0.598kg); <i>WiFi + WWAN:</i> from 1.34 lb (0.610kg); <i>WiFi + WWAN + SCR:</i> from 1.46 lb (0.660kg)									Preload	<i>Some:</i> Windows 8.1 Pro 32-bit or Windows 8.1 Pro 64-bit <i>Some:</i> Windows 8.1 32-bit or Windows 8.1 64-bit <ul style="list-style-type: none"> • Lenovo Solution Center • Lenovo Support • Lenovo Companion • ThinkVantage System Update • Hightail Cloud Storage • PC Device Stage • AccuWeather • Amazon Kindle • Nitro Pro • Evernote • Rara • Norton Studio • Microsoft® Office preloaded; purchase a product key to activate • Norton™ Internet Security (30 days of virus definitions)
Case color	Graphite Black									Environment	None
Case material	Aluminum frame										
Battery - type	Lithium Polymer, 33Whr										
Battery - life ¹⁰	up to 26 days (standby); up to 110 hr (MP3 playback); up to 10 hr (local video playback)										
AC adapter	36-watt AC adapter (Unique New Connector)										
Platform	Intel Atom Z3795 SoC (System on Chip) platform										
Smart Card Read	<i>Optional:</i> Smart Card reader (SCR)										
Multicard Reader	None										
Ports	One USB 2.0, one Micro-HDMI, headphone/microphone combo jack, one Living Hinge Docking connector, one Keyboard connector, one Micro SIM slot										

See footnotes for more detailed information

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ThinkPad 10 20C1 (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Widescreen display	Graphics	Camera Front/Rear (MP)	Storage	Digitizer & Pen	Keyboard	M.2 Card WLAN	M.2 Card WWAN	SIM card	Finger print reader	NFC	Smart Card Reader	Battery	TPM	Top Color	Smart Cover	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20C10001US	Z3795	2GB	10.1" WUXGA	Intel HD	2.0/8.0	64G	Pen	None	11a/b/g/n	None	None	None	None	None	33Wh	TPM2.0	Black	None	Win8.1 32	1-Depot	No	05/14
20C1001DUS	Z3795	2GB	10.1" WUXGA	Intel HD	2.0/8.0	64G	Pen	None	11a/b/g/n	None	None	None	None	None	33Wh	TPM2.0	Black	None	Win8.1 Pro32	1-Depot	No	05/14
20C1002RUS	Z3795	4GB	10.1" WUXGA	Intel HD	2.0/8.0	128G	Pen	None	11a/b/g/n	None	None	None	None	None	33Wh	TPM2.0	Black	None	Win8.1 Pro64	1-Depot	No	05/14
20C1002SUS	Z3795	4GB	10.1" WUXGA	Intel HD	2.0/8.0	128G	Pen	None	11a/b/g/n	None	None	None	None	None	33Wh	TPM2.0	Black	None	Win8.1 64	1-Depot	No	06/14
20C1A00RUS	Z3795	4GB	10.1" WUXGA	Intel HD	2.0/8.0	128G	Pen	Classic	11a/b/g/n	None	None	None	None	None	33Wh	TPM2.0	Black	None	Win8.1 Pro64	1-Depot	No	07/14
20C1002TUS	Z3795	4GB	10.1" WUXGA	Intel HD	2.0/8.0	128G	Pen	None	11a/b/g/n	EM7345	None	Finger	NFC	None	33Wh	TPM2.0	Black	None	Win8.1 Pro64	1-Depot	No	08/14
20C1002UUS	Z3795	4GB	10.1" WUXGA	Intel HD	2.0/8.0	128G	Pen	Classic	11a/b/g/n	EM7345	None	Finger	NFC	None	33Wh	TPM2.0	Black	None	Win8.1 Pro64	1-Depot	No	08/14
20C1001AUS	Z3795	2GB	10.1" WUXGA	Intel HD	2.0/8.0	64G	Pen	Classic	11a/b/g/n	None	None	None	None	None	33Wh	TPM2.0	Black	None	Win8.1 Pro32	1-Depot	No	08/14
20C10032US	Z3795	2GB	10.1" WUXGA	Intel HD	2.0/8.0	64G	Pen	None	11a/b/g/n	EM7345	None	Finger	NFC	None	33Wh	TPM2.0	Black	None	Win8.1 Pro32	1-Depot	No	08/14

• For detailed platform specifications, please see [ThinkPad 10 Platform Specifications sheet](#)

Processor	Intel® Atom Processor Z3795 (4 cores, 2MB cache), Burst Frequency 2.4 GHz	Chipset	Intel Atom Z3795 SoC (System on Chip) platform
Memory	<i>Some:</i> 2GB / 1067MHz LPDDR3, mobile DDR / soldered to systemboard <i>Some:</i> 4GB / 1067MHz LPDDR3, mobile DDR / soldered to systemboard <i>All:</i> no sockets, dual-channel capable	Smart Card Read	<i>Optional:</i> Smart Card reader
Storage	64GB or 128GB / eMMC (embedded Multi Media Card) flash memory on board	Multicard Reader	None
Storage extension	One microSD Card slot, supports up to 64GB	Ports	One USB 2.0, one Micro-HDMI, headphone/microphone combo jack, one Living Hinge Docking connector, one Keyboard connector, one Micro SIM slot
Widescreen display	10.1" (256.5mm) WUXGA (1920x1200) TFT color , anti-reflective display with Corning® Gorilla® Glass, LED backlight, 400 nits, 16:10 aspect ratio, 800:1 contrast ratio, IPS, WideView (170° viewing), MultiTouch screen supports ten-finger gesture	Audio support	Realtek® ALC5672 codec / stereo speakers, 0.5 watt x 2 / 3 digital microphone, combo audio/microphone jack
Camera	<i>Front camera:</i> 2.0-megapixel, fixed focus <i>Rear camera:</i> 8.0-megapixel, auto focus, flash LED	WLAN ⁴	11a/b/g/n ²⁸ wireless, ThinkPad 11a/b/g/n, 2x2, WiFi + Bluetooth combo chip
Graphics	Intel HD Graphics in processor, supports 1080p video out via micro-HDMI™ connector, HDCP-compliant	WWAN	<i>Optional:</i> Sierra Wireless EM7345, 4G LTE/HSPA/GSM/GPRS/EDGE, GPS
Keyboard	<i>Optional:</i> ThinkPad 10 Classic keyboard or Touch Case	SIM card	<i>Optional:</i> AT&T / Verizon / T-Mobile, contract required with service provider
Dimensions ³	10.09" x 6.96" x 0.35"; 256.5mm x 177.0mm x 8.95mm 10.09" x 6.96" x 0.67"; 256.5mm x 177.0mm x 16.95mm (with SCR)	Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter
Weight ²	<i>WiFi only:</i> from 1.32 lb (0.598kg); <i>WiFi + WWAN:</i> from 1.34 lb (0.610kg); <i>WiFi + WWAN + SCR:</i> from 1.46 lb (0.660kg)	Ethernet	None
Case material	Aluminum frame,	NFC	<i>Optional:</i> Near Field Communication
Battery - type	Lithium Polymer, 33Whr	Security	None
Battery - life ¹⁰	up to 26 days (standby); up to 110 hr (MP3 playback); up to 10 hr (local video playback)	Security chip	<i>All:</i> Trusted Platform Module, TPM 2.0 FW (firmware) <i>Optional:</i> Trusted Platform Module, TCG 1.2-compliant
AC adapter	36-watt AC adapter	vPro & iAMT	None
		Fingerprint reader	<i>Optional:</i> Fingerprint reader on the A Cover
		Tablet pen	ThinkPad 10 Digitizer Pen
		Preload	<i>Win8 / 8.1 Pro:</i> Windows 8.1 Pro 32-bit or Windows 8.1 Pro 64-bit <i>Win8 / 8.1:</i> Windows 8.1 32-bit or Windows 8.1 64-bit
		Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available

See footnotes for more detailed information



Lenovo® ThinkPad Tablet 2



Lenovo ThinkPad Tablet 2



Lenovo ThinkPad Tablet 2 with
ThinkPad Tablet 2 Digitizer Pen
0A33899



Lenovo ThinkPad Tablet 2 with
ThinkPad Tablet 2 Dock
0B47109



Lenovo ThinkPad Tablet 2 with
ThinkPad In-Ear Headphones with microphone
57Y4488



Lenovo ThinkPad Tablet 2 with
ThinkPad Tablet 2 Dock
0B47109



Lenovo® ThinkPad Tablet 2 with
ThinkPad Tablet 2 Bluetooth Keyboard with Stand
0B47270



Lenovo ThinkPad Tablet 2 with
ThinkPad Tablet 2 Fitted Sleeve
0A33902



Lenovo ThinkPad Tablet 2 with
ThinkPad Tablet 2 VGA Adapter
0B47084



Lenovo ThinkPad Tablet 2 with
ThinkPad Tablet 2 Fitted Sleeve
0A33902



Lenovo ThinkPad Tablet 2 with
ThinkPad Tablet 2 Bluetooth Keyboard with Stand
0B47270



ThinkPad Tablet 2 Dock
0B47109

ThinkPad Tablet 2 (3679) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Widescreen display	Storage	Tablet Pen	Camera Front/Rear (MP)	Bluetooth Keyboard w/ Stand	WLAN 802.11	PCIe Mini Card WWAN	Carrier	NFC	Blue-tooth	Preload	Ann Date (mm/yy)
3679-23U	Atom Z2760	2GB	10.1" HD	64G	No	2.0/8.0	None	11a/b/g/n ²⁸	None	None	None	BT	Win8 32	10/12
3679-26U	Atom Z2760	2GB	10.1" HD	64G	Pen	2.0/8.0	None	11a/b/g/n	None	None	None	BT	Win8 32	10/12
3679-27U	Atom Z2760	2GB	10.1" HD	64G	Pen	2.0/8.0	None	11a/b/g/n	None	None	None	BT	Win8 Pro32	10/12
3679-28U	Atom Z2760	2GB	10.1" HD	64G	No	2.0/8.0	None	11a/b/g/n	None	None	None	BT	Win8 Pro32	10/12
3679-4JU	Atom Z2760	2GB	10.1" HD	64G	No	2.0/8.0	None	11a/b/g/n	Gobi 4000	AT&T	None	BT	Win8 Pro32	12/12
3679-22U	Atom Z2760	2GB	10.1" HD	32G	No	2.0/8.0	None	11a/b/g/n	None	None	None	BT	Win8 32	01/13
3679-5HU	Atom Z2760	2GB	10.1" HD	64G	Pen	2.0/8.0	None	11a/b/g/n	Gobi 4000	AT&T	NFC	BT	Win8 Pro32	03/13

• **Small and medium business (SMB) model(s), part of the US TopSeller™ Program**

Positioning	Touchscreen tablet for on-the-go business										Preloaded operating system²⁰			
Processor	Intel® Atom™ Processor Z2760 (2 cores, 1.80GHz, 1MB cache), LPDDR2 memory controller (800MHz), HT technology										- Some: Windows® 8 32-bit - Some: Windows 8 Pro 32-bit			
Memory	2GB / 800MHz LPDDR2, mobile DDR / soldered to systemboard, no sockets										Preloaded applications¹⁴ (only some listed)			
Storage	32GB or 64GB / eMMC (embedded Multi Media Card) flash memory on board										<ul style="list-style-type: none"> • Lenovo® Settings • Lenovo Support • Lenovo Companion • Lenovo QuickSnap • AT&T® All Access • Lenovo Cloud Storage by SugarSync • Password Manager • Norton™ Internet Security 2012 (30 days of virus definitions) • ThinkVantage System Update • AccuWeather • Evernote® • Nitro PDF • Skype™ • Amazon Kindle 			
Storage extension	One microSD Card slot, supports up to 32GB													
Graphics	PowerVR™ SGX545 graphics in Intel Atom SoC, supports 1080p video out via mini-HDMI™ connector, HDCP-compliant													
Display	10.1" (256.5mm) HD (1366x768) TFT color, anti-reflective display with infinity AGC Dragontrail™ Glass, LED backlight, 400 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, WideView (170° viewing), MultiTouch screen supports five-finger gesture													
Tablet pen	Some: ThinkPad Tablet 2 Digitizer Pen (0A33899), supports hover, tip, and pressure modes / a button for selection / no batteries required *The models without Tablet Pen can not support pen input function via optional ThinkPad Tablet 2 Digitizer Pen (0A33899)													
Camera	Front camera: 2.0-megapixel, fixed focus Rear camera: 8.0-megapixel, auto focus, flash LED													
Video capture	720p video capture													
Audio support	Realtek® ALC5642 codec / stereo speakers, 0.5 watt x 2 / dual array digital microphone, combo audio/microphone jack													
Media capable	Audio formats: MP3, AAC, AAC+, eAAC+, WAV, PCM, WMA Video formats: MPEG-4, H.263, H.264, VC-1, WMV9, Xvid													
Control buttons	Windows button, Power button, volume control button, rotation lock switch, reset switch													
Bluetooth	Some: ThinkPad Tablet 2 Bluetooth Keyboard with Stand (0B47270), 6-row, TrackPoint® pointing device w/ three mouse buttons, landscape stand included, connects system via bluetooth, sealed battery with 30-day battery life, chargeable via micro-USB (one USB to micro-USB cable included)													
Keyboard with Stand														
Light sensor	Ambient Light Sensor, Capella CM3218													
G-sensor/ eCompass	3D accelerometer and 3D magnetometer module, STMicroelectronics LSM303DLHC													
Gyroscope	3-axis gyroscope, STMicroelectronics L3G4200D													
Platform	Intel Atom Z2760 SoC (System on Chip) platform													
Ports	One USB 2.0, one micro-USB 2.0 (only for power supply / charging), one mini-HDMI, headphone/microphone combo jack, one ThinkPad Tablet 2 Dock connector													
WLAN ⁴	11a/b/g/n ²⁸ wireless, ThinkPad 11a/b/g/n, 1x1, WiFi + Bluetooth combo chip													
WWAN	Some: Wireless WAN, Qualcomm® Gobi™ 4000 chipset, LTE (4G), WCDMA/HSPA/HSPA+													
Carrier	Some: AT&T® LTE (4G), contract required with service provider													
GNSS	Global Navigation Satellite System													
Bluetooth™	Bluetooth 4.0 wireless, integrated in WiFi + Bluetooth combo chip													
NFC	Some: Near Field Communication, easy for two devices to communicate with each other													
Dimensions ³	10.34" x 6.48" x 0.39"; 262.6mm x 164.6mm x 9.8mm													
Weight ²	WiFi only: from 1.26 lb (0.57kg); WiFi + Digitizer Pen: from 1.30 lb (0.59kg); WiFi + Digitizer Pen + WWAN: from 1.35 lb (0.61kg)													
Case color	Black													
Case material	Magnesium frame, PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) cover													
Battery - type	Lithium Polymer, 30Whr													
Battery - life ¹⁰	up to 25 days (standby); up to 150 hr (MP3 playback); up to 10 hr (web browsing with flash); up to 10 hr (local video playback)													
Limited Warranty ¹²	1-year - depot repair service / service upgrades ²² available													

See footnotes for more detailed information
US model(s) announced October 23 or December 18, 2012, or January 15 or March 5, 2013

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ThinkPad Tablet 2 (3679) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Widescreen display	Storage	Tablet Pen	Camera Front/Rear (MP)	Bluetooth Keyboard w/ Stand	WLAN 802.11	PCIe Mini Card WWAN	Carrier	NFC	Blue-tooth	Preload	Ann Date (mm/yy)
3679-5YU	Atom Z2760	2GB	10.1" HD	64G	No	2.0/8.0	None	11a/b/g/n ²⁸	None	None	None	BT	Win8 32	04/13
3679-5XU	Atom Z2760	2GB	10.1" HD	64G	Pen	2.0/8.0	None	11a/b/g/n	Gobi 4000	AT&T	NFC	BT	Win8 32	04/13
3679-5VU	Atom Z2760	2GB	10.1" HD	64G	No	2.0/8.0	None	11a/b/g/n	Gobi 4000	AT&T	NFC	BT	Win8 32	04/13
3679-5QU	Atom Z2760	2GB	10.1" HD	64G	No	2.0/8.0	None	11a/b/g/n	None	None	NFC	BT	Win8 32	04/13
3679-5PU	Atom Z2760	2GB	10.1" HD	64G	Pen	2.0/8.0	None	11a/b/g/n	None	None	NFC	BT	Win8 32	04/13
3679-5MU	Atom Z2760	2GB	10.1" HD	64G	Pen	2.0/8.0	None	11a/b/g/n	None	None	None	BT	Win8 32	04/13

• **Small and medium business (SMB) model(s), part of the US TopSeller™ Program**

Positioning	<i>Touchscreen tablet for on-the-go business</i>										Preloaded operating system²⁰ - Windows® 8 32-bit			
Processor	Intel® Atom™ Processor Z2760 (2 cores, 1.80GHz, 1MB cache), LPDDR2 memory controller (800MHz), HT technology										Preloaded applications¹⁴ (only some listed)			
Memory	2GB / 800MHz LPDDR2, mobile DDR / soldered to systemboard, no sockets										<ul style="list-style-type: none"> • Microsoft Office Home and Student (included in Windows 8) • Lenovo® Settings • Lenovo Support • Lenovo Companion • Lenovo QuickSnap • AT&T® All Access • Lenovo Cloud Storage by SugarSync • Password Manager • Norton™ Internet Security 2012 (30 days of virus definitions) • ThinkVantage System Update • AccuWeather • Evernote® • Nitro PDF • Skype™ • Amazon Kindle 			
Storage	32GB or 64GB / eMMC (embedded Multi Media Card) flash memory on board													
Storage extension	One microSD Card slot, supports up to 32GB													
Graphics	PowerVR™ SGX545 graphics in Intel Atom SoC, supports 1080p video out via mini-HDMI™ connector, HDCP-compliant													
Display	10.1" (256.5mm) HD (1366x768) TFT color, anti-reflective display with infinity AGC Dragontrail™ Glass, LED backlight, 400 nits, 16:9 aspect ratio, 500:1 contrast ratio, IPS, WideView (170° viewing), MultiTouch screen supports five-finger gesture													
Tablet pen	<i>Some: ThinkPad Tablet 2 Digitizer Pen (0A33899), supports hover, tip, and pressure modes / a button for selection / no batteries required</i> <i>*The models without Tablet Pen can not support pen input function via optional ThinkPad Tablet 2 Digitizer Pen (0A33899)</i>													
Camera	<i>Front camera: 2.0-megapixel, fixed focus</i> <i>Rear camera: 8.0-megapixel, auto focus, flash LED</i>													
Video capture	720p video capture													
Audio support	Realtek® ALC5642 codec / stereo speakers, 0.5 watt x 2 / dual array digital microphone, combo audio/microphone jack													
Media capable	Audio formats: MP3, AAC, AAC+, eAAC+, WAV, PCM, WMA Video formats: MPEG-4, H.263, H.264, VC-1, WMV9, Xvid													
Control buttons	Windows button, Power button, volume control button, rotation lock switch, reset switch													
Bluetooth	<i>Some: ThinkPad Tablet 2 Bluetooth Keyboard with Stand (0B47270),</i>													
Keyboard with Stand	6-row, TrackPoint® pointing device w/ three mouse buttons, landscape stand included, connects system via bluetooth, sealed battery with 30-day battery life, chargeable via micro-USB (one USB to micro-USB cable included)													
Light sensor	Ambient Light Sensor, Capella CM3218													
G-sensor/ eCompass	3D accelerometer and 3D magnetometer module, STMicroelectronics LSM303DLHC													
Gyroscope	3-axis gyroscope, STMicroelectronics L3G4200D													
Platform	Intel Atom Z2760 SoC (System on Chip) platform													
Ports	One USB 2.0, one micro-USB 2.0 (only for power supply / charging), one mini-HDMI, headphone/microphone combo jack, one ThinkPad Tablet 2 Dock connector													
WLAN ⁴	11a/b/g/n ²⁸ wireless, ThinkPad 11a/b/g/n, 1x1, WiFi + Bluetooth combo chip													
WWAN	<i>Some: Wireless WAN, Qualcomm® Gobi™ 4000 chipset, LTE (4G), WCDMA/HSPA/HSPA+</i>													
Carrier	<i>Some: AT&T® LTE (4G), contract required with service provider</i>													
GNSS	Global Navigation Satellite System													
Bluetooth™	Bluetooth 4.0 wireless, integrated in WiFi + Bluetooth combo chip													
NFC	<i>Some: Near Field Communication, easy for two devices to communicate with each other</i>													
Dimensions ³	10.34" x 6.48" x 0.39"; 262.6mm x 164.6mm x 9.8mm										10-watt AC adapter (via micro-USB) GREENGUARD® certified RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²			
Weight ²	<i>WiFi only:</i> from 1.26 lb (0.57kg); <i>WiFi + Digitizer Pen:</i> from 1.30 lb (0.59kg); <i>WiFi + Digitizer Pen + WWAN:</i> from 1.35 lb (0.61kg)													
Case color	Black													
Case material	Magnesium frame, PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) cover													
Battery - type	Lithium Polymer, 30Whr										For compatible accessories, please go to O-Tablet-2 sheet; For Lenovo service ²² upgrade options, please go to S-Tablet sheet			
Battery - life ¹⁰	up to 25 days (standby); up to 150 hr (MP3 playback); up to 10 hr (web browsing with flash); up to 10 hr (local video playback)													
Limited Warranty ¹² 1-year - depot repair service / service upgrades ²² available														

See footnotes for more detailed information
US model(s) announced April 30, 2013

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(CLT1-3) June 2013

ThinkPad Tablet Expansion

ThinkPad Tablet 2 Dock 0B47109 *ann 10/23/12*

Keyboard

ThinkPad Tablet 2 Bluetooth Keyboard with Stand 0B47270 *ann 10/23/12*

Multimedia

ThinkPad In-Ear Headphones with microphone 57Y4488 *ann 01/07/10*

Tablet

ThinkPad Tablet 2 Digitizer Pen 0A33899 *ann 10/23/12*

⁷³ The ThinkPad Tablet 2 models without Tablet Pen can not support pen input function via *ThinkPad Tablet 2 Digitizer Pen (0A33899)*

Security

3M ThinkPad Tablet 2 Privacy Filter (landscape) 0C33167 *ann 10/23/12*

3M ThinkPad Tablet 2 Privacy Filter (portrait) 0C33168 *ann 10/23/12*

3M ThinkPad Tablet 2 Privacy Filter (4-way) 0C33170 *ann 10/23/12*

3M ThinkPad Tablet 2 Anti-glare Matte Removable Film 0C33169 *ann 10/23/12*

Power Adapters

ThinkPad Tablet 2 AC Charger 0B47010 *ann 10/23/12*

ThinkPad Tablet DC Charger 0A36247 *ann 08/16/11*

ThinkPad 65W AC Adapter⁶⁶ 40Y7696 *ann 01/05/06*

⁶⁶ Attachment via the *ThinkPad Tablet 2 Dock 0B47109*

More info at www.lenovo.com/support/poweradapters

Carrying Cases

ThinkPad Tablet 2 Fitted Sleeve⁷¹ 0A33902 *ann 10/23/12*

⁷¹ *ThinkPad Tablet 2 Fitted Sleeve* perfectly fits the *ThinkPad Tablet 2* and *ThinkPad Tablet 2 Bluetooth Keyboard with Stand 0B47270*

ThinkPad 11W Sling Case 57Y4287 *ann 08/16/11*

ThinkPad Tablet 2 Slim Case - Black 0A33907 *ann 10/23/12*

ThinkPad Tablet 2 Slim Case - Red 0A33905 *ann 10/23/12*

More information at www.lenovo.com/support/cases

Lenovo luxury cases at www.lenovoluxurycases.com

Monitor Accessories⁴⁶

ThinkPad Tablet 2 VGA Adapter 0B47084 *ann 10/23/12*

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



Lenovo® ThinkPad Helix



Lenovo ThinkPad Helix



Lenovo ThinkPad Helix



Lenovo ThinkPad Helix



Lenovo ThinkPad Helix

ThinkPad Helix Platform Specifications

Product Specifications Reference (PSREF)

Positioning	Convertible with many modes - Tent, Notebook, Stand, Desktop, and Tablet								Case color	Graphite black								
Processor	5th Generation Intel® Core™ M or Core M vPro™ Processor								Case material	PC/ABS (Acrylonitrile-Butadiene-Styrene), and Aluminum								
	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Processor Graphics	Intel vPro Technology	Multicard reader	Support micro SD (2G max), micro SDHC (32G max), micro SDXC (64G max)							
	5Y10	2	4	0.8 GHz	2.0 GHz	4MB	LPDDR3-1600	Intel HD graphics 5300	No	Tablet ports	One USB 3.0 (one Always On), micro HDMI, micro SD, Micro SIM, Dock connector							
	5Y70			1.1 GHz	2.6 GHz				Yes									
	5Y10C			0.8 GHz	2.0 GHz				No									
5Y71	1.2 GHz			2.9 GHz	Yes													
Graphics	Intel HD Graphics 5300 in processor, external digital monitor support via micro HDMI, dual independent display; Max external resolution: 1920x1080 (micro HDMI)@60Hz								Camera	<i>Front camera:</i> 2.0-megapixel, 1080p resolution, fixed focus <i>Rear camera:</i> 5.0-megapixel, 1080p resolution, auto focus								
Chipset	Intel Core M & Intel Core M vPro								Audio support	HD Audio, Realtek® ALC286-VC codec, stereo speakers, 0.7W x 2 / three microphones, combo audio/mic jack								
Memory	8GB max / PC3-12800 1600MHz LPDDR3, soldered to systemboard, no sockets								Control buttons	Windows button, Power button, volume button, rotation lock switch, reset switch								
Display	11.6" (295mm) FHD (1920x1080) TFT color, VibrantView (glossy) display with infinity Corning® Gorilla® Glass, LED backlight, 370 nits, 16:9 aspect ratio, 800:1 contrast ratio, IPS, WideView (170° viewing), MultiTouch screen supports ten-finger gesture, One Glass Solution								Keyboard (optional)	<i>Pro:</i> Ultrabook Pro Keyboard, (Battery keyboard)6-row, TrackPoint® pointing device, MultiTouch with 3+2 buttons click pad, security keyhole, one USB 3.0, one Mini DisplayPort, integrated 4-cell battery (Li-Polymer, 26Wh), 36-watt AC adapter can charge both the Tablet battery and Keyboard battery, pen holder, backlight <i>Non-pro:</i> Ultrabook Keyboard, (Mechanical keyboard) 6-row, touchpad w/ 2 integrated buttons, one USB 2.0, pen holder								
Digitizer Pen	Wacom® digitizer pen, supports hover, tip, and pressure modes / a button for selection / no batteries required								Security	Power-on password, hard disk password, supervisor password, security keyhole								
Storage	M.2 2280 SSD, 128GB or 256GB, 256GB SSD supports OPAL								Security chip vPro	<i>Optional:</i> Trusted Platform Module, TCG 1.2-compliant <i>Optional:</i> Intel vPro Technology								
Optical	None								Fingerprint reader	Fingerprint reader								
Ethernet WLAN	None								NFC	<i>Optional:</i> Near Field Communication								
Bluetooth™	Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card								Smart Cover	<i>Optional:</i> Quickshot cover								
WWAN	<i>Optional:</i> Sierra Wireless EM7345, 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 Card								Tablet battery	Integrated Li-Polymer 2-cell (35Wh)								
Micro SIM card (optional)	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> • AT&T® or Verizon® LTE (4G), contract required with service provider • User selectable, contract required with service provider 								Keyboard battery	Li-Polymer 4-cell (26Wh)								
Smart Card Read	<i>Optional:</i> Smart Card reader								Battery - life	<table border="1"> <thead> <tr> <th>Battery configuration</th> <th>2-cell</th> <th>2-cell + 4-cell</th> </tr> </thead> <tbody> <tr> <td>Battery life</td> <td>8 hr</td> <td>12 hr</td> </tr> </tbody> </table>			Battery configuration	2-cell	2-cell + 4-cell	Battery life	8 hr	12 hr
Battery configuration	2-cell	2-cell + 4-cell																
Battery life	8 hr	12 hr																
Monitor Cable	<i>Optional:</i> Micro-HDMI to VGA monitor cable								AC adapter	36-watt AC adapter								
Light sensor	Ambient Light Sensor								Preload	<i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit								
G-sensor/eCompass	3D accelerometer and 3D magnetometer									<ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • ThinkVantage System Update • Lenovo Reach • Hightail - Metro • Amazon Kindle • Nitro Pro • Evernote • Skype • Rara Streaming • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions) 								
Gyroscope	3D inclinometer																	
Dimensions	11.6W" WLAN/WWAN: 11.9" x 7.58" x 0.38" (301.1mm x 192.5mm x 9.6mm) 11.6W" SmartCard reader: 11.9" x 7.58" x 0.76" (301.1mm x 192.5mm x 19.4mm)								Limited warranty	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> • 1-year - depot repair service / service upgrades available • 3-year - depot repair service / service upgrades available 								
Tablet Weight	WiFi/Touch	WiFi/Digitizer	WWAN/Touch	WWAN/Digitizer	SmartCard				Environment	EPEAT™ Gold; ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant								
	795g	822g	795g	822g	855g													
	1.75 lb	1.81 lb	1.75 lb	1.81 lb	1.88 lb													
Keyboard weight	<i>Ultrabook Pro Keyboard:</i> 900g/1.98 lb <i>Ultrabook Keyboard:</i> 560g/1.23 lb																	

See footnotes for more detailed information

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(DK1-Spec) January 2015

ThinkPad Helix 20CG (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	vPro	Memory	Display	Digi- tizer Pen	Graphics	Storage	WLAN & Bluetooth	WWAN	SIM card	Smart card reader	Top Color	Camera Front/ Rear (MP)	Keyboard	Finger print reader	battery cells NFC (int+ext)	Preload	Base Warranty (year)	Global	Ann Date (m/y)	
20CG000QUS	5Y70	vPro	8GB	11.6" FHD	Pen	HD 5300	256G OPAL	7265 ac+BT	None	None	None	Black	2.0/5.0	Non-pro	Finger	None	2+0	Win8.1 P64	3-Depot	No	11/14
20CG000LUS	5Y10	None	4GB	11.6" FHD	Pen	HD 5300	128G SSD	7265 ac+BT	None	None	None	Black	2.0/5.0	Non-pro	Finger	None	2+0	Win8.1 P64	3-Depot	No	11/14
20CG000NUS	5Y70	vPro	4GB	11.6" FHD	Pen	HD 5300	128G SSD	7265 ac+BT	None	None	None	Black	2.0/5.0	Non-pro	Finger	None	2+0	Win8.1 P64	3-Depot	No	11/14
20CG000MUS	5Y10	None	4GB	11.6" FHD	Pen	HD 5300	256G OPAL	7265 ac+BT	None	None	None	Black	2.0/5.0	Non-pro	Finger	None	2+0	Win8.1 P64	3-Depot	No	11/14
20CG000PUS	5Y70	vPro	4GB	11.6" FHD	Pen	HD 5300	256G OPAL	7265 ac+BT	None	None	None	Black	2.0/5.0	Non-pro	Finger	None	2+0	Win8.1 P64	3-Depot	No	11/14
20CG000KUS	5Y10	None	4GB	11.6" FHD	Pen	HD 5300	128G SSD	7265 ac+BT	None	None	None	Black	2.0/5.0	Non-pro	Finger	None	2+0	Win8.1 64	1-Depot	No	11/14
20CG000SUS	5Y10	None	4GB	11.6" FHD	Pen	HD 5300	128G SSD	7265 ac+BT	None	None	None	Black	2.0/5.0	Non-pro	Finger	None	2+0	Win8.1 P64	1-Depot	No	11/14
20CG000RUS	5Y70	vPro	4GB	11.6" FHD	Pen	HD 5300	256G OPAL	7265 ac+BT	None	None	None	Black	2.0/5.0	Non-pro	Finger	None	2+0	Win8.1 P64	1-Depot	No	11/14
20CG0036US	5Y71	vPro	8GB	11.6" FHD	Pen	HD 5300	256G OPAL	7265 ac+BT	EM7345	None	None	Black	2.0/5.0	Pro	Finger	NFC	2+0	Win8.1 P64	3-Depot	No	01/15
20CG0031US	5Y71	vPro	4GB	11.6" FHD	Pen	HD 5300	256G OPAL	7265 ac+BT	None	None	None	Black	2.0/5.0	Pro	Finger	None	2+0	Win8.1 P64	3-Depot	No	01/15
20CG0030US	5Y71	vPro	4GB	11.6" FHD	Pen	HD 5300	128G SSD	7265 ac+BT	None	None	None	Black	2.0/5.0	Pro	Finger	None	2+0	Win8.1 P64	3-Depot	No	01/15
20CG0037US	5Y71	vPro	8GB	11.6" FHD	Pen	HD 5300	180G OPAL	7265 ac+BT	EM7345	None	None	Black	2.0/5.0	Pro	Finger	NFC	2+0	Win8.1 P64	3-Depot	No	01/15
20CG0033US	5Y71	vPro	8GB	11.6" FHD	Pen	HD 5300	180G OPAL	7265 ac+BT	None	None	None	Black	2.0/5.0	Pro	Finger	None	2+0	Win8.1 P64	3-Depot	No	01/15
20CG0034US	5Y71	vPro	4GB	11.6" FHD	Pen	HD 5300	180G OPAL	7265 ac+BT	None	None	None	Black	2.0/5.0	Pro	Finger	None	2+0	Win8.1 P64	3-Depot	No	01/15
20CG0035US	5Y71	vPro	4GB	11.6" FHD	Pen	HD 5300	256G OPAL	7265 ac+BT	EM7345	None	None	Black	2.0/5.0	Pro	Finger	NFC	2+0	Win8.1 P64	3-Depot	No	01/15
20CG002YUS	5Y10C	None	4GB	11.6" FHD	Pen	HD 5300	128G SSD	7265 ac+BT	None	None	None	Black	2.0/5.0	Pro	Finger	None	2+0	Win8.1 P64	3-Depot	No	01/15
20CG0032US	5Y71	vPro	8GB	11.6" FHD	Pen	HD 5300	256G OPAL	7265 ac+BT	None	None	None	Black	2.0/5.0	Pro	Finger	None	2+0	Win8.1 P64	3-Depot	No	01/15

• For detailed platform specifications, please see [ThinkPad Helix Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ M or Core m vPro™ Processor	Dimensions	11.6W" WLAN/WWAN: 11.9" x 7.58" x 0.38" (301.1mm x 192.5mm x 9.6mm) 11.6W" SmartCard reader: 11.9" x 7.58" x 0.76" (301.1mm x 192.5mm x 19.4mm)																																													
	<table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Clock Speed</th> <th>Max Turbo Frequency</th> <th>Cache</th> <th>Memory speed</th> <th>Processor Graphics</th> <th>Intel vPro Technology</th> </tr> </thead> <tbody> <tr> <td>5Y10</td> <td rowspan="5">2</td> <td rowspan="5">4</td> <td>0.8 GHz</td> <td>2.0 GHz</td> <td rowspan="5">4MB</td> <td rowspan="5">LPDDR3-1600</td> <td rowspan="5">Intel HD graphics 5300</td> <td>No</td> </tr> <tr><td>5Y70</td><td>1.1 GHz</td><td>2.6 GHz</td><td>Yes</td></tr> <tr><td>5Y10C</td><td>0.8 GHz</td><td>2.0 GHz</td><td>No</td></tr> <tr><td>5Y71</td><td>1.2 GHz</td><td>2.9 GHz</td><td>Yes</td></tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Processor Graphics	Intel vPro Technology	5Y10	2	4	0.8 GHz	2.0 GHz	4MB	LPDDR3-1600	Intel HD graphics 5300	No	5Y70	1.1 GHz	2.6 GHz	Yes	5Y10C	0.8 GHz	2.0 GHz	No	5Y71	1.2 GHz	2.9 GHz	Yes	Tablet Weight	<table border="1"> <thead> <tr> <th>WiFi/Touch</th> <th>WiFi/Digitizer</th> <th>WWAN/Touch</th> <th>WWAN/Digitizer</th> <th>SmartCard</th> </tr> </thead> <tbody> <tr> <td>795g</td> <td>822g</td> <td>795g</td> <td>822g</td> <td>855g</td> </tr> <tr> <td>1.75 lb</td> <td>1.81 lb</td> <td>1.75 lb</td> <td>1.81 lb</td> <td>1.88 lb</td> </tr> </tbody> </table>	WiFi/Touch	WiFi/Digitizer	WWAN/Touch	WWAN/Digitizer	SmartCard	795g	822g	795g	822g	855g	1.75 lb	1.81 lb	1.75 lb	1.81 lb	1.88 lb
Processor Number	# of Cores	# of Threads	Clock Speed	Max Turbo Frequency	Cache	Memory speed	Processor Graphics	Intel vPro Technology																																								
5Y10	2	4	0.8 GHz	2.0 GHz	4MB	LPDDR3-1600	Intel HD graphics 5300	No																																								
5Y70			1.1 GHz	2.6 GHz				Yes																																								
5Y10C			0.8 GHz	2.0 GHz				No																																								
5Y71			1.2 GHz	2.9 GHz				Yes																																								
WiFi/Touch			WiFi/Digitizer	WWAN/Touch				WWAN/Digitizer	SmartCard																																							
795g	822g	795g	822g	855g																																												
1.75 lb	1.81 lb	1.75 lb	1.81 lb	1.88 lb																																												
		Case color	Graphite black																																													
		Case material	PC/ABS (Acrylonitrile-Butadiene-Styrene), and Aluminum																																													
Graphics	Intel HD Graphics 5300 in processor	Multicard reader	Support micro SD (2G max), micro SDHC (32G max), micro SDXC (64G max)																																													
Chipset	Intel Core M & Intel Core m vPro	Tablet ports	One USB 3.0 (one Always On), micro HDMI, micro SD, Micro SIM, Dock connector																																													
Memory	8GB max / PC3-12800 1600MHz LPDDR3, soldered to system board, no sockets	Camera	<i>Front camera:</i> 2.0-megapixel, 1080p resolution, fixed focus <i>Rear camera:</i> 5.0-megapixel, 1080p resolution, auto focus HD Audio, Realtek® ALC286-VC codec, stereo speakers, 0.7W x 2 / three microphones, combo audio/mic jack																																													
Display	11.6" (295mm) FHD (1920x1080) TFT color, VibrantView (glossy) display with infinity Corning® Gorilla® Glass, LED backlight, 370 nits, 16:9 aspect ratio, 800:1 contrast ratio, IPS, WideView (170° viewing), MultiTouch screen supports ten-finger gesture, One Glass Solution	Audio support	Windows button, Power button, volume button, rotation lock switch, reset switch																																													
Digitizer Pen	Wacom® digitizer pen, supports hover, tip, and pressure modes / a button for selection / no batteries required	Keyboard	<i>Pro:</i> Ultrabook Pro Keyboard, Battery keyboard, pen holder, backlight <i>Non-pro:</i> Ultrabook Keyboard, Mechanical keyboard, pen holder																																													
Storage	M.2 2280 SSD, 128GB or 256GB, 256GB SSD supports OPAL	Control buttons	Security Security chip vPro vPro Fingerprint reader NFC Smart Cover																																													
Optical	None	Keyboard	Power-on password, hard disk password, supervisor password, security keyhole None Optional: Intel vPro Technology Fingerprint reader Optional: Near Field Communication None																																													
Ethernet	None	Tablet battery	Integrated Li-Polymer 2-cell (35Wh)																																													
WLAN ⁴	Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card	Battery - life	Up to 8 hrs																																													
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	AC adapter	36-watt AC adapter																																													
WWAN	Optional: Sierra Wireless EM7345, 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 Card	Preload	Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit																																													
Micro SIM card	None	Limited warranty	One of the following, configurable by model: • 1-year - depot repair service / service upgrades available • 3-year - depot repair service / service upgrades available																																													
Smart Card Read	Optional: Smart Card reader	Environment	EPEAT™ Gold; ENERGY STAR® 6.1; GREENGUARD®; RoHS-compliant																																													
Monitor Cable	None																																															
Light sensor	Ambient Light Sensor																																															
G-sensor/	3D accelerometer and 3D magnetometer																																															
eCompass	3D compass, 3D inclinometer																																															
Gyroscope	3D gyrometer																																															

See footnotes for more detailed information



Lenovo® ThinkPad Helix (Stand mode)



Lenovo ThinkPad Helix (Tablet mode) with ThinkPad Helix Digitizer Pen 0A33910



Lenovo ThinkPad Helix (Notebook mode)



Lenovo ThinkPad Helix



Lenovo ThinkPad Helix (Notebook mode)



Lenovo ThinkPad Helix



Lenovo® ThinkPad Helix
(Tablet mode)



Lenovo ThinkPad Helix
(Tablet only)



Lenovo ThinkPad Helix (Notebook mode)



Lenovo ThinkPad Helix (Tablet+ mode)



Lenovo ThinkPad Helix



Lenovo ThinkPad Helix (Notebook mode)

ThinkPad Helix (3698) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Widescreen display	Storage	Digitizer Pen	Front/ Rear (MP)	Keyboard Dock	Camera Enhanced	WLAN 802.11	PCIe Mini Card WWAN	Carrier	NFC	Blue-tooth	Intel AMT	Intel vPro	Preload	Ann Date (mm/yy)
3698-4UU	i7-3667U	8GB	11.6" FHD	256G	Pen	2.0/5.0	Dock	Intel 6205S ²⁸	Gobi 4000	AT&T	NFC	BT	iAMT	vPro	Win8 Pro64	03/13	
3698-4TU	i7-3667U	8GB	11.6" FHD	180G	Pen	2.0/5.0	Dock	Intel 6205S	Gobi 4000	AT&T	None	BT	iAMT	vPro	Win8 Pro64	03/13	
3698-4PU	i5-3427U	4GB	11.6" FHD	256G	Pen	2.0/5.0	Dock	Intel 6205S	Gobi 4000	AT&T	NFC	BT	iAMT	vPro	Win8 Pro64	03/13	
3698-4NU	i5-3427U	4GB	11.6" FHD	180G	Pen	2.0/5.0	Dock	Intel 6205S	Gobi 4000	AT&T	NFC	BT	iAMT	vPro	Win8 Pro64	03/13	
3698-4SU	i7-3667U	8GB	11.6" FHD	256G	Pen	2.0/5.0	Dock	Intel 6205S	None	None	NFC	BT	iAMT	vPro	Win8 Pro64	03/13	
3698-4RU	i7-3667U	8GB	11.6" FHD	180G	Pen	2.0/5.0	Dock	Intel 6205S	None	None	NFC	BT	iAMT	vPro	Win8 Pro64	03/13	
3698-4MU	i5-3427U	4GB	11.6" FHD	180G	Pen	2.0/5.0	Dock	Intel 6205S	None	None	NFC	BT	iAMT	vPro	Win8 Pro64	03/13	
3698-4LU	i5-3337U	4GB	11.6" FHD	180G	Pen	2.0/5.0	Dock	Intel 6205S	None	None	NFC	BT	None	No	Win8 Pro64	03/13	
3698-4KU	i5-3337U	4GB	11.6" FHD	256G	No	2.0/5.0	Dock	Intel 6205S	None	None	NFC	BT	None	No	Win8 Pro64	03/13	
3698-4JU	i5-3337U	4GB	11.6" FHD	180G	No	2.0/5.0	Dock	Intel 6205S	None	None	NFC	BT	None	No	Win8 Pro64	03/13	
3698-6EU	i5-3337U	4GB	11.6" FHD	128G	Pen	2.0/5.0	Dock	Intel 6205S	None	None	NFC	BT	None	No	Win8 Pro64	04/13	

- **Small and medium business (SMB) model(s), part of the US TopSeller™ Program**
- **A depot repair service 3-year limited warranty**

Positioning	Convertible design for four modes - Notebook, Stand, Tablet, and Tablet +											Preloaded operating system²⁰ - Windows® 8 Pro 64-bit				
Processor	Intel® Core™ i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology Intel Core i7-3667U processor (2 cores, 2.0GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology											Preloaded applications¹⁴ (only some listed) - Traditional Desktop apps • Lenovo® Solution Center • ThinkVantage System Update • Password Manager • Lenovo Cloud Storage by SugarSync • PC Device Stage • Nitro PDF Reader • Microsoft® Office preloaded; purchase a product key to activate • Intel Small Business Advantage				
Memory	8GB max / PC3-10600 1333MHz DDR3L / soldered to systemboard, no sockets											- Windows Store apps • Lenovo Settings • Lenovo Experience • Lenovo Support • Lenovo Companion • AT&T® All Access • Norton™ Internet Security 2013 (30 days of virus definitions) • AccuWeather • Evernote® Skitch (MultiTouch models) • Skype™ • Amazon Kindle				
Storage	mSATA Solid State Drive (SSD), via PCIe Mini Card slot															
Graphics	Intel HD Graphics 4000 in processor, external digital monitor support via Mini DisplayPort (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable 0A36536); supports dual independent display; Max external resolution: 2560x1600 (Mini-DisplayPort)@60Hz															
Display	11.6" (295mm) FHD (1920x1080) TFT color, VibrantView (glossy) display with infinity Corning® Gorilla® Glass, LED backlight, 350 nits, 16:9 aspect ratio, 800:1 contrast ratio, IPS, WideView (170° viewing), MultiTouch screen supports ten-finger gesture, One Glass Solution															
Digitizer Pen	Some: Wacom® digitizer pen, supports hover, tip, and pressure modes / a button for selection / no batteries required, pen holder on Tablet * The models without Digitizer Pen can not support pen input function via optional ThinkPad Helix Digitizer Pen (0A33910)															
Camera	Front camera: 2.0-megapixel, 1080p resolution, fixed focus Rear camera: 5.0-megapixel, 1080p resolution, auto focus															
Video capture	1080p video capture															
Audio support	HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array digital microphone, combo audio/microphone jack															
Media capable	Audio formats: MP3, AAC, AAC+, eAAC+, WAV, WMA Video formats: MPEG-4, H.263, H.264, VC-1, WMV9, Xvid															
Control buttons Keyboard Dock	Windows button, Power button, volume control button, rotation lock switch, reset switch Keyboard Dock, 6-row spill-resistant keyboard, TrackPoint® pointing device, MultiTouch glass touchpad w/ 5 integrated buttons, landscape stand, security keyhole, two USB 3.0, one Mini DisplayPort, integrated 4-cell battery (Li-Polymer, 28Wh), the 45-watt AC adapter can charge both the Tablet battery and Keyboard Dock battery															
Light sensor G-sensor/ eCompass Gyroscope	Ambient Light Sensor, Capella CM3218 3D accelerometer and 3D magnetometer module, STMicroelectronics LSM303DLHC 3D gyroscope, STMicroelectronics L3GD20															
Chipset	Mobile Intel QS77 Express Chipset															
Tablet ports Monitor Cable	One USB 2.0, one Mini DisplayPort, SIM card slot, Keyboard Dock connector None															
WLAN ⁴ WWAN	11a/b/g/n ²⁸ , PCIe SFF (Small Form Factor) Mini Card, Intel Centrino® Advanced-N 6205S, 2x2 Some: Wireless WAN, Qualcomm® Gobi™ 4000 chipset, LTE (4G), PCIe TFF (Thin Form Factor) Mini Card, WCDMA/HSPA/HSPA+, GPS															
Carrier	Some: AT&T® LTE (4G), contract required with service provider															
Bluetooth™	Bluetooth 4.0 wireless															
Ethernet	None															
NFC	Some: Near Field Communication, easy for two devices to communicate with each other															
Intel AMT	Some: Intel Active Management Technology (iAMT)															
Security chip	Trusted Platform Module, TCG 1.2-compliant															
Dimensions ³	Tablet only: 11.66" x 7.37" x 0.46"; 296.1mm x 187.3mm x 11.6mm Tablet with Keyboard Dock: 11.66" x 8.90" x 0.80"; 296.1mm x 226mm x 20.4mm															
Weight ²	Tablet only: from 1.73 lb (0.785kg); Tablet with Keyboard Dock: from 3.54 lb (1.606kg)															
Case color	Black															
Case material	Magnesium + PC/ABS (PolyCarbonate/Acrylonitrile-Butadiene-Styrene)															
Battery - type	Tablet battery: Integrated Lithium Polymer 3-cell battery, 42Whr Keyboard Dock battery: Integrated Lithium Polymer 4-cell battery, 28Whr											45-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²				
Battery - life ¹⁰	MobileMark® 2012: Tablet only: up to 5.6 hr; Tablet with Keyboard Dock: up to 8.0 hr											For Lenovo service ²² upgrade options, please go to S-TA sheet				
Limited Warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available															

See footnotes for more detailed information
US model(s) announced March 26 or April 2, 2013

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(PR1-1) April 2013

ThinkPad Helix (3698) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Widescreen display	Storage	Digitizer Pen	Camera Front/ Rear (MP)	Enhanced Keyboard Dock	WLAN 802.11	PCIe Mini Card WWAN	Carrier	NFC	Intel AMT	Intel vPro	Preload	Ann Date (mm/yy)
3698-6VU	i5-3337U	4GB	11.6" FHD	180G	Pen	2.0/5.0	Dock	Intel 6205S ²⁸	Ericsson	selectable	NFC	None	No	Win8 Pro64	06/13
3698-6UU	i5-3427U	4GB	11.6" FHD	180G	Pen	2.0/5.0	Dock	Intel 6205S	Ericsson	selectable	NFC	iAMT	vPro	Win8 Pro64	06/13
3698-6TU	i5-3427U	4GB	11.6" FHD	256G	Pen	2.0/5.0	Dock	Intel 6205S	Ericsson	selectable	NFC	iAMT	vPro	Win8 Pro64	06/13
3698-6SU	i7-3667U	8GB	11.6" FHD	180G	Pen	2.0/5.0	Dock	Intel 6205S	Ericsson	selectable	NFC	iAMT	vPro	Win8 Pro64	06/13
3698-6RU	i7-3667U	8GB	11.6" FHD	256G	Pen	2.0/5.0	Dock	Intel 6205S	Ericsson	selectable	NFC	iAMT	vPro	Win8 Pro64	06/13
3698-6QU	i5-3317U	4GB	11.6" FHD	128G	Pen	2.0/5.0	Dock	Intel 6205S	Ericsson	selectable	NFC	None	No	Win8 Pro64	06/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- A depot repair service 3-year limited warranty

Positioning	Convertible design for four modes - Notebook, Stand, Tablet, and Tablet +											Preloaded operating system ²⁰ - Windows® 8 Pro 64-bit
Processor	Intel® Core™ i5-3317U processor (2 cores, 1.70GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i5-3337U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i5-3427U processor (2 cores, 1.80GHz, 3MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.80GHz), HT technology Intel Core i7-3667U processor (2 cores, 2.0GHz, 4MB cache), Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.20GHz), HT technology											Preloaded applications ¹⁴ (only some listed) - Traditional Desktop apps • Lenovo® Solution Center • ThinkVantage System Update • Password Manager • Lenovo Cloud Storage by SugarSync • PC Device Stage • Nitro PDF Reader • Microsoft® Office preloaded; purchase a product key to activate • Intel Small Business Advantage - Windows Store apps • Lenovo Settings • Lenovo Experience • Lenovo Support • Lenovo Companion • AT&T® All Access • Norton™ Internet Security 2013 (30 days of virus definitions) • AccuWeather • Evernote® Sketch (MultiTouch models) • Skype™ • Amazon Kindle
Memory	8GB max ⁷ / PC3-10600 1333MHz DDR3L / soldered to systemboard, no sockets											
Storage	mSATA Solid State Drive (SSD), via PCIe Mini Card slot											
Graphics	Intel HD Graphics 4000 in processor, external digital monitor support via Mini DisplayPort (supports VGA analog monitor via Mini DisplayPort to VGA Monitor Cable 0A36536); supports dual independent display; Max external resolution: 2560x1600 (Mini-DisplayPort)@60Hz											
Display	11.6" (295mm) FHD (1920x1080) TFT color, VibrantView (glossy) display with infinity Corning® Gorilla® Glass, LED backlight, 350 nits, 16:9 aspect ratio, 800:1 contrast ratio, IPS, WideView (170° viewing), MultiTouch screen supports ten-finger gesture, One Glass Solution											
Digitizer Pen	Wacom® digitizer pen, supports hover, tip, and pressure modes / a button for selection / no batteries required, pen holder on Tablet * The models without Digitizer Pen can not support pen input function via optional ThinkPad Helix Digitizer Pen (0A33910)											
Camera	Front camera: 2.0-megapixel, 1080p resolution, fixed focus Rear camera: 5.0-megapixel, 1080p resolution, auto focus											
Video capture	1080p video capture											
Audio support	HD Audio, Realtek® ALC3202 codec, Dolby® Home Theater® v4 / stereo speakers, 1 watt x 2 / dual array digital microphone, combo audio/microphone jack											
Media capable	Audio formats: MP3, AAC, AAC+, eAAC+, WAV, WMA Video formats: MPEG-4, H.263, H.264, VC-1, WMV9, Xvid											
Control buttons	Windows button, Power button, volume control button, rotation lock switch, reset switch											
Keyboard Dock	Keyboard Dock, 6-row spill-resistant keyboard, TrackPoint® pointing device, MultiTouch glass touchpad w/ 5 integrated buttons, landscape stand, security keyhole, two USB 3.0, one Mini DisplayPort, integrated 4-cell battery (Li-Polymer, 28Wh), the 45-watt AC adapter can charge both the Tablet battery and Keyboard Dock battery											
Light sensor	Ambient Light Sensor, Capella CM3218											
G-sensor/ eCompass	3D accelerometer and 3D magnetometer module, STMicroelectronics LSM303DLHC											
Gyroscope	3D gyroscope, STMicroelectronics L3GD20											
Chipset	Mobile Intel QS77 Express Chipset											
Tablet ports	One USB 2.0, one Mini DisplayPort, SIM card slot, Keyboard Dock connector											
Monitor Cable	None											
WLAN ⁴	11a/b/g/n ²⁸ , PCIe SFF (Small Form Factor) Mini Card, Intel Centrino® Advanced-N 6205S, 2x2											
WWAN	Wireless WAN, Ericsson® C5621gw Mobile Broadband Module, PCIe TFF (Thin Form Factor) Mini Card, GPRS/WCDMA/HSPA/HSPA+, GPS											
Carrier	User selectable, contract required with service provider											
Bluetooth™	Bluetooth 4.0 wireless											
Ethernet	None											
NFC	Near Field Communication, easy for two devices to communicate with each other											
Intel AMT	Some: Intel Active Management Technology (iAMT)											
Security chip	Trusted Platform Module, TCG 1.2-compliant											
Dimensions ³	Tablet only: 11.66" x 7.37" x 0.46"; 296.1mm x 187.3mm x 11.6mm Tablet with Keyboard Dock: 11.66" x 8.90" x 0.80"; 296.1mm x 226mm x 20.4mm											
Weight ²	Tablet only: from 1.73 lb (0.785kg); Tablet with Keyboard Dock: from 3.54 lb (1.606kg)											
Case color	Black											
Case material	Magnesium + PC/ABS (PolyCarbonate/Acrylonitrile-Butadiene-Styrene)											
Battery - type	Tablet battery: Integrated Lithium Polymer 3-cell battery, 42Whr Keyboard Dock battery: Integrated Lithium Polymer 4-cell battery, 28Whr											45-watt AC adapter EPEAT™ Gold rating ENERGY STAR® 5.0-compliant RoHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²
Battery - life ¹⁰	MobileMark® 2012: Tablet only: up to 5.6 hr; Tablet with Keyboard Dock: up to 8.0 hr											
Limited Warranty ¹²	3-years/1-yr battery - depot repair service / service upgrades ²² available											For Lenovo service ²² upgrade options, please go to S-TA sheet

See footnotes for more detailed information
US model(s) announced June 4, 2013

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(PR1-4) June 2013

ThinkPad Helix Accessories

Product Specifications Reference (PSREF)

Storage and removable storage

USB 2.0 Portable 500GB Hard Disk	45K1690	ann 05/26/09
USB 3.0 Secure 500GB Hard Drive	0A65619	ann 11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann 11/29/11
Lenovo® Slim USB Portable DVD Burner	0A33988	ann 06/14/11

ThinkPad Expansion

USB 2.0 Port Replicator with Digital Video	0A33942	ann 03/22/11
ThinkPad USB 3.0 Dock	0A33970	ann 05/15/12
Lenovo Essential Notebook Stand	45J9292	ann 05/12/09

Keyboard

TrackPoint Cap Collection	73P2698	ann 12/16/03
Ultraslim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann 04/05/11
USB Numeric Keypad	33L3225	ann 05/01/00
Preferred Pro USB Keyboard	73P5220	ann 06/21/05
Enhanced Performance USB Keyboard	73P2620	ann 03/23/04
ThinkPad USB Keyboard with TrackPoint	55Y9003	ann 08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann 02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann 03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann 05/21/03
Lenovo Laser Mouse (USB)	41U3074	ann 01/23/07
ThinkPad USB Laser Mouse	57Y4635	ann 12/15/09
Lenovo ScrollPoint® Mouse (USB, Optical)	31P7405	ann 08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann 06/04/02
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann 12/20/11

Multimedia

ThinkPad In-Ear Headphones with microphone	57Y4488	ann 01/07/10
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Tablet

ThinkPad Helix Digitizer Pen ⁷³	0A33910	ann 01/29/13
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⁷³ The ThinkPad Helix models without Tablet Pen can not support pen input function via *ThinkPad Helix Digitizer Pen (0A33910)*

Modem

USB 2.0 Lenovo Modem	43R1814	ann 02/26/08
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Ethernet

Lenovo USB 2.0 Ethernet Adapter	0A36322	ann 08/14/12
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Security

3M ThinkPad Helix Privacy Filter (4-way)	4Z10A23288	ann 03/26/13
3M ThinkPad Helix Anti-glare Screen Protector	4Z10A23289	ann 03/26/13
USB Gemplus GemPC Smart Card Reader	41N3040	ann 02/21/06

Power Adapters

ThinkPad 45W AC Adapter	0B47030	ann 01/29/13
90W Ultraslim AC/DC Combo Adapter ⁷⁰	41R4493	ann 09/22/09

⁷⁰ Requires the *Lenovo Slim Power Tip 0B47048*

More info at www.lenovo.com/support/poweradapters

Charging tips for 90W Ultraslim AC/DC Combo Adapter 41R4493

•Lenovo Slim Power Tip	0B47048	ann 08/14/12
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More information at www.lenovopowertips.com

Carrying Cases

<i>Up to 12.5" widescreen models:</i>		
ThinkPad 12.5" Ultrabook Topload	0B47416	ann 12/04/12

<i>Up to 14" widescreen models:</i>		
ThinkPad Ultralight Backpack	0B47306	ann 12/11/12
ThinkPad Ultralight Topload	0B47307	ann 12/11/12

<i>Up to 15.6" widescreen models:</i>		
Lenovo Messenger Max	41U5253	ann 05/01/07
Lenovo Performance BackPack	41U5254	ann 05/01/07
ThinkPad Business Topload Case	43R2476	ann 05/13/08
ThinkPad Business Backpack	43R2482	ann 05/13/08
ThinkPad Deluxe Expander Case	43R2478	ann 05/13/08
ThinkPad Executive Leather Case	43R2480	ann 05/13/08
Lenovo Sport Backpack - Red	0A33896	ann 02/28/12
Lenovo Sport Slimcase - Red	0A33897	ann 02/28/12
Lenovo Sport Messenger - Red	0A33898	ann 02/28/12
Lenovo Sport Backpack - Blue	0B47298	ann 08/28/12
Lenovo Sport Slimcase - Blue	0B47300	ann 08/28/12
Lenovo Sport Messenger - Blue	0B47299	ann 08/28/12
Lenovo Sport Backpack - Grey	0B47301	ann 08/28/12
Lenovo Sport Slimcase - Grey	0B47303	ann 08/28/12
Lenovo Sport Messenger - Grey	0B47302	ann 08/28/12

More information at www.lenovo.com/support/cases

Monitor Accessories⁴⁶

Lenovo Mini-DisplayPort to VGA Monitor Cable	0A36536	ann 05/17/11
Mini-DisplayPort to Single-link DVI Monitor Cable	0B47090	ann 06/26/12
Mini-DisplayPort to DisplayPort Monitor Cable	0B47091	ann 07/24/12
Lenovo USB Soundbar	0A36190	ann 05/01/12
Lenovo Easy Reach Monitor Stand	55Y9258	ann 09/22/09

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



Lenovo® ThinkPad Yoga 11e



Lenovo ThinkPad Yoga 11e



Lenovo ThinkPad Yoga 11e



Lenovo ThinkPad Yoga 11e



Lenovo ThinkPad Yoga 11e

ThinkPad Yoga 11e 20D9 (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Graphics	Widescreen display	Multi-touch	Camera	Top color	Storage	M.2 Card WLAN	M.2 Card WWAN/SSD	SIM card	Finger print reader	battery cells	Power Adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20D9000RUS	N2930	4GB	Intel HD	11.6" HD	Multi	720p	Black	500G 7200	7260 a/b/g/n	None	None	None	4	45W	Win8.1 64	1-Depot	No	06/14
20D9000XUS	N2930	4GB	Intel HD	11.6" HD	Multi	720p	Black	320G 7200	7260 a/b/g/n	None	None	None	4	45W	Win8.1 64	1-Depot	No	06/14
20D9000UUS	N2930	4GB	Intel HD	11.6" HD	Multi	720p	Black	128G SSD	7260 a/b/g/n	None	None	None	4	45W	Win8.1 64	1-Depot	No	06/14
20D9000WUS	N2930	4GB	Intel HD	11.6" HD	Multi	720p	Black	128G SSD	7260 a/b/g/n	None	None	None	4	45W	Win8.1 P64	1-Depot	No	06/14
20D9000VUS	N2930	4GB	Intel HD	11.6" HD	Multi	720p	Black	320G 7200	7260 a/b/g/n	None	None	None	4	45W	Win8.1 P64	1-Depot	No	06/14
20D9000QUS	N2930	4GB	Intel HD	11.6" HD	Multi	720p	Black	500G 7200	7260 a/b/g/n	None	None	None	4	45W	Win8.1 P64	1-Depot	No	06/14
20D9001AUS	N2940	4GB	Intel HD	11.6" HD	Multi	720p	Black	128G SSD	7260 ac	None	None	None	4	45W	Win8.1 P64	1-Depot	No	12/14
20D90019US	N2940	4GB	Intel HD	11.6" HD	Multi	720p	Black	500G 7200	7260 ac	None	None	None	4	45W	Win8.1 P64	1-Depot	No	12/14
20D90018US	N2940	4GB	Intel HD	11.6" HD	Multi	720p	Black	320G 7200	7260 ac	None	None	None	4	45W	Win8.1 P64	1-Depot	No	12/14
20D9001FUS	N2940	4GB	Intel HD	11.6" HD	Multi	720p	Black	500G 7200	7260 ac	None	None	None	4	45W	Win8.1 64	1-Depot	No	02/15
20D9001GUS	N2940	4GB	Intel HD	11.6" HD	Multi	720p	Black	128G SSD	7260 ac	None	None	None	4	45W	Win8.1 64	1-Depot	No	02/15
20D9001JUS	N2940	4GB	Intel HD	11.6" HD	Multi	720p	Black	320G 7200	7260 ac	None	None	None	4	45W	Win8.1 64	1-Depot	No	02/15

Processor	Intel® Celeron® processor N2930 or N2940	Chipset	Intel SoC (System on Chip) platform																											
	<table border="1"> <thead> <tr> <th>Processor Number</th> <th># of Cores</th> <th># of Threads</th> <th>Clock Speed</th> <th>Burst Frequency</th> <th>Cache</th> <th>Memory speed</th> <th>Processor Graphics</th> <th>Intel vPro Technology</th> </tr> </thead> <tbody> <tr> <td>N2930</td> <td>4</td> <td>4</td> <td>1.83 GHz</td> <td>2.16 GHz</td> <td>2MB</td> <td>DDR3L-1333</td> <td>Intel HD graphics</td> <td>No</td> </tr> <tr> <td>N2940</td> <td>4</td> <td>4</td> <td>1.83 GHz</td> <td>2.25 GHz</td> <td>2MB</td> <td>DDR3L-1333</td> <td>Intel HD graphics</td> <td>No</td> </tr> </tbody> </table>	Processor Number	# of Cores	# of Threads	Clock Speed	Burst Frequency	Cache	Memory speed	Processor Graphics	Intel vPro Technology	N2930	4	4	1.83 GHz	2.16 GHz	2MB	DDR3L-1333	Intel HD graphics	No	N2940	4	4	1.83 GHz	2.25 GHz	2MB	DDR3L-1333	Intel HD graphics	No	Smart Card Read	None
Processor Number	# of Cores	# of Threads	Clock Speed	Burst Frequency	Cache	Memory speed	Processor Graphics	Intel vPro Technology																						
N2930	4	4	1.83 GHz	2.16 GHz	2MB	DDR3L-1333	Intel HD graphics	No																						
N2940	4	4	1.83 GHz	2.25 GHz	2MB	DDR3L-1333	Intel HD graphics	No																						
		Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)																											
		Ports	One USB 3.0, one powered USB 2.0, HDMI, ethernet, combo audio/mic jack																											
		Control buttons	Power button, volume control button																											
		WLAN	<i>TP 11b/g/n:</i> ThinkPad 11b/g/n, 2x2, Wi-Fi + BT, M.2 Card <i>7260 a/b/g/n:</i> Intel Dual Band Wireless-N 7260, 2x2, Wi-Fi + BT, M.2 Card <i>7260 ac:</i> Intel Dual Band Wireless-AC 7260, 2x2, Wi-Fi + BT, M.2 Card																											
Memory	8GB max / PC3-12800 1600MHz DDR3L, non-parity, one 204-pin SO-DIMM socket * System automatically clocks down for processors w/ lower memory controller	WWAN	None																											
		Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																											
Storage	<i>Some:</i> SSD / SATA 3.0Gb/s, 2.5" wide, 7mm high, <i>Some:</i> HDD / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™	Ethernet	Realtek RTL8111GUS-CG Gigabit Network Connection																											
		NFC	None																											
Widescreen display	11.6" (295mm) HD (1366x768) TFT color, LED backlight, 270 nits, 16:9 aspect ratio, 800:1 contrast ratio, IPS	Security chip	Power-on password, hard disk password, supervisor password, security keyhole																											
MultiTouch	Yes, support 10 fingers	vPro & iAMT	None																											
Hinge	Yoga hinge, 360 degree	Fingerprint reader	None																											
Camera (optional)	HD720p resolution, low light sensitive	Limited warranty	1-year - depot repair service / service upgrades available <i>For Lenovo service upgrade options, please go to P_C-AQP sheet</i>																											
Graphics	Intel HD Graphics in processor, supports external digital monitor via HDMI™, supports dual independent display; <i>Max resolution:</i> 1920x1080 (HDMI)@60Hz	Preload	<i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit <ul style="list-style-type: none"> • Lenovo Solution Center • Lenovo Support - Metro • Lenovo QuickCast - Metro • Lenovo Companion - Metro • ThinkVantage System Update • Lenovo Reach • AccuWeather • Amazon Kindle • Nitro Pro • Evernote • Skype • Rara Streaming • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions) 																											
Dimensions	<i>11.6W" (WxDxH):</i> 11.81" x 8.50" x 0.90" (300mm x 216mm x 22.9mm)	Environment	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant																											
Weight	From 3.5 lb (1.59kg)																													
Case color	<i>Display cover:</i> Graphite black or silver <i>Bottom:</i> Graphite black																													
Case material	<i>Display cover:</i> PolyCarbonate/Glass-Fiber Reinforced Plastic; <i>Bottom:</i> PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic																													
Battery - type	Integrated Lithium Ion 4-cell (35Wh)																													
Battery - life	<table border="1"> <thead> <tr> <th>Models</th> <th>Windows 7</th> <th>Windows 8</th> </tr> </thead> <tbody> <tr> <td>MobileMark® 2007</td> <td>-</td> <td>9.0 hr</td> </tr> <tr> <td>MobileMark 2012</td> <td>-</td> <td>6.5 hr</td> </tr> </tbody> </table>	Models	Windows 7	Windows 8	MobileMark® 2007	-	9.0 hr	MobileMark 2012	-	6.5 hr																				
Models	Windows 7	Windows 8																												
MobileMark® 2007	-	9.0 hr																												
MobileMark 2012	-	6.5 hr																												
AC adapter	45-watt AC adapter																													
Audio support	HD Audio, Realtek® ALC283 codec, Dolby® Advanced Audio™ v2 / stereo speakers, 2W x 2 / monaural digital microphone, combo audio/mic jack																													
Keyboard	ThinkPad Windows keyboard, 6-row, multimedia Fn keys																													
Touchpad	Buttonless touchpad below keyboard, multi-touch																													
ThinkLight™	None																													



Lenovo® ThinkPad Yoga 11e Chromebook



Lenovo ThinkPad Yoga 11e Chromebook



Lenovo ThinkPad Yoga 11e Chromebook

ThinkPad Yoga 11e Chromebook 20DU (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Graphics	Widescreen display	Multi-touch	Camera	Top color	Storage	M.2 Card WLAN	M.2 Card WWAN/SSD	SIM card	Finger print reader	battery cells	Power Adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DU0008US	N2930	4GB	Intel HD	11.6" HD	Multi	720p	Black	16GB eMMC	7260 ac	None	None	None	4	45W	Chrome	1-Depot	No	06/14
20DU000AUS	N2940	4GB	Intel HD	11.6" HD	Multi	720p	Black	16GB eMMC	7260 ac	None	None	None	4	45W	Chrome	1-Depot	No	12/14

Processor	Intel® Celeron® processor N2930 or N2940									Audio support	HD Audio, Maxim MAX98090AETL+T codec / stereo speakers, 2W x 2 / monaural digital microphone, combo audio/mic jack							
	Processor Number	# of Cores	# of Threads	Clock Speed	Burst Frequency	Cache	Memory speed	Processor Graphics	Intel vPro Technology	Keyboard	ThinkPad Chrome keyboard, 6-row, multimedia Fn keys							
	N2930	4	4	1.83 GHz	2.16 GHz	2MB	DDR3L-1333	Intel HD graphics	No	Touchpad	Buttonless touchpad below keyboard, multi-touch							
	N2940	4	4	1.83 GHz	2.25 GHz	2MB	DDR3L-1333	Intel HD graphics	No	ThinkLight™	None							
										Chipset	Intel SoC (System on Chip) platform							
Memory	2GB or 4GB / DDR3L-1600MHz / soldered to systemboard, no sockets * System automatically clocks down for processors w/ lower memory controller									Smart Card Read	None							
										Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)							
Storage	16GB eMMC (embedded Multi Media Card) flash memory on board									Ports	One USB 3.0, one USB 2.0, HDMI, combo audio/mic jack							
Widescreen display	11.6" (295mm) HD (1366x768) TFT color, LED backlight, 270 nits, 16:9 aspect ratio, 800:1 contrast ratio, IPS									Control buttons	Power button, volume control button							
MultiTouch	Yes, support 10 fingers									WLAN	TP 11a/b/g/n: ThinkPad 11a/b/g/n, 2x2, Wi-Fi + BT, M.2 Card							
Hinge	Yoga hinge, 360 degree									WWAN	None							
Camera	HD720p resolution, low light sensitive									Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter							
Graphics	Intel HD Graphics in processor, supports external digital monitor via HDMI™, supports dual independent display; Max resolution: 1920x1080 (HDMI) @60Hz									Ethernet	None							
										NFC	None							
Dimensions	11.6W" (WxDxH): 11.81" x 8.50" x 0.90" (300mm x 216mm x 22.9mm)									Security	Security keyhole							
Weight	From 3.31 lb (1.50kg)									Security chip	Trusted Platform Module, TCG 1.2-compliant							
Case color	Display cover: Graphite black or silver Bottom: Graphite black									vPro & iAMT	None							
Case material	Display cover: PolyCarbonate/Glass-Fiber Reinforced Plastic; Bottom: PolyCarbonate/Acrylonitrile-Butadiene-Styrene (PC/ABS) plastic									Fingerprint reader	None							
Battery - type	Integrated Lithium Ion 4-cell (35Wh)									Limited warranty	1-year - depot repair service / service upgrades available For Lenovo service upgrade options, please go to P-C-AQP sheet							
Battery - life	Up to 8 hours									Preload	Google Chrome OS							
AC adapter	45-watt AC adapter									Environment	EPEAT™ Gold; ENERGY STAR® 6.0; GREENGUARD®; RoHS-compliant							



Lenovo® ThinkPad Yoga



Lenovo ThinkPad Yoga



Lenovo ThinkPad Yoga



Lenovo ThinkPad Yoga



Lenovo ThinkPad Yoga



Lenovo ThinkPad Yoga

ThinkPad Yoga (20CD) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Widescreen display	Screen type	Pen	Camera	Disk SATA GB ³ rpm	PCIe Mini Card WLAN	M.2 Card SSD	SIM card	Top color	Battery cells	Preload	Ann date (mm/yy)
20CD0002US	i7-4500U	8GB	12.5" HD	anti-smudge	None	720p	256G SSD	Intel 7260 + BT	None	None	Black	8	Win8.1 Pro64	11/13
20CD000GUS	i3-4010U	4GB	12.5" HD	anti-smudge	None	720p	500G 5400	Intel 7260 ac + BT	16GB	None	Black	8	Win8.1 Pro64	11/13
20CD000HUS	i5-4200U	4GB	12.5" HD	anti-smudge	None	720p	500G 5400	Intel 7260 ac + BT	16GB	None	Black	8	Win8.1 Pro64	11/13
20CD000KUS	i7-4500U	8GB	12.5" HD	anti-smudge	None	720p	500G 5400	Intel 7260 ac + BT	16GB	None	Black	8	Win8.1 Pro64	11/13
20CD000MUS	i5-4200U	8GB	12.5" FHD	anti-glare	Pen	720p	500G 5400	Intel 7260 ac + BT	16GB	None	Black	8	Win8.1 Pro64	11/13
20CD000NUS	i5-4200U	4GB	12.5" FHD	anti-glare	Pen	720p	256G SSD	Intel 7260 ac + BT	None	None	Black	8	Win8.1 Pro64	11/13
20CD002FUS	i5-4200U	4GB	12.5" HD	anti-smudge	None	720p	256G SSD	Intel 7260 ac + BT	None	None	Black	8	Win8.1 Pro64	11/13
20CD00AYUS	i7-4500U	8GB	12.5" FHD	anti-glare	Pen	720p	500G 7200	Intel 7260 ac + BT	16GB	None	Black	8	Win8.1 Pro64	01/14
20CD00C5US	i7-4500U	8GB	12.5" FHD	anti-glare	Pen	720p	256G SSD	Intel 7260 ac + BT	None	None	Black	8	Win7 Pro64	01/14
20CD00CHUS	i5-4200U	4GB	12.5" HD	anti-smudge	None	720p	500G 7200	Intel 7260 ac + BT	16GB	None	Black	8	Win8.1 Pro64	02/14
20CD00CGUS	i3-4010U	4GB	12.5" HD	anti-smudge	None	720p	500G 7200	Intel 7260 ac + BT	16GB	None	Black	8	Win8.1 Pro64	02/14
20CD00DPUS	i3-4030U	4GB	12.5" HD	anti-smudge	None	720p	500G 7200	Intel 7260 ac + BT	16GB	None	Black	8	Win8.1 Pro64	05/14
20CD00DQUS	i5-4210U	4GB	12.5" HD	anti-smudge	None	720p	500G 7200	Intel 7260 ac + BT	16GB	None	Black	8	Win8.1 Pro64	05/14

Positioning	<i>Convertible tablet; one spindle</i>											Preloaded operating system²⁰ - <i>Some:</i> Windows [®] 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit - <i>Some:</i> Windows 8.1 64-bit - <i>Some:</i> Windows 8.1 Pro 64-bit Preloaded applications¹⁴ (only some listed, for Windows 8.1 models) • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Password Manager • ThinkVantage System Update • Norton [™] Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate • Skype [™]
Processor	Intel[®] Core[™] i3-4010U processor (2 cores, 1.70GHz, 3MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i3-4030U processor (2 cores, 1.90GHz, 3MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), HT technology Intel Core i5-4200U processor (2 cores, 1.60GHz, 3MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i5-4210U processor (2 cores, 1.70GHz, 3MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.70GHz), HT technology Intel Core i7-4500U processor (2 cores, 1.80GHz, 4MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.00GHz), HT technology											
Memory	4GB or 8GB / PC3-12800 1600MHz DDR3L / soldered to systemboard, no SO-DIMM sockets											
Optical	None											
SATA disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System [™] <i>Some:</i> M.2 Solid State Drive (SSD), via M.2 Card slot											
M.2 SSD												
Widescreen display	<i>Some:</i> 12.5" (317.5mm) HD (1366x768) TFT color , smudgeless, 10-point touch screen LED backlight, 300 nits, 16:9 aspect ratio, IPS; <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080) TFT color , smudgeless, 10-point touch screen LED backlight, 400 nits, 16:9 aspect ratio, IPS; <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080) TFT color , anti-glare, 10-point touch screen with Pen, LED backlight, 400 nits, 16:9 aspect ratio, IPS HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus											
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus											
Graphics	Intel HD Graphics 4400 in processor, supports external digital monitor via Mini HDMI; supports dual independent display; <i>Maximum external resolution:</i> 1920x1200 (Mini HDMI)@60Hz											
Keyboard	6-row, 83-key, spill-resistant, multimedia Fn keys, LED backlight											
TrackPoint [®]	TrackPoint pointing device											
Touchpad	UltraNav [™] , wide touchpad below keyboard, integrated five buttons, multi-touch											
Light sensor	Ambient light sensor											
ThinkLight [™]	None											
Dimensions ³	<i>8-cell:</i> 12.44" x 8.70" x 0.74"; 316mm x 221mm x 18.8mm <i>8-cell with Pen:</i> 12.44" x 8.70" x 0.76"; 316mm x 221mm x 19.4mm											
Weight ²	<i>8-cell:</i> from 3.46 lb (1.57kg) <i>8-cell with Pen:</i> from 3.59 lb (1.63kg)											
Case material	<i>Display cover:</i> Magnesium and Aluminum + Polyphenylene sulfide (PPS); <i>Bottom:</i> Magnesium and Aluminum + Polyphenylene sulfide (PPS);											
Battery - type	Integrated Li-Polymer 8-cell, HW Authentication											
Battery - life ¹⁰	<i>8-cell (47Whr):</i> up to 7.0 hr											
Multicard Reader	4-in-1 reader (SD, SDHC, SDXC, MMC)											
ExpressCard	None											
Ports	Two USB 3.0(one powered), external monitor (mini-HDMI)											
PCIe Mini Card	One PCI Express Mini Card slot											
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2											
M.2 Card	One M.2 Card slot for support of SSD											
WWAN	None											
Bluetooth [™]	Bluetooth 4.0 wireless, integrated in WLAN PCIe Half Mini Card											
Ethernet	None											
Intel AMT	None											
Audio support	High Definition (HD) Audio, Conexant CX20751 codec / stereo speakers, 2 watt x 2, Dolby [®] Home Theater [®] v4 certified / volume up, down, mute buttons / dual array microphone, combo audio/mic jack											
Security	Power-on password, hard disk password, supervisor password, security keyhole											
Security chip	Trusted Platform Module, TCG 1.2-compliant											
Fingerprint reader	None											
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available											

See footnotes for more detailed information

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ThinkPad Yoga (20CD) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Widescreen display	Screen type	Pen	Camera	Disk SATA GB ³ rpm	PCIe Mini Card WLAN	M.2 Card SSD	Top color	Battery cells	Preload	Ann date (mm/yy)
20CD002HUS	i7-4500U	8GB	12.5" HD	anti-smudge	None	720p	256G SSD	Intel 7260 ac + BT	None	Black	8	Win8.1 Pro64	11/13
20CD002PUS	i5-4200U	4GB	12.5" HD	anti-smudge	None	720p	128G SSD	Intel 7260 + BT	None	Black	8	Win8.1 64	11/13
20CD002QUS	i5-4200U	4GB	12.5" FHD	anti-glare	Pen	720p	128G SSD	Intel 7260 + BT	None	Black	8	Win8.1 64	11/13
20CD002RUS	i7-4500U	8GB	12.5" FHD	anti-glare	Pen	720p	256G SSD	Intel 7260 + BT	None	Black	8	Win8.1 64	11/13
20CD002SUS	i5-4200U	4GB	12.5" HD	anti-smudge	None	720p	180G SSD OPAL	Intel 7260 ac + BT	None	Black	8	Win8.1 Pro64	11/13
20CD002TUS	i5-4200U	4GB	12.5" FHD	anti-glare	Pen	720p	180G SSD OPAL	Intel 7260 ac + BT	None	Black	8	Win8.1 Pro64	11/13
20CD002UUS	i7-4500U	8GB	12.5" HD	anti-smudge	None	720p	180G SSD OPAL	Intel 7260 ac + BT	None	Black	8	Win8.1 Pro64	11/13
20CD002VUS	i7-4500U	8GB	12.5" FHD	anti-glare	Pen	720p	180G SSD OPAL	Intel 7260 ac + BT	None	Black	8	Win8.1 Pro64	11/13
20CD00AYUS	i7-4500U	8GB	12.5" FHD	anti-glare	Pen	720p	500G 7200	Intel 7260 ac + BT	16GB	Black	8	Win8.1 Pro64	12/13
20CD00B0US	i7-4500U	8GB	12.5" FHD	anti-glare	Pen	720p	256G SSD	Intel 7260 ac + BT	None	Black	8	Win8.1 Pro64	12/13
20CD00EGUS	i5-4200U	8GB	12.5" FHD	anti-glare	Pen	720p	180G SSD OPAL	Intel 7260 ac + BT	None	Black	8	Win7 Pro64	09/14

Positioning	<i>Convertible tablet; one spindle</i>										
Processor	Intel® Core™ i5-4200U processor (2 cores, 1.60GHz, 3MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.60GHz), HT technology Intel Core i5-4300U processor (2 cores, 1.90GHz, 3MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.90GHz), HT technology Intel Core i7-4500U processor (2 cores, 1.80GHz, 4MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.00GHz), HT technology Intel Core i7-4600U processor (2 cores, 2.10GHz, 4MB Cache), Intel HD Graphics 4400 , DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology										
Memory	4GB or 8GB / PC3-12800 1600MHz DDR3L / soldered to systemboard, no SO-DIMM sockets										
Optical	None										
SATA disk	<i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>Some:</i> M.2 Solid State Drive (SSD), via M.2 Card slot										
M.2 SSD											
Widescreen display	<i>Some:</i> 12.5" (317.5mm) HD (1366x768) TFT color , smudgeless, 10-point touch screen LED backlight, 300 nits, 16:9 aspect ratio, IPS; <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080) TFT color , smudgeless, 10-point touch screen LED backlight, 400 nits, 16:9 aspect ratio, IPS; <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080) TFT color , anti-glare, 10-point touch screen with Pen, LED backlight, 400 nits, 16:9 aspect ratio, IPS HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus										
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus										
Graphics	Intel HD Graphics 4400 in processor, supports external digital monitor via Mini HDMI; supports dual independent display; <i>Maximum external resolution:</i> 1920x1200 (Mini HDMI) @60Hz										
Keyboard	6-row, 83-key, spill-resistant, multimedia Fn keys, LED backlight										
TrackPoint®	TrackPoint pointing device										
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch										
Light sensor	Ambient light sensor										
ThinkLight™	None										
Dimensions ³	<i>8-cell:</i> 12.44" x 8.70" x 0.74"; 316mm x 221mm x 18.8mm <i>8-cell with Pen:</i> 12.44" x 8.70" x 0.76"; 316mm x 221mm x 19.4mm										
Weight ²	<i>8-cell:</i> from 3.46 lb (1.57kg) <i>8-cell with Pen:</i> from 3.59 lb (1.63kg)										
Case material	<i>Display cover:</i> Magnesium and Aluminum + Polyphenylene sulfide (PPS); <i>Bottom:</i> Magnesium and Aluminum + Polyphenylene sulfide (PPS);										
Battery - type	Integrated Li-Polymer 8-cell, HW Authentication										
Battery - life ¹⁰	<i>8-cell (47Whr):</i> up to 7.0 hr										
Multicard Reader	4-in-1 reader (SD, SDHC, SDXC, MMC)										
ExpressCard	None										
Ports	Two USB 3.0(one powered), external monitor (mini-HDMI)										
PCIe Mini Card	One PCI Express Mini Card slot										
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2										
M.2 Card	One M.2 Card slot for support of SSD										
WWAN	None										
Bluetooth™	Bluetooth 4.0 wireless, integrated in WLAN PCIe Half Mini Card										
Ethernet	None										
Intel AMT	None										
Audio support	High Definition (HD) Audio, Conexant CX20751 codec / stereo speakers, 2 watt x 2, Dolby® Home Theater® v4 certified / volume up, down, mute buttons / dual array microphone, combo audio/mic jack										
Security	Power-on password, hard disk password, supervisor password, security keyhole										
Security chip	Trusted Platform Module, TCG 1.2-compliant										
Fingerprint reader	None										
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available										
	Supports ThinkVantage® technologies 45-watt AC Adapter ENERGY STAR® compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹² For Lenovo ²² service upgrade options, please go to S-EDGE sheet										

See footnotes for more detailed information

ThinkPad Yoga (20CD) - TopSeller - III

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Widescreen display	Screen type	Pen	Camera	Disk SATA GB ² rpm	PCIe Mini Card WLAN	M.2 Card SSD	M.2 Card SIM card	Top color	Battery cells	Intel vPro	Preload	Ann date (mm/yy)
20CD00BXUS	i5-4300U	4GB	12.5" FHD	anti-glare	Pen	720p	500G 7200	7260 ac + BT	16GB	None	Black	8	vPro	Win8.1 Pro64	01/14
20CD00BYUS	i7-4600U	8GB	12.5" HD	anti-smudge	None	720p	500G 7200	7260 ac + BT	16GB	None	Black	8	vPro	Win8.1 Pro64	01/14
20CD00C0US	i7-4600U	8GB	12.5" FHD	anti-glare	Pen	720p	500G 7200	7260 ac + BT	16GB	None	Black	8	vPro	Win7 Pro64	01/14
20CD00C3US	i5-4300U	4GB	12.5" FHD	anti-glare	Pen	720p	180G OPAL	7260 ac + BT	None	None	Black	8	vPro	Win7 Pro64	01/14
20CD00C1US	i5-4300U	4GB	12.5" HD	anti-smudge	None	720p	180G OPAL	7260 ac + BT	None	None	Black	8	vPro	Win7 Pro64	01/14
20CD00C2US	i7-4600U	8GB	12.5" FHD	anti-glare	Pen	720p	256G SSD	7260 ac + BT	None	None	Black	8	vPro	Win7 Pro64	01/14
20CD00B1US	i7-4600U	8GB	12.5" FHD	anti-glare	Pen	720p	256G SSD	7260 ac + BT	None	None	Black	8	vPro	Win8.1 Pro64	01/14
20CD00AXUS	i7-4600U	8GB	12.5" FHD	anti-glare	Pen	720p	180G OPAL	7260 ac + BT	None	None	Black	8	vPro	Win8.1 Pro64	01/14
20CD00AVUS	i5-4300U	4GB	12.5" FHD	anti-glare	Pen	720p	180G OPAL	7260 ac + BT	None	None	Black	8	vPro	Win8.1 Pro64	01/14
20CD00AWUS	i5-4300U	4GB	12.5" HD	anti-smudge	None	720p	180G OPAL	7260 ac + BT	None	None	Black	8	vPro	Win8.1 Pro64	01/14
20CD00EHUS	i5-4300U	8GB	12.5" FHD	anti-glare	Pen	720p	180G OPAL	7260 ac + BT	None	None	Black	8	vPro	Win7 Pro64	09/14
20CD00BWUS	i5-4300U	8GB	12.5" FHD	anti-glare	Pen	720p	256G SSD	7260 ac + BT	None	None	Black	8	vPro	Win7 Pro64	09/14

Positioning	<i>Convertible tablet; one spindle</i>											Preloaded operating system²⁰			
Processor	Intel® Core™ i5-4300U processor (2 cores, 1.90GHz, 3MB Cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (2.90GHz), HT technology Intel Core i7-4510U processor (2 cores, 2.00GHz, 4MB Cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.10GHz), HT technology Intel Core i7-4600U processor (2 cores, 2.10GHz, 4MB Cache), Intel HD Graphics 4400, DDR3 memory controller (up to 1600MHz), Intel Turbo Boost 2.0 (3.30GHz), HT technology											- <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit - <i>Some:</i> Windows 8.1 64-bit - <i>Some:</i> Windows 8.1 Pro 64-bit			
Memory	4GB or 8GB / PC3-12800 1600MHz DDR3L / soldered to systemboard, no SO-DIMM sockets											Preloaded applications¹⁴ (only some listed, for Windows 8.1 models)			
Optical SATA disk	None <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide, 7mm high <i>Some:</i> Hard Disk Drive / SATA 3.0Gb/s, 2.5" wide, 7mm high, Active Protection System™ <i>Some:</i> M.2 Solid State Drive (SSD), via M.2 Card slot											<ul style="list-style-type: none"> • Lenovo Support • Lenovo Companion • Lenovo Cloud Storage • Password Manager • ThinkVantage System Update • Norton™ Internet Security (30 days of virus definitions) • Microsoft Office preloaded; purchase a product key to activate • Skype™ 			
M.2 SSD															
Widescreen display	<i>Some:</i> 12.5" (317.5mm) HD (1366x768) TFT color , smudgeless, 10-point touch screen LED backlight, 300 nits, 16:9 aspect ratio, IPS; <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080) TFT color , smudgeless, 10-point touch screen LED backlight, 400 nits, 16:9 aspect ratio, IPS; <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080) TFT color , anti-glare, 10-point touch screen with Pen, LED backlight, 400 nits, 16:9 aspect ratio, IPS														
Camera	HD720p resolution, wide view angle, low light sensitive, face tracking, fixed focus														
Graphics	Intel HD Graphics 4400 in processor, supports external digital monitor via Mini HDMI; supports dual independent display; <i>Maximum external resolution:</i> 1920x1200 (Mini HDMI)@60Hz														
Keyboard	6-row, 83-key, spill-resistant, multimedia Fn keys, LED backlight														
TrackPoint®	TrackPoint pointing device														
Touchpad	UltraNav™, wide touchpad below keyboard, integrated five buttons, multi-touch														
Light sensor	Ambient light sensor														
ThinkLight™	None														
Dimensions ³	<i>8-cell:</i> 12.44" x 8.70" x 0.74"; 316mm x 221mm x 18.8mm <i>8-cell with Pen:</i> 12.44" x 8.70" x 0.76"; 316mm x 221mm x 19.4mm														
Weight ²	<i>8-cell:</i> from 3.46 lb (1.57kg) <i>8-cell with Pen:</i> from 3.59 lb (1.63kg)														
Case material	<i>Display cover:</i> Magnesium and Aluminum + Polyphenylene sulfide (PPS); <i>Bottom:</i> Magnesium and Aluminum + Polyphenylene sulfide (PPS);														
Battery - type	Integrated Li-Polymer 8-cell, HW Authentication														
Battery - life ¹⁰	<i>8-cell (47Whr):</i> up to 7.0 hr														
Multicard Reader	4-in-1 reader (SD, SDHC, SDXC, MMC)														
ExpressCard	None														
Ports	Two USB 3.0 (one powered), external monitor (mini-HDMI)														
PCIe Mini Card	One PCI Express Mini Card slot														
PCIe WLAN ⁴	11ac, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + Bluetooth combo adapter, 2x2														
M.2 Card	One M.2 Card slot for support of SSD														
WWAN	None														
Bluetooth™	Bluetooth 4.0 wireless, integrated in WLAN PCIe Half Mini Card											Supports ThinkVantage® technologies			
Ethernet	None														
Intel AMT	Intel Active Management Technology (iAMT)														
Audio support	High Definition (HD) Audio, Conexant CX20751 codec / stereo speakers, 2 watt x 2, Dolby® Home Theater® v4 certified / volume up, down, mute buttons / dual array microphone, combo audio/mic jack											45-watt AC Adapter ENERGY STAR® compliant ROHS-compliant International Warranty Service ¹⁷ 24 hour x 7 day ¹⁸ toll-free support during the warranty period ¹²			
Security	Power-on password, hard disk password, supervisor password, security keyhole														
Security chip	Trusted Platform Module, TCG 1.2-compliant														
Fingerprint reader	None											For Lenovo ²² service upgrade options, please go to S-EDGE sheet			
Limited warranty ¹²	1-year - depot repair service / service upgrades ²² available														

See footnotes for more detailed information

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(STLA1-3) September 2014



Lenovo® ThinkPad Yoga 12



Lenovo ThinkPad Yoga 12



Lenovo ThinkPad Yoga 12



ThinkPad Yoga 12 Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor								Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC)	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics		Two USB 3.0 (one Always On), mini HDMI, Lenovo OneLink connector, combo audio / microphone jack	
	i3-5005U	2	4	2.0 GHz	-	3MB	DDR3L-1600	HD5500		None	
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500		Monitor cable	
	i5-5300U	2	4	2.3 GHz	2.9 GHz	3MB		HD5500		Camera	
	i7-5500U	2	4	2.4 GHz	3.0 GHz	4MB		HD5500		Audio support	
i7-5600U	2	4	2.6 GHz	3.2 GHz	4MB	HD5500		HD720p resolution, fixed focus HD Audio, Conexant® CX22752 codec, Dolby® Home Theater® v4 / stereo speakers, 1.5W x 2 / dual array microphone, combo audio / microphone jack			
Graphics	Intel HD Graphics 5500 in processor only, digital monitor support via mini HDMI™; supports dual independent display Max resolution: 1920x1080 (HDMI)@60Hz								Keyboard UltraNav™ ThinkLight™	6-row, LED backlit, spill-resistant, multimedia Fn keys TrackPoint® pointing device and multi-touch with 3+2 buttons click pad None	
Chipset	Intel SoC (System on Chip) platform								Security	Power-on password, hard disk password, supervisor password, security keyhole	
Memory	8GB max / PC3-12800 1600MHz DDR3L, soldered to systemboard, no sockets								Security chip vPro	Trusted Platform Module, TCG 1.2-compliant <i>Some:</i> Intel vPro Technology	
Display	<i>Some:</i> 12.5" (317.5mm) HD (1366x768) color, glossy, LED backlight, 300 nits, 16:9 aspect ratio, IPS <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080) color, anti-glare, LED backlight, 400 nits, 16:9 aspect ratio, IPS								Fingerprint reader	None NFC	
Multi-touch	Supports 10-finger gesture								Battery type	Li-Polymer 8-cell (47Wh)	
Hinge	Yoga hinge, 360 degree								Battery life	Up to 8.0 hr	
Convertible mode	Laptop, tent, stand and tablet								AC adapter	45-watt AC adapter	
Pen	<i>Some:</i> Wacom® Active pen with glossy panel, batteries required <i>Some:</i> Wacom® Digitizer pen with anti-glare panel, no batteries required								Light sensor	Ambient Light Sensor	
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> SSHD with 8GB NAND flash memory								G-sensor/ eCompass	3D accelerometer and 3D magnetometer 3D compass	
Optical	None								Gyroscope	3D gyrometer	
M.2 SSD	<i>Some:</i> M.2 Solid State Drive (SSD), via M.2 Card slot								Preload	<i>Some:</i> No operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo SHAREit • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • PC Device Stage • Adobe® Reader® • Evernote® • Skype™ • Maxthon Cloud Browser • Microsoft® Office preloaded; purchase a product key to activate	
Ethernet	None									<i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo SHAREit • Lenovo Companion • ThinkVantage System Update • PC Device Stage • Weather Channel • Evernote • Maxthon Cloud Browser • Bing Translator • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions)	
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
WLAN	<i>One of the following, configurable by model:</i> • Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card										
WWAN	None										
SIM card	None										
Smart Card Read	None										
ExpressCard	None										
Dimensions	12.5" (WxDxH): 12.44" x 8.70" x 0.74" (316mm x 221mm x 19.4mm)								Limited warranty	1-year - depot repair service / service upgrades available 3-year - depot repair service / service upgrades available 3-year - onsite repair service / service upgrades available	
Weight	From 3.48 lb (1.58kg)										
Case color	Graphite black or silver										
Case Material	Magnesium and aluminum + Polyphenylene sulfide (PPS)								Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant	

See footnotes for more detailed information

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(STLA2-Spec) February 2015

ThinkPad Yoga 12 20DL - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Pen	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Color	Camera	Keyboard	TPM	Finger print reader	Battery cells(wh)	Power adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DL0035US	I3-5005U	No	HD 5500	4GB	12.5" FHD	MT	Digitizer	500GB 7200	None	7265 ac+BT4.0	16GB	None	Black	720p	Backlit	TPM	No	8 (47wh)	45W	Win8.1 P64	1-depot	No	02/15
20DL003AUS	I7-5600U	vPro	HD 5500	8GB	12.5" FHD	MT	Digitizer	256GB SSD OPAL2	None	7265 ac+BT4.0	None	None	Black	720p	Backlit	TPM	No	8 (47wh)	45W	Win8.1 P64	1-depot	No	02/15
20DL0038US	I5-5300U	vPro	HD 5500	8GB	12.5" FHD	MT	Digitizer	180GB SSD OPAL2	None	7265 ac+BT4.0	None	None	Black	720p	Backlit	TPM	No	8 (47wh)	45W	Win8.1 P64	1-depot	No	02/15
20DL0032US	I5-5300U	vPro	HD 5500	8GB	12.5" FHD	MT	Digitizer	500GB 7200	None	7265 ac+BT4.0	16GB	None	Black	720p	Backlit	TPM	No	8 (47wh)	45W	Win8.1 P64	1-depot	No	02/15
20DL003BUS	I5-5200U	No	HD 5500	4GB	12.5" FHD	MT	Digitizer	500GB 7200	None	7265 ac+BT4.0	16GB	None	Black	720p	Backlit	TPM	No	8 (47wh)	45W	Win8.1 P64	1-depot	No	02/15
20DL0037US	I5-5200U	No	HD 5500	4GB	12.5" HD	MT	None	500GB 7200	None	7265 ac+BT4.0	16GB	None	Black	720p	Backlit	TPM	No	8 (47wh)	45W	Win8.1 P64	1-depot	No	02/15
20DL0039US	I5-5300U	vPro	HD 5500	8GB	12.5" HD	MT	None	1TB 5400	None	7265 ac+BT4.0	16GB	None	Black	720p	Backlit	TPM	No	8 (47wh)	45W	Win8.1 P64	1-depot	No	02/15
20DL0031US	I7-5500U	No	HD 5500	8GB	12.5" HD	MT	None	500GB 7200	None	7265 ac+BT4.0	16GB	None	Black	720p	Backlit	TPM	No	8 (47wh)	45W	Win8.1 P64	1-depot	No	02/15
20DL0036US	I3-5005U	No	HD 5500	4GB	12.5" HD	MT	None	500GB 7200	None	7265 ac+BT4.0	16GB	None	Black	720p	Backlit	TPM	No	8 (47wh)	45W	Win8.1 P64	1-depot	No	02/15

• For detailed platform specifications, please see [ThinkPad Yoga 12 Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor									Dimensions	12.5" (WxDxH): 12.44" x 8.70" x 0.74" (316mm x 221mm x 19.4mm)			
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics	Weight	From 3.48 lb (1.58kg)				
	i3-5005U	2	4	2.0 GHz	-	3MB	DDR3L-1600	HD5500	Case color	Graphite black or silver				
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500	Case Material	Magnesium and aluminum + Polyphenylene sulfide (PPS)				
	i5-5300U	2	4	2.3 GHz	2.9 GHz	3MB		HD5500	Multicard Reader	4-in-1 reader (MMC, SD, SDHC, SDXC)				
	i7-5500U	2	4	2.4 GHz	3.0 GHz	4MB		HD5500	Ports	Two USB 3.0 (one Always On), mini HDMI, Lenovo OneLink connector, combo audio / microphone jack				
	i7-5600U	2	4	2.6 GHz	3.2 GHz	4MB		HD5500	Monitor cable	None				
Graphics	Intel HD Graphics 5500 in processor only									Camera	HD720p resolution, fixed focus			
Chipset	Intel SoC (System on Chip) platform									Audio support	HD Audio, Conexant® CX22752 codec, Dolby® Home Theater® v4 / stereo speakers, 1.5W x 2 / dual array microphone, combo audio / microphone jack			
Memory	8GB max / PC3-12800 1600MHz DDR3L, soldered to systemboard, no sockets									Keyboard	6-row, LED backlit, spill-resistant, multimedia Fn keys			
Display	<i>Some:</i> 12.5" (317.5mm) HD (1366x768) color, glossy, LED backlight, 300 nits, 16:9 aspect ratio, IPS <i>Some:</i> 12.5" (317.5mm) FHD (1920x1080) color, anti-glare, LED backlight, 400 nits, 16:9 aspect ratio, IPS									UltraNav™	TrackPoint® pointing device and multi-touch with 3+2 buttons click pad			
Multi-touch	Supports 10-finger gesture									ThinkLight™	None			
Hinge	Yoga hinge, 360 degree									Security	Power-on password, hard disk password, supervisor password, security keyhole			
Convertible mode	Laptop, tent, stand and tablet									Security chip	Trusted Platform Module, TCG 1.2-compliant			
Pen	<i>Some:</i> Wacom® Active pen with glossy panel, batteries required <i>Some:</i> Wacom® Digitizer pen with anti-glare panel, no batteries required									vPro	<i>Some:</i> Intel vPro Technology			
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> SSHD with 8GB NAND flash memory									Fingerprint reader	None			
Optical	None									NFC	None			
M.2 SSD	<i>Some:</i> M.2 Solid State Drive (SSD), via M.2 Card slot									Battery type	Li-Polymer 8-cell (47Wh)			
Ethernet	None									Battery life	Up to 8.0 hr			
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter									AC adapter	45-watt AC adapter			
WLAN	<i>One of the following, configurable by model:</i> <ul style="list-style-type: none"> Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 Card Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card 									Preload	<i>Some:</i> No operating system <i>Some:</i> Windows® 7 Professional 64		<i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit	
										Limited warranty	1-year - depot repair service / service upgrades available 3-year - depot repair service / service upgrades available 3-year - onsite repair service / service upgrades available			
										Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant			

See footnotes for more detailed information



Lenovo® ThinkPad Yoga 15



Lenovo ThinkPad Yoga 15



Lenovo ThinkPad Yoga 15

ThinkPad Yoga 15 Platform Specifications

Product Specifications Reference (PSREF)

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor								Multicard Reader Ports	4-in-1 reader (MMC, SD, SDHC, SDXC) Two USB 3.0 (one Always On), one USB 2.0, HDMI, Lenovo OneLink connector combo audio / microphone jack	
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics		Monitor cable	None
	i3-5010U	2	4	2.1 GHz	-	3MB	DDR3L-1600	HD5500		Camera	<i>Some:</i> HD720p resolution, fixed focus <i>Some:</i> 3D camera, Intel RealSense™ 3D Camera
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500		Audio support	HD Audio, Realtek® ALC283 codec, Dolby® Advanced Audio™ v4 / stereo JBL branded speakers, 1.5W x 2 / dual array microphone, combo audio / microphone jack
i7-5500U	2	4	2.4 GHz	3.0 GHz	4MB		HD5500	Keyboard UltraNav™ ThinkLight™	6-row, LED backlit, spill-resistant, multimedia Fn keys, numeric keypad TrackPoint® pointing device and multi-touch with 3+2 buttons click pad None		
Graphics	Intel HD Graphics in processor only, or Nvidia Geforce 840M Graphics, 2GB DDR3 memory, digital monitor support via HDMI™ (supporting HDCP to output protected content); supports dual independent display Max resolution: 1920x1080 (HDMI)@60Hz								Security Security chip vPro	Power-on password, hard disk password, supervisor password, security keyhole <i>Some:</i> Trusted Platform Module, TCG 1.2-compliant None	
Chipset Memory	Intel SoC (System on Chip) platform 16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Fingerprint reader NFC	<i>Some:</i> Fingerprint reader on the keyboard bezel, swipe sensor None	
Display	<i>Some:</i> 15.6" (396mm) FHD (1920x1080) color, glossy, LED backlight, 300 nits, 16:9 aspect ratio, IPS <i>Some:</i> 15.6" (396mm) FHD (1920x1080) color, anti-glare, LED backlight, 300 nits, 16:9 aspect ratio, IPS								Battery type Battery life AC adapter	Li-Polymer 4-cell (66Wh) Up to 8.0 hr <i>Some:</i> 45-watt AC adapter (Integrated Graphics) <i>Some:</i> 65-watt AC adapter (Discrete Graphics)	
Multi-touch Hinge Convertible mode Active pen	Supports 10-finger gesture Yoga hinge, 360 degree Laptop, tent, stand and tablet <i>Some:</i> Wacom® Active pen, batteries required								Light sensor G-sensor/ eCompass Gyroscope	Ambient Light Sensor 3D accelerometer and 3D magnetometer 3D compass, 3D inclinometer 3D gyrometer	
Storage	<i>Some:</i> SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable <i>Some:</i> HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ <i>Some:</i> SSHD with 8GB NAND flash memory								Preload	<i>Some:</i> No operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo SHAREit • ThinkVantage Product Recovery • Rescue and Recovery™ • ThinkVantage System Update • PC Device Stage • Adobe® Reader® • Evernote® • Skype™ • Maxthon Cloud Browser • Microsoft® Office preloaded; purchase a product key to activate	<i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit • Lenovo Solution Center • Lenovo SHAREit • Lenovo Companion • ThinkVantage System Update • PC Device Stage • Weather Channel • Evernote • Maxthon Cloud Browser • Bing Translator • Norton Studio • Microsoft Office preloaded; purchase a product key to activate • Norton Internet Security (30 days of virus definitions)
Optical M.2 SSD	None <i>Some:</i> M.2 Solid State Drive (SSD), via M.2 Card slot								Limited warranty	1-year - depot repair service / service upgrades available	
Ethernet Bluetooth™	None Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant	
WLAN	<i>One of the following, configurable by model:</i> • Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card										
WWAN (optional)	<i>Some:</i> Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/ EDGE, GPS, M.2 Card										
SIM card	None										
Smart Card Read ExpressCard	None None										
Dimensions Weight Case color Case Material	FHD (WxDxH): 15.07" x 10.07" x 0.82" (383mm x 256mm x 21mm) From 5.07 lb (2.30kg) Graphite black or silver Aluminum										

See footnotes for more detailed information

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ThinkPad Yoga 15 20DQ (Geforce) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	vPro	Graphics	Memory	Display	Multi-touch	Pen	Storage	Optical	WLAN & Bluetooth	WWAN/SSD	SIM card	Color	Camera	Keyboard	TPM	Finger print reader	Battery cells(wh)	Power adapter (watt)	Preload	Base Warranty (year)	Global	Ann Date (m/y)
20DQ001KUS	I5-5200U	No	840M	4GBx2	15.6" FHD	MT	None	180GB SSD OPAL2	None	7265 ac+BT4.0	None	None	Black	720p	Numpad	None	No	4 (66wh)	65W	Win8.1 P64	1-depot	No	01/15
20DQ001JUS	I5-5200U	No	840M	4GBx1	15.6" FHD	MT	None	500GB 7200	None	7265 ac+BT4.0	16GB	None	Black	720p	Numpad	None	No	4 (66wh)	65W	Win8.1 P64	1-depot	No	01/15
20DQ001LUS	I7-5500U	No	840M	4GBx2	15.6" FHD	MT	None	256GB SSD OPAL2	None	7265 ac+BT4.0	None	None	Black	720p	Numpad	None	No	4 (66wh)	65W	Win8.1 P64	1-depot	No	01/15

• For detailed platform specifications, please see [ThinkPad Yoga 15 Platform Specifications sheet](#)

Processor	5th Generation Intel® Core™ i3 / i5 / i7 Processor								Dimensions Weight Case color Case Material	FHD (WxDxH): 15.07" x 10.07" x 0.82" (383mm x 256mm x 21mm) From 5.07 lb (2.30kg) Graphite black or silver Aluminum
	Processor Number	# of Cores	# of Threads	Base Frequency	Max Turbo Frequency	Cache	Memory speed	Processor Graphics		
	i3-5010U	2	4	2.1 GHz	-	3MB	DDR3L-1600	HD5500		
	i5-5200U	2	4	2.2 GHz	2.7 GHz	3MB		HD5500		
i7-5500U	2	4	2.4 GHz	3.0 GHz	4MB					
Graphics	Nvidia Geforce 840M Graphics, 2GB DDR3 memory, digital monitor support via HDMI™ (supporting HDCP to output protected content)								Monitor cable	None
Chipset	Intel SoC (System on Chip) platform								Camera	Some: HD720p resolution, fixed focus Some: 3D camera, Intel RealSense™ 3D Camera
Memory	16GB max ⁷ / PC3-12800 1600MHz DDR3L, non-parity, dual-channel capable, two 204-pin SO-DIMM sockets								Audio support	HD Audio, Realtek® ALC283 codec, Dolby® Advanced Audio™ v4 / stereo JBL branded speakers, 1.5W x 2 / dual array microphone, combo audio / microphone jack
Display	15.6" (396mm) FHD (1920x1080) color, glossy, LED backlight, 300 nits, 16:9 aspect ratio, IPS								Keyboard	6-row, LED backlit, spill-resistant, multimedia Fn keys, numeric keypad
Multi-touch	Supports 10-finger gesture								UltraNav™	TrackPoint® pointing device and multi-touch with 3+2 buttons click pad
Hinge	Yoga hinge, 360 degree								ThinkLight™	None
Convertible mode	Laptop, tent, stand and tablet								Security	Power-on password, hard disk password, supervisor password, security keyhole
Active pen	Some: Wacom® Active pen, batteries required								Security chip	Some: Trusted Platform Module, TCG 1.2-compliant
Storage	Some: SSD / SATA 6.0Gb/s, 2.5" wide, 7mm high, removable, upgradable Some: HDD / SATA 6.0Gb/s, 2.5" wide, removable, upgradable, Shock Mounted Hard Drive, Active Protection System™ Some: SSHD with 8GB NAND flash memory								vPro	None
Optical	None								Fingerprint reader	Some: Fingerprint reader on the keyboard bezel, swipe sensor
M.2 SSD	Some: M.2 Solid State Drive (SSD), via M.2 Card slot								NFC	None
Ethernet	None								Battery type	Li-Polymer 4-cell (66Wh)
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								Battery life	Up to 8.0 hr
									AC adapter	Some: 45-watt AC adapter (Integrated Graphics) Some: 65-watt AC adapter (Discrete Graphics)
WLAN	One of the following, configurable by model: • Intel Wireless-N 7265, 2x2, Wi-Fi + Bluetooth combo adapter, M.2 Card • Intel Dual Band Wireless-AC 7265, 2x2, Wi-Fi + BT combo adapter, M.2 Card								Preload	Some: No operating system Some: Windows® 7 Professional 64 Some: Windows 8.1 Pro 64-bit preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
WWAN (optional)	Some: Wireless WAN, Sierra Wireless EM7345, Intel 4G LTE/HSPA/GSM/GPRS/EDGE, GPS, M.2 Card								Limited warranty	1-year - depot repair service / service upgrades available
SIM card	None								Environment	EPEAT™ Gold; ENERGY STAR®; RoHS-compliant

See footnotes for more detailed information

Lenovo Quick Pick (<http://www.lenovoquickpick.com>) is an options and services configurator for Lenovo systems.

For the options and services information on ThinkPad systems, please see below:

ThinkPad 10

<http://www.lenovoquickpick.com/usa/system/thinkpad/tablet/thinkpad-10>

ThinkPad Tablet 2

<http://www.lenovoquickpick.com/usa/system/thinkpad/tablet/tablet-2>

ThinkPad Helix

<http://www.lenovoquickpick.com/usa/system/thinkpad/other-thinkpad/helix>
<http://www.lenovoquickpick.com/usa/system/thinkpad/multimode/thinkpad-helix-2nd-gen>

ThinkPad Yoga

<http://www.lenovoquickpick.com/usa/system/thinkpad/other-thinkpad/yoga>

ThinkPad 11e Yoga

<http://www.lenovoquickpick.com/usa/system/thinkpad/other-thinkpad/thinkpad-11e-windows>

ThinkPad Yoga 15

<http://www.lenovoquickpick.com/usa/system/thinkpad/yoga/yoga-15-s5>

Disclaimer

Lenovo provides the information in the Product Specifications Reference (PSREF) withdrawn product books on an "AS-IS" basis. Because the actual products have been withdrawn from marketing, the information in these withdrawn product books is no longer maintained or updated. The referenced footnote numbering may not correspond with the listed footnotes.

PSREF books for the withdrawn systems:

http://www.lenovo.com/psref/psrefs_withdrawn.html

Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, go to http://support.lenovo.com/en_US/product-service/warranty-status/WarrantyPolicies.page. Lenovo makes no representation or warranty regarding third party products or services.

Footnotes:

- ¹ Power management, including Intel® SpeedStep® Technology, reduces processor speed when in battery mode.
- ² **Weight** includes battery and standard optical drive; weight may vary due to vendor components, manufacturing process and options.
- ³ **Thinness** may vary at certain points on the system.
- ⁴ **Wireless capability:** Requires compatible wireless-enabled options sold separately.
- ⁵ **TAA:** ThinkPad notebook is compliant with the U.S. Federal Government's country-of-origin requirements prescribed in 48 C.F.R. Subpart 25.4; Trade Act Agreement (TAA) model.
- ⁶ **Public network download modem speeds** are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.
- ⁷ **Maximum memory capacity** may require the replacement of standard component with largest supported component available. On ThinkPad systems, even though it is possible to physically install 4GB of memory, the actual amount of memory addressable by a 32-bit operating system will be limited to 3GB. This limitation does not exist with 64-bit operating systems.
- ⁸ **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.
- ⁹ **CD/DVD drive speeds** list maximum rates; rates are variable and are often less than the maximum.
- ¹⁰ **Battery:** These model numbers achieved the battery life based on MobileMark® 2012 during testing. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning, and other customer preferences.
- ¹¹ **External monitor:** This system supports a maximum of two external monitors. The integrated display(s) must be disabled to support two external monitors.
- ¹² **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.
- ¹³ **Internet access not included.**
- ¹⁴ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. Software license agreements may apply.
- ¹⁶ **Activating Verizon Wireless Service:** Lenovo customers will be contacted after purchase to activate service; requires separate agreement with Verizon Wireless and is subject to the Customer Agreement, Calling Plan, and credit approval. Service, airtime, and early termination charges may apply. Verizon Wireless, not Lenovo, is solely responsible for service. Service not available in all areas; purchaser is responsible for verifying that service is available for the intended location before purchasing a computer equipped with WAN card. Network details, coverage limitations, and maps at www.verizonwireless.com.
- ¹⁷ **International Warranty Service** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.
- ¹⁸ **Telephone support** may be subject to additional charges, even during the limited warranty period. Response times may vary. May exclude some holidays. If a machine is listed as having "On-site service for select repairs", this means that onsite service is available only for the replacement of select parts. For all other warranty repairs, Lenovo will provide the customer a replacement part for customer installation. The parts for which onsite service is available varies by machine, but may include the processor, power supply, heat sink, system board, or base cover. For ThinkPad notebooks with Depot or Courier service, Lenovo will attempt to diagnose and resolve the problem remotely before sending a courier.
- ¹⁹ **Depot repair service:** The customer may be asked certain diagnostic questions before a courier is sent. Your ThinkPad purchase includes this depot repair service, available in the U.S. during the limited warranty period.
- ²⁰ **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.
- ²¹ **For combination drives,** maximum possible speeds only are given in the following order: CD write, CD rewrite, CD read, DVD read.

²² **Lenovo Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. For ThinkPad notebooks requiring LCD or other component replacement, Lenovo may choose to perform service at the depot repair center. Calls must be received by 5 pm local time in order to qualify for Next Business Day service. P&L means parts and labor. P/U means pick-up. See Lenovo Warranty Services terms and conditions for complete details and restrictions.

²³ **Activating AT&T Wireless Service:** Requires separate agreement with AT&T, subject to service agreement, rate plan and coverage maps. AT&T, not Lenovo, is solely responsible for service. Coverage not available in all areas; AT&T BroadbandConnect available in select metropolitan markets. Special credit and tenure restrictions and additional charges may apply to international roaming. A network connection, third-party software, additional hardware, and/or subscription to a third-party service may be required for certain solutions/applications. Additional restrictions apply, including early termination fee; see www.wireless.att.com for details. To activate call Lenovo Wireless Activation Hot Line at 1-877-299-4710.

²⁴ **Limited onsite service systems** are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.

²⁶ **Full-size keyboard:** As defined by ISO/IEC 15412.

²⁷ **Based on IEEE 802.11a and 802.11b.** A customer can not upgrade to a different wireless Mini PCI adapter due to FCC regulations. Security screws prevent removal of this adapter. This wireless LAN product has been designed to permit legal operation world-wide in regions which it is approved. This product has been tested and certified to be interoperable by the Wireless Ethernet Compatibility Alliance and is authorized to carry the Wi-Fi logo.

²⁸ **The IEEE 802.11n specification (MIMO)** has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.

³⁰ **Measures only maximum** data transfer rate, not application performance. Many factors affect application performance.

³² **Wireless:** Based on IEEE 802.11a, 802.11b, and 802.11g respectively. An adapter with 11a/b, 11b/g, or 11a/b/g can communicate on either/any of these listed formats respectively, the actual connection will be based on the access point to which it connects.

³⁶ **Wireless upgradable** allows the system to be wireless-enabled with an optional wireless Mini PCI or Mini PCI Express card. Designed to operate only with Lenovo options.

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Visit www.lenovo.com/safecomputing periodically for the latest information on safe and effective computing.

Visit www.lenovo.com/psref for the latest version of Product Specifications Reference.

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Recently Launched Think Accessories



ThinkPad Compact Bluetooth Keyboard with Trackpoint
(PN: 0B47189)



Lenovo Wireless TouchPad for Windows 8
(PN: 0A33909)



ThinkPad Noise Cancelling Earbuds
(PN: 0B47313)

Additional Think Accessories



ThinkPad USB 3.0 Portable Secure HDD (500GB , 750GB, 1TB)
(PN: 0A65619, 0A65616, 0A65621)



Kensington MicroSaver Security Cable Lock from Lenovo
(PN: 73P2582)



Lenovo Ultralim Wireless Keyboard and Mouse Combo
(PN: 0A34032)

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Lenovo Quick Pick (<http://www.lenovoquickpick.com/>) is an options compatibility configurator for Lenovo systems.

For more information on the various ThinkCentre systems, please see below :

<p><u>ThinkCentre M32</u> M32 Thin Client 10BM/10BV www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m32-thin-client</p>	<p><u>ThinkCentre M73z</u> M73z AIO 10BB/10BC www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m73z-aio</p>
<p><u>ThinkCentre M73</u> M73 Tiny 10AX/10AY www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m73-tiny M73 Small 10B4/10B5/10B6/10B7 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m73-sff M73 Tower 10B0/10B1/10B2/10B3 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m73-tower</p>	<p><u>ThinkCentre M93z</u> M93z AIO 10AC/10AD/10AE/10AF www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m93z-aio <u>ThinkCentre Edge 62z</u> Edge 62z AIO 2117 www.lenovoquickpick.com/usa/system/thinkcentre/e-series/edge-62z-aio</p>
<p><u>ThinkCentre M78</u> M78 Small 10BS/10BT/10BU www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m78-sff M78 Tower 10BN/10BQ/10BR www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m78-tower</p>	<p><u>ThinkCentre E63z</u> E63z AIO 10D4/10D5/10D6/10D7 www.lenovoquickpick.com/usa/system/thinkcentre/e-series/e63z-aio <u>ThinkCentre E93z</u> E93z AIO 10B8/10B9/10BA/10BH/10BJ/10BK www.lenovoquickpick.com/usa/system/thinkcentre/e-series/e93z-aio</p>
<p><u>ThinkCentre M79</u> M79 Small 10CT/10CU/10CV/10CW www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m79-sff M79 Tower 10CN/10CQ/10CR/10CS www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m79-tower</p>	
<p><u>ThinkCentre M83</u> M83 Small 10AH/10AJ/10AM/10AN www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m83-sff M83 Tower 10AG/10AK/10AL/10BE www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m83-tower</p>	
<p><u>ThinkCentre M93/M93p</u> M93/M93p Tiny 10A4/10A5/10AA/10AB www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m93-m93p-tiny M93/M93p Small 10A2/10A3/10A8/10A9 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m93-m93p-sff M93/M93p Tower 10A0/10A1/10A6/10A7 www.lenovoquickpick.com/usa/system/thinkcentre/m-series/m93-m93p-tower</p>	
<p><u>ThinkCentre E73</u> E73 Small 10AU/10AW/10BF/10BG www.lenovoquickpick.com/usa/system/thinkcentre/e-series/e73-sff E73 Tower 10AS/10AV www.lenovoquickpick.com/usa/system/thinkcentre/e-series/e73-tower</p>	

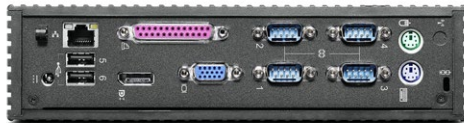
ThinkCentre M32 Thin Client



Lenovo ThinkCentre M32 Thin Client with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M32 Thin Client



Lenovo ThinkCentre M32 Thin Client



Lenovo ThinkCentre M32 Thin Client



Lenovo ThinkCentre M32 Thin Client (inside view)



Lenovo ThinkCentre M32 Thin Client

ThinkCentre M32 (10BV) - Thin Client (TopSeller) - 1-year depot

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Flash Memory	Optical	Graphics	DP to DVI dongle	Floor stand	Key-board/ Mouse	ENERGY STAR 6.0 Global	OS preload	Ann date (mm/dd/yy)
10BV0006US	Celeron 807	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS 09/03/13
10BV0009US	Celeron 807	4GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS 09/03/13
10BV0007US	Celeron 807	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES6.0	None	WES 7 09/03/13
10BV0008US	Celeron 807	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES6.0	None	WES 7 09/03/13
10BV000EUS	Celeron 847	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS 12/10/13
10BV000FUS	Celeron 847	4GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS 12/10/13
10BV000AUS	Celeron 847	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES6.0	None	WES 7 12/10/13
10BV000BUS	Celeron 847	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES6.0	None	WES 7 12/10/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year depot warranty

Positioning	<i>Mainstream Thin Client with better security and manageability for the enterprise</i>							Preloaded operating system				
Processor	Intel® Celeron® Processor 807 (1 cores / 2 threads, 1.5GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Celeron Processor 847 (2 cores / 2 threads, 1.1GHz, 2MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology							Some: Genuine Windows® Embedded Standard 7 (WES 7) Some: LeTOS (Lenovo Terminal Operating System, Linux-based)				
Memory	4GB max, PC3-12800 1600MHz DDR3* , one 204-pin SODIMM socket (notebook) * System automatically clocks down for processors with 1333MHz DDR3 memory controller							Preloaded applications (only some listed) - WES 7 only: <ul style="list-style-type: none"> • Intel Management Engine Components • RDP Client • Citrix Client • VMware Client • Internet Explorer 9 • Java • Flash • .Net Framework • Microsoft® Silverlight • Echo Agent • Ultra VNC • Adobe Reader • Intel Manageability Engine Firmware Recovery Agent 				
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x2048 (DisplayPort) @60Hz; 2560x1600 (VGA) @60Hz Optional DisplayPort to Single-link DVI-D dongle							- LeTOS only: <ul style="list-style-type: none"> • xFreeRDP • Citrix ICA Client • VMware View Client • Java • Mozilla Firefox • NX NoMachine Client • X11 Client • VDI-In-A-Box Java Client • AnyConnect VPN Client 				
DP dongle	Optional DisplayPort to Single-link DVI-D dongle											
Flash Memory	1GB (LeTOS models) or 8GB (WES 7 models) / DOM (Disk On Module) Card							Network-based Thin Client Management Tool - Lenovo Thin Client Manager (LTM)* *A license is included with the purchase of M32 and the utility is downloadable from website				
Optical	None											
SATA controller	Serial ATA, SATA 3.0Gb/s support, integrated in chipset											
Onboard SATA	one SATA 3.0Gb/s connector for DOM Card											
eSATA port	None											
Chipset	Mobile Intel NM70 Express Chipset											
Front ports	Four USB 2.0, microphone (3.5mm), headphone (3.5mm)											
Rear ports	Two USB 2.0, ethernet (RJ-45), two PS/2 ports (keyboard and mouse), one parallel, four serial ports (Customizable Pin definition for serial port 2, 3, and 4), one VGA, one DisplayPort											
PCIe Mini Card	None											
PCIe WLAN	None											
Bluetooth	None											
Audio	High Definition (HD) Audio, Realtek® ALC662-VD codec											
Speaker	None											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Realtek RTL8111F, Wake on LAN®											
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
VESA mount	Supports VESA 100mm mount standard											
Power supply	65 watts adapter, autosensing 100-240V, 85% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; USFF (2L) • Fan-less, Cable-less Design • (Without stand) 2.2" W X 6.7" D X 8.7" H • (Without stand) 55mm W X 170mm D X 220mm H • (Without stand) 3.3 lb (1.48 kg) in maximum configuration 											
Protocols	Citrix: Microsoft: VMWare:	ICA, HDX (compatible with XenDesktop and XenApp) RDP, RemoteFX (WES 7 models only), RDS VMware Horizon View through RDP VMware Horizon View through PCoIP					EPEAT™ Gold rating (WES models) ENERGY STAR® 6.0 (WES models) GREENGUARD® certified RoHS-compliant WEEE REACH VMWare Ready Certification Citrix Ready/HDX Ready Certification MS RemoteFX Certification (WES models)					
Limited Warranty	1-years, depot repair service / service upgrades available							For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information

US model(s) announced September 3, 2013 or December 10, 2013

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(CLVL1-3) December 2013

ThinkCentre M32 (10BV) - Thin Client (TopSeller) - 1-year onsite

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Flash Memory	Optical	Graphics	DP to DVI dongle	Floor stand	Key-board/ Mouse	ENERGY STAR 6.0 Global	OS preload	Ann date (mm/dd/yy)	
10BV0005US	Celeron 807	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS	09/03/13
10BV0001US	Celeron 807	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES6.0	None	WES 7	09/03/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Mainstream Thin Client with better security and manageability for the enterprise</i>							Preloaded operating system				
Processor	Intel® Celeron® Processor 807 (1 cores / 2 threads, 1.5GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology							Some: Genuine Windows® Embedded Standard 7 (WES 7) Some: LeTOS (Lenovo Terminal Operating System, Linux-based)				
Memory	4GB max, PC3-12800 1600MHz DDR3* , one 204-pin SODIMM socket (notebook) * System automatically clocks down for processors with 1333MHz DDR3 memory controller							Preloaded applications (only some listed)				
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x2048 (DisplayPort)@60Hz; 2560x1600 (VGA)@60Hz</i> Optional DisplayPort to Single-link DVI-D dongle							- WES 7 only:				
DP dongle								<ul style="list-style-type: none"> • Intel Management Engine Components • RDP Client • Citrix Client • VMware Client • Internet Explorer 9 • Java • Flash • .Net Framework • Microsoft® Silverlight • Echo Agent • Ultra VNC • Adobe Reader • Intel Manageability Engine Firmware Recovery Agent 				
Flash Memory	1GB (LeTOS models) or 8GB (WES 7 models) / DOM (Disk On Module) Card							- LeTOS only:				
Optical	None							<ul style="list-style-type: none"> • xFreeRDP • Citrix ICA Client • VMware View Client • Java • Mozilla Firefox • NX NoMachine Client • X11 Client • VDI-In-A-Box Java Client • AnyConnect VPN Client 				
SATA controller	Serial ATA, SATA 3.0Gb/s support, integrated in chipset							Network-based Thin Client Management Tool - Lenovo Thin Client Manager (LTM)*				
Onboard SATA	one SATA 3.0Gb/s connector for DOM Card							*A license is included with the purchase of M32 and the utility is downloadable from website				
eSATA port	None							Security				
Chipset	Mobile Intel NM70 Express Chipset							<ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Serial port and parallel port disablement 				
Front ports	Four USB 2.0, microphone (3.5mm), headphone (3.5mm)							EPEAT™ Gold rating (WES models)				
Rear ports	Two USB 2.0, ethernet (RJ-45), two PS/2 ports (keyboard and mouse), one parallel, four serial ports (Customizable Pin definition for serial port 2, 3, and 4), one VGA, one DisplayPort							ENERGY STAR® 6.0 (WES models)				
PCIe Mini Card	None							GREENGUARD® certified				
PCIe WLAN	None							RoHS-compliant				
Bluetooth	None							WEEE				
Audio	High Definition (HD) Audio, Realtek® ALC662-VD codec							REACH				
Speaker	None							VMWare Ready Certification				
IEEE 1394	None							Citrix Ready/HDX Ready Certification				
Ethernet	One gigabit ethernet port, Realtek RTL8111F, Wake on LAN®							MS RemoteFX Certification (WES models)				
Intel AMT	None							For compatible accessories, please go to TC-AQP sheet;				
Modem	None							For Lenovo service upgrade options, please go to S-TC sheet				
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
VESA mount	Supports VESA 100mm mount standard											
Power supply	65 watts adapter, autosensing 100-240V, 85% PSU											
Machine	<ul style="list-style-type: none"> • Business black color; USFF (2L) • Fan-less, Cable-less Design • (Without stand) 2.2" W X 6.7" D X 8.7" H • (Without stand) 55mm W X 170mm D X 220mm H • (Without stand) 3.3 lb (1.48 kg) in maximum configuration 											
Protocols	Citrix:	ICA, HDX (compatible with XenDesktop and XenApp)										
	Microsoft:	RDP, RemoteFX (WES 7 models only), RDS										
	VMWare:	VMware Horizon View through RDP VMware Horizon View through PCoIP										
Limited Warranty	1-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											

See footnotes for important warranty information
US model(s) announced September 3, 2013

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ThinkCentre M32 (10BV) - Thin Client (TopSeller) - 3-year onsite

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Flash Memory	Optical	Graphics	DP to DVI dongle	Floor stand	Key-board/ Mouse	ENERGY STAR 6.0 Global	OS preload	Ann date (mm/dd/yy)	
10BV0004US	Celeron 807	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS	09/03/13
10BV0000US	Celeron 807	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES6.0	None	WES 7	09/03/13
10BV0002US	Celeron 807	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES6.0	None	WES 7	09/03/13
10BV000GUS	Celeron 847	2GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS	12/10/13
10BV000HUS	Celeron 847	4GBx1	1G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	None	None	LeTOS	12/10/13
10BV000CUS	Celeron 847	2GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES6.0	None	WES 7	12/10/13
10BV000DUS	Celeron 847	4GBx1	8G DOM Card	None	Intel HD Graphics	None	Floor stand	USB	ES6.0	None	WES 7	12/10/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Mainstream Thin Client with better security and manageability for the enterprise</i>							Preloaded operating system				
Processor	Intel® Celeron® Processor 807 (1 cores / 2 threads, 1.5GHz, 1.5MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Celeron Processor 847 (2 cores / 2 threads, 1.1GHz, 2MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology							Some: Genuine Windows® Embedded Standard 7 (WES 7) Some: LeTOS (Lenovo Terminal Operating System, Linux-based)				
Memory	4GB max, PC3-12800 1600MHz DDR3* , one 204-pin SODIMM socket (notebook) * System automatically clocks down for processors with 1333MHz DDR3 memory controller							Preloaded applications (only some listed) - WES 7 only: <ul style="list-style-type: none"> • Intel Management Engine Components • RDP Client • Citrix Client • VMware Client • Internet Explorer 9 • Java • Flash • .Net Framework • Microsoft® Silverlight • Echo Agent • Ultra VNC • Adobe Reader • Intel Manageability Engine Firmware Recovery Agent 				
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 10.1, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x2048 (DisplayPort) @60Hz; 2560x1600 (VGA) @60Hz</i> Optional DisplayPort to Single-link DVI-D dongle							- LeTOS only: <ul style="list-style-type: none"> • xFreeRDP • Citrix ICA Client • VMware View Client • Java • Mozilla Firefox • NX NoMachine Client • X11 Client • VDI-In-A-Box Java Client • AnyConnect VPN Client 				
DP dongle	Optional DisplayPort to Single-link DVI-D dongle											
Flash Memory	1GB (LeTOS models) or 8GB (WES 7 models) / DOM (Disk On Module) Card											
Optical	None											
SATA controller	Serial ATA, SATA 3.0Gb/s support, integrated in chipset											
Onboard SATA	one SATA 3.0Gb/s connector for DOM Card											
eSATA port	None											
Chipset	Mobile Intel NM70 Express Chipset											
Front ports	Four USB 2.0, microphone (3.5mm), headphone (3.5mm)											
Rear ports	Two USB 2.0, ethernet (RJ-45), two PS/2 ports (keyboard and mouse), one parallel, four serial ports (Customizable Pin definition for serial port 2, 3, and 4), one VGA, one DisplayPort											
PCIe Mini Card	None											
PCIe WLAN	None											
Bluetooth	None											
Audio	High Definition (HD) Audio, Realtek® ALC662-VD codec											
Speaker	None											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Realtek RTL8111F, Wake on LAN®							Network-based Thin Client Management Tool - Lenovo Thin Client Manager (LTM)* *A license is included with the purchase of M32 and the utility is downloadable from website				
Intel AMT	None											
Modem	None											
Security chip	None											
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	System floor stand for vertical orientation											
VESA mount	Supports VESA 100mm mount standard											
Power supply	65 watts adapter, autosensing 100-240V, 85% PSU							Security <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Serial port and parallel port disablement 				
Machine	<ul style="list-style-type: none"> • Business black color; USFF (2L) • Fan-less, Cable-less Design • (Without stand) 2.2" W X 6.7" D X 8.7" H • (Without stand) 55mm W X 170mm D X 220mm H • (Without stand) 3.3 lb (1.48 kg) in maximum configuration 							EPEAT™ Gold rating (WES models) ENERGY STAR® 6.0 (WES models) GREENGUARD® certified RoHS-compliant WEEE REACH VMWare Ready Certification Citrix Ready/HDX Ready Certification MS RemoteFX Certification (WES models)				
Protocols	Citrix: Microsoft: VMWare:	ICA, HDX (compatible with XenDesktop and XenApp) RDP, RemoteFX (WES 7 models only), RDS VMware Horizon View through RDP VMware Horizon View through PCoIP					For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet					
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											

See footnotes for important warranty information
 US model(s) announced September 3, 2013 or December 10, 2013

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ThinkCentre M53 Tiny with optional floor stand, wireless keyboard/mouse, and monitor



ThinkCentre M53 Tiny with optional floor stand



ThinkCentre M53 Tiny with optional VESA mount kit



ThinkCentre M53 Tiny with optional optical box



ThinkCentre M53 Tiny with optional I/O box



ThinkCentre M53 Tiny

ThinkCentre M53 Tiny Platform Specifications

Product Specifications Reference (PSREF)

Processor	Intel® Celeron® Processor J1000 Series for Desktop or Intel Pentium® Processor J2000 Series for Desktop	Mechanical	<ul style="list-style-type: none"> Tiny (1L), business black color; metal case M53 Tiny only: 7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration With VESA mount & optical box: 7.2" W X 7.2" D X 2.55" H 184mm W X 182mm D X 65mm H 4.6 lb (2.1 kg), weight may vary by configuration Optional VESA mount bracket kit, supports VESA 75mm and 100mm Optional system floor stand for vertical orientation 																		
	<table border="1"> <thead> <tr> <th>Processor</th> <th>Cores / Threads</th> <th>Frequency (Max/Base)</th> <th>Cache</th> <th>Memory Types</th> <th>Integrated Graphics</th> </tr> </thead> <tbody> <tr> <td>Celeron J1800</td> <td>2 / 2</td> <td>2.58 / 2.41 GHz</td> <td>1MB</td> <td>DDR3L-1333</td> <td>Intel HD</td> </tr> <tr> <td>Pentium J2900</td> <td>4 / 4</td> <td>2.58 / 2.41 GHz</td> <td>2MB</td> <td>DDR3L-1333</td> <td>Intel HD</td> </tr> </tbody> </table>	Processor	Cores / Threads	Frequency (Max/Base)	Cache	Memory Types	Integrated Graphics	Celeron J1800	2 / 2	2.58 / 2.41 GHz	1MB	DDR3L-1333	Intel HD	Pentium J2900	4 / 4	2.58 / 2.41 GHz	2MB	DDR3L-1333	Intel HD	VESA mount Floor Stand	Optional system floor stand for vertical orientation
Processor	Cores / Threads	Frequency (Max/Base)	Cache	Memory Types	Integrated Graphics																
Celeron J1800	2 / 2	2.58 / 2.41 GHz	1MB	DDR3L-1333	Intel HD																
Pentium J2900	4 / 4	2.58 / 2.41 GHz	2MB	DDR3L-1333	Intel HD																
Chipset	Intel one-chip platform, integrates processor core, graphics, memory controller, and Platform Controller Hub (PCH) in one chip	Power supply	65 watts AC/DC adapter, autosensing, 88% PSU (not included for TIO models)																		
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz Optional DisplayPort to DVI-D or DisplayPort to HDMI monitor cable	Limited warranty ³	<ul style="list-style-type: none"> <i>Some:</i> 1-year, depot service / service upgrades available <i>Some:</i> 1-year or 3-year, limited onsite service / service upgrades available <i>Some:</i> 3-year, limited onsite service, IWS (International Warranty Service⁹) / service upgrades available <i>For Lenovo service upgrade options, please go to S-TC sheet</i> 																		
Monitor cable	Optional DisplayPort to DVI-D or DisplayPort to HDMI monitor cable	Preload	<ul style="list-style-type: none"> <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <i>Some:</i> Genuine Windows® Embedded Standard 7 (WES 7) <i>Some:</i> Windows 7 Professional 64-bit <i>Some:</i> LeTOS (Lenovo Terminal Operating System, Linux-based) <i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit <i>Some:</i> Windows 8.1 with Bing 64-bit Ready to install applications (for Win7) • Rescue and Recovery™ • Password Manager Web install applications (for Win8.1) • Password Manager Preloaded applications (only some listed) - For both Windows 7 and Windows 8.1 • ThinkVantage System Update • Desktop Power Manager • Lenovo Solution Center • Lenovo Support • Lenovo Companion • Lenovo Reach • Lenovo SHAREit • Norton™ Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote® • Nitro Pro - Only for Windows 7: • ThinkVantage® Product Recovery • ThinkVantage Communication Utility • ThinkVantage Device Experience • View Management Utility • Lenovo Message Center Plus - Only for Windows 8.1: • Cyberlink PowerDVD (DVD±RW, DVD) • AccuWeather • Norton™ Studio • Pokki • Hightail 																		
Memory	8GB max / DDR3 Low Voltage, DDR3L-1600*, non-parity, one 204-pin SO-DIMM socket * System automatically clocks down for processors with 1333MHz DDR3 memory controller	Onboard SATA Media reader	None																		
Storage	<i>Some:</i> 8GB or 16GB / DOM (Disk On Module) Card <i>Some:</i> SATA 3.0Gb/s, 2.5" Wide, 5400 or 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 3.0Gb/s, 2.5" wide	Front ports	One USB 3.0 (Always On / Powered), one USB 2.0, one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)																		
Optical	<i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide <i>Some:</i> external optical box with slim DVD-ROM, 12.7mm high, tray-in, via USB <i>Some:</i> external optical box with slim DVD±RW, 12.7mm high, tray-in, via USB	Rear ports	Three USB 2.0 (optional external optical box or external I/O box occupies one specific USB 2.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort, one optional port (USB 2.0 or serial on selected models)																		
Onboard SATA	SATA 3.0Gb/s controller, one connectors on planar	I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port																		
Media reader	None	Audio support	High Definition (HD) Audio, Realtek ALC283 / optional internal speaker (1.5 watt)																		
WLAN ¹³	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Realtek RTL8723BE, Wi-Fi + Bluetooth 4.0 combo adapter, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Realtek RTL8192EE, Wi-Fi + Bluetooth 4.0 combo adapter, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2	WLAN ¹³	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Realtek RTL8723BE, Wi-Fi + Bluetooth 4.0 combo adapter, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Realtek RTL8192EE, Wi-Fi + Bluetooth 4.0 combo adapter, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2																		
Bluetooth™	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	Bluetooth™	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																		
Ethernet Modem	One gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®	Ethernet Modem	None																		
Manageability	None	Manageability	None																		
Security chip	None	Security chip	None																		
Security features	<ul style="list-style-type: none"> • Security slot (in rear for optional Kensington® MicroSaver® cable) • Smart USB protection, allows keyboard/mouse only, blocks all storage devices • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Optional Chassis intrusion switch 	Security features	<ul style="list-style-type: none"> • Security slot (in rear for optional Kensington® MicroSaver® cable) • Smart USB protection, allows keyboard/mouse only, blocks all storage devices • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Optional Chassis intrusion switch 																		
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo logo <i>Some:</i> Lenovo Slim USB Keyboard (USB connector), black, Lenovo logo <i>Some:</i> Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black	Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo logo <i>Some:</i> Lenovo Slim USB Keyboard (USB connector), black, Lenovo logo <i>Some:</i> Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black																		
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Environment	ENERGY STAR® 6.0 (for Windows models only); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3	Environment	ENERGY STAR® 6.0 (for Windows models only); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3																		
Accessories	For compatible accessories, please go to TC-AQP sheet	Accessories	For compatible accessories, please go to TC-AQP sheet																		

See footnotes for more detailed information

ThinkCentre M53 Tiny (10DC) - TopSeller

Product Specifications Reference (PSREF)

Model	Processor	Memory	Graphics	Storage	External Optical / I/O box	WLAN	Optional Port	Monitor Cable	Chassis Intrusion Switch	Floor Stand	VESA Mount	Key-board/ Mouse	Internal Speaker	Power Supply	Kensington Cable Lock	Preload	Base Warranty (year)	Global	Ann Date (mm/yy)
10DC0011US	Pentium J2900	4GBx1	Intel HD	500GB 7200	None	7260 b/g/n	None	None	None	Stand	None	USB	Speaker	65W	None	Win7 P64 DG Win8.1	3-onsite	No	08/14
10DC0012US	Pentium J2900	8GBx1	Intel HD	256GB SSD OPAL	None	7260 b/g/n	None	None	None	Stand	None	USB	Speaker	65W	None	Win7 P64 DG Win8.1	3-onsite	No	08/14
10DC001GUS	Pentium J2900	4GBx1	Intel HD	500GB 7200	None	RTL8723BE	None	None	None	None	None	USB	Speaker	65W	None	Win7 P64 DG Win8.1	1-onsite	No	12/14
10DC001JUS	Pentium J2900	4GBx1	Intel HD	500GB 7200	None	7260 b/g/n	None	None	None	None	None	USB	Speaker	65W	None	Win7 P64 DG Win8.1	1-onsite	No	02/15
10DC001HUS	Pentium J2900	4GBx1	Intel HD	180GB SSD OPAL	None	7260 b/g/n	None	None	None	None	None	USB	Speaker	65W	None	Win7 P64 DG Win8.1	1-onsite	No	02/15

• For detailed platform specifications, please see [ThinkCentre M53 Tiny Platform Specifications sheet](#)

Processor	Intel® Celeron® Processor J1000 Series* for Desktop or Intel Pentium® Processor J2000 Series* for Desktop	Manageability Security chip	None None																		
	<table border="1"> <thead> <tr> <th>Processor</th> <th>Cores / Threads</th> <th>Frequency (Max/Base)</th> <th>Cache</th> <th>Memory Types</th> <th>Integrated Graphics</th> </tr> </thead> <tbody> <tr> <td>Celeron J1800</td> <td>2 / 2</td> <td>2.58 / 2.41 GHz</td> <td>1MB</td> <td>DDR3L-1333</td> <td>Intel HD</td> </tr> <tr> <td>Pentium J2900</td> <td>4 / 4</td> <td>2.58 / 2.41 GHz</td> <td>2MB</td> <td>DDR3L-1333</td> <td>Intel HD</td> </tr> </tbody> </table>	Processor	Cores / Threads	Frequency (Max/Base)	Cache	Memory Types	Integrated Graphics	Celeron J1800	2 / 2	2.58 / 2.41 GHz	1MB	DDR3L-1333	Intel HD	Pentium J2900	4 / 4	2.58 / 2.41 GHz	2MB	DDR3L-1333	Intel HD	Security features	<ul style="list-style-type: none"> • Security slot (in rear for optional Kensington® MicroSaver® cable) • Smart USB protection, allows keyboard/ mouse only, blocks all storage devices • Power-on password • Administrator password <ul style="list-style-type: none"> • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Optional Chassis intrusion switch
Processor	Cores / Threads	Frequency (Max/Base)	Cache	Memory Types	Integrated Graphics																
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Pentium J2900	4 / 4	2.58 / 2.41 GHz	2MB	DDR3L-1333	Intel HD																
Chipset	Intel one-chip platform, integrates processor core, graphics, memory controller, and Platform Controller Hub (PCH) in one chip	Keyboard	USB: Preferred Pro USB Keyboard (USB connector), Lenovo logo USB(Slim): Lenovo Slim USB Keyboard (USB connector), black, Lenovo logo 2.4G: Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black																		
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz	Mouse	USB: Enhanced Optical USB Mouse, black, Lenovo logo 2.4G: Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black																		
Monitor cable	Optional DisplayPort to DVI-D or DisplayPort to HDMI monitor cable	Mechanical	<ul style="list-style-type: none"> • Tiny (1L), business black color; metal case M53 Tiny only: 7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration With VESA mount & optical box: 7.2" W X 7.2" D X 2.55" H 184mm W X 182mm D X 65mm H 4.6 lb (2.1 kg), weight may vary by configuration																		
Memory	8GB max / DDR3 Low Voltage, DDR3L-1600*, non-parity, one 204-pin SO-DIMM socket * System automatically clocks down for processors with 1333MHz DDR3 memory controller	VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm																		
Storage	<i>Some:</i> 8GB or 16GB / DOM (Disk On Module) Card <i>Some:</i> SATA 3.0Gb/s, 2.5" Wide, 5400 or 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 3.0Gb/s, 2.5" wide	Floor Stand	Optional system floor stand for vertical orientation																		
Optical	<i>Some:</i> Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide <i>Some:</i> external optical box with slim DVD-ROM, 12.7mm high, tray-in, via USB <i>Some:</i> external optical box with slim DVD±RW, 12.7mm high, tray-in, via USB	Power supply	65 watts AC/DC adapter, autosensing, 88% PSU (not included for TIO models)																		
Onboard SATA Media reader	SATA 3.0Gb/s controller, one connectors on planar None	Limited warranty ³	<i>Some:</i> 1-year, depot service / service upgrades available <i>Some:</i> 1-year or 3-year, limited onsite service / service upgrades available <i>Some:</i> 3-year, limited onsite service, IWS (International Warranty Service®) / service upgrades available For Lenovo service upgrade options, please go to S-TC sheet																		
Front ports	One USB 3.0 (Always On / Powered), one USB 2.0, one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)	Preload	<i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <i>Some:</i> Windows 7 Professional 64 <i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit <i>Some:</i> Windows 8.1 with Bing 64-bit <i>Some:</i> Genuine Windows® Embedded Standard 7 (WES 7) <i>Some:</i> LeTOS (Lenovo Terminal Operating System, Linux-based)																		
Rear ports	Three USB 2.0 (optional external optical box or external I/O box occupies one specific USB 2.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort, one optional port (USB 2.0 or serial on selected models)	Environment	ENERGY STAR® 6.0 (for Windows models only); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3																		
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port	Accessories	For compatible accessories, please go to TC-AQP sheet																		
Audio support	High Definition (HD) Audio, Realtek ALC283 / optional internal speaker (1.5 watt)																				
WLAN ¹³	<i>Some:</i> 11b/g/n wireless, Realtek RTL8723BE, Wi-Fi + BT 4.0 combo, 1x1 <i>Some:</i> 11b/g/n wireless, Realtek RTL8192EE, Wi-Fi + BT 4.0 combo, 2x2 <i>Some:</i> 11b/g/n, Intel Centrino® Wireless-N 7260, Wi-Fi + BT combo																				
Bluetooth™	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																				
Ethernet	One gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®																				
Modem	None																				

See footnotes for more detailed information

ThinkCentre M53 Tiny (10DE) - TopSeller

Product Specifications Reference (PSREF)

Model	Processor	Memory	Graphics	Storage	External Optical / I/O box	WLAN	Optional Port	Monitor Cable	Chassis Intrusion Switch	Floor Stand	VESA Mount	Key-board/ Mouse	Internal Speaker	Power Supply	Kensington Cable Lock	Preload	Base Warranty (year)	Global	Ann Date (mm/yy)
10DE0004US	Celeron J1800	4GBx1	Intel HD	500GB 7200	None	7260 b/g/n	None	None	None	Stand	None	USB	Speaker	65W	None	Win7 P64 DG Win8.1	3-onsite	No	08/14
10DE0005US	Celeron J1800	8GBx1	Intel HD	256GB SSD OPAL	None	7260 b/g/n	None	None	None	Stand	None	USB	Speaker	65W	None	Win7 P64 DG Win8.1	3-onsite	No	08/14
10DE001HUS	Celeron J1800	4GBx1	Intel HD	500GB 7200	None	RTL8723BE	None	None	None	None	None	USB	Speaker	65W	None	Win7 P64 DG Win8.1	1-onsite	No	12/14
10DE001LUS	Celeron J1800	4GBx1	Intel HD	500GB 7200	None	7260 b/g/n	None	DP to DVI	None	None	None	USB	Speaker	65W	None	Win7 P64 DG Win8.1	1-onsite	No	02/15
10DE001KUS	Celeron J1800	4GBx1	Intel HD	128GB SSD	None	7260 b/g/n	None	DP to DVI	None	None	None	USB	Speaker	65W	None	Win7 P64 DG Win8.1	1-onsite	No	02/15

• For detailed platform specifications, please see [ThinkCentre M53 Tiny Platform Specifications sheet](#)

Processor	Intel® Celeron® Processor J1000 Series* for Desktop or Intel Pentium® Processor J2000 Series* for Desktop	Manageability Security chip	None None																		
	<table border="1"> <thead> <tr> <th>Processor</th> <th>Cores / Threads</th> <th>Frequency (Max/Base)</th> <th>Cache</th> <th>Memory Types</th> <th>Integrated Graphics</th> </tr> </thead> <tbody> <tr> <td>Celeron J1800</td> <td>2 / 2</td> <td>2.58 / 2.41 GHz</td> <td>1MB</td> <td>DDR3L-1333</td> <td>Intel HD</td> </tr> <tr> <td>Pentium J2900</td> <td>4 / 4</td> <td>2.58 / 2.41 GHz</td> <td>2MB</td> <td>DDR3L-1333</td> <td>Intel HD</td> </tr> </tbody> </table>	Processor	Cores / Threads	Frequency (Max/Base)	Cache	Memory Types	Integrated Graphics	Celeron J1800	2 / 2	2.58 / 2.41 GHz	1MB	DDR3L-1333	Intel HD	Pentium J2900	4 / 4	2.58 / 2.41 GHz	2MB	DDR3L-1333	Intel HD	Security features	<ul style="list-style-type: none"> • Security slot (in rear for optional Kensington® MicroSaver® cable) • Smart USB protection, allows keyboard/ mouse only, blocks all storage devices • Power-on password • Administrator password <ul style="list-style-type: none"> • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Optional Chassis intrusion switch
Processor	Cores / Threads	Frequency (Max/Base)	Cache	Memory Types	Integrated Graphics																
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Pentium J2900	4 / 4	2.58 / 2.41 GHz	2MB	DDR3L-1333	Intel HD																
Chipset	Intel one-chip platform, integrates processor core, graphics, memory controller, and Platform Controller Hub (PCH) in one chip	Keyboard	USB: Preferred Pro USB Keyboard (USB connector), Lenovo logo USB(Slim): Lenovo Slim USB Keyboard (USB connector), black, Lenovo logo 2.4G: Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black																		
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz	Mouse	USB: Enhanced Optical USB Mouse, black, Lenovo logo 2.4G: Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black																		
Monitor cable	Optional DisplayPort to DVI-D or DisplayPort to HDMI monitor cable	Mechanical	<ul style="list-style-type: none"> • Tiny (1L), business black color; metal case M53 Tiny only: 7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration With VESA mount & optical box: 7.2" W X 7.2" D X 2.55" H 184mm W X 182mm D X 65mm H 4.6 lb (2.1 kg), weight may vary by configuration																		
Memory	8GB max / DDR3 Low Voltage, DDR3L-1600*, non-parity, one 204-pin SO-DIMM socket * System automatically clocks down for processors with 1333MHz DDR3 memory controller	VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm																		
Storage	Some: 8GB or 16GB / DOM (Disk On Module) Card Some: SATA 3.0Gb/s, 2.5" Wide, 5400 or 7200 rpm Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 3.0Gb/s, 2.5" wide	Floor Stand	Optional system floor stand for vertical orientation																		
Optical	Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide Some: external optical box with slim DVD-ROM, 12.7mm high, tray-in, via USB Some: external optical box with slim DVD±RW, 12.7mm high, tray-in, via USB	Power supply	65 watts AC/DC adapter, autosensing, 88% PSU (not included for TIO models)																		
Onboard SATA Media reader	SATA 3.0Gb/s controller, one connectors on planar None	Limited warranty ³	Some: 1-year, depot service / service upgrades available Some: 1-year or 3-year, limited onsite service / service upgrades available Some: 3-year, limited onsite service, IWS (International Warranty Service®) / service upgrades available For Lenovo service upgrade options, please go to S-TC sheet																		
Front ports	One USB 3.0 (Always On / Powered), one USB 2.0, one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)	Preload	Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Some: Windows 7 Professional 64 Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit Some: Windows 8.1 with Bing 64-bit Some: Genuine Windows® Embedded Standard 7 (WES 7) Some: LeTOS (Lenovo Terminal Operating System, Linux-based)																		
Rear ports	Three USB 2.0 (optional external optical box or external I/O box occupies one specific USB 2.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort, one optional port (USB 2.0 or serial on selected models)	Environment	ENERGY STAR® 6.0 (for Windows models only); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3																		
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port	Accessories	For compatible accessories, please go to TC-AQP sheet																		
Audio support	High Definition (HD) Audio, Realtek ALC283 / optional internal speaker (1.5 watt)																				
WLAN ¹³	Some: 11b/g/n wireless, Realtek RTL8723BE, Wi-Fi + BT 4.0 combo, 1x1 Some: 11b/g/n wireless, Realtek RTL8192EE, Wi-Fi + BT 4.0 combo, 2x2 Some: 11b/g/n, Intel Centrino® Wireless-N 7260, Wi-Fi + BT combo																				
Bluetooth™	Some: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																				
Ethernet	One gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®																				
Modem	None																				

See footnotes for more detailed information

ThinkCentre M53 Tiny (10ED) - Thin Client (TopSeller)

Product Specifications Reference (PSREF)

Model	Processor	Memory	Graphics	Storage	External Optical / I/O box	WLAN	Optional Port	Monitor Cable	Chassis Intrusion Switch	Floor Stand	VESA Mount	Keyboard/ Mouse	Internal Speaker	Power Supply	Kensington Cable Lock	Preload	Base Warranty (year)	Global	Ann Date (mm/yy)
10ED0000US	Celeron J1800	2GBx1	Intel HD	16GB DOM Card	None	RTL8723BE	None	DP to DVI	None	Stand	None	USB	Speaker	65W	None	WES7	1-onsite	No	12/14
10ED0001US	Celeron J1800	4GBx1	Intel HD	16GB DOM Card	None	RTL8723BE	None	DP to DVI	None	Stand	None	USB	Speaker	65W	None	WES7	1-onsite	No	12/14
10ED0002US	Celeron J1800	2GBx1	Intel HD	8GB DOM Card	None	RTL8723BE	None	None	None	Stand	None	USB	Speaker	65W	None	LeTOS	1-Depot	No	12/14
10ED0003US	Celeron J1800	4GBx1	Intel HD	8GB DOM Card	None	RTL8723BE	None	None	None	Stand	None	USB	Speaker	65W	None	LeTOS	1-Depot	No	12/14
10ED0007US	Celeron J1800	2GBx1	Intel HD	8GB DOM Card	None	RTL8723BE	None	None	None	None	None	USB	Speaker	65W	None	LeTOS	1-onsite	No	01/15
10ED0008US	Celeron J1800	2GBx1	Intel HD	16GB DOM Card	None	RTL8723BE	None	None	None	None	None	USB	Speaker	65W	None	WES7	1-onsite	No	01/15
10ED0009US	Celeron J1800	4GBx1	Intel HD	8GB DOM Card	None	RTL8723BE	None	None	None	None	None	USB	Speaker	65W	None	LeTOS	1-onsite	No	01/15

• For detailed platform specifications, please see [ThinkCentre M53 Tiny Platform Specifications sheet](#)

Processor	Intel® Celeron® Processor J1000 Series* for Desktop or Intel Pentium® Processor J2000 Series* for Desktop	Manageability Security chip	None None																		
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Memory	8GB max / DDR3 Low Voltage, DDR3L-1600*, non-parity, one 204-pin SO-DIMM socket * System automatically clocks down for processors with 1333MHz DDR3 memory controller	VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm																		
Storage	Some: 8GB or 16GB / DOM (Disk On Module) Card Some: SATA 3.0Gb/s, 2.5" Wide, 5400 or 7200 rpm Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 3.0Gb/s, 2.5" wide	Floor Stand	Optional system floor stand for vertical orientation																		
Optical	Some: Solid State Drive (SSD) / SATA 3.0Gb/s, 2.5" Wide Some: external optical box with slim DVD-ROM, 12.7mm high, tray-in, via USB Some: external optical box with slim DVD±RW, 12.7mm high, tray-in, via USB	Power supply	65 watts AC/DC adapter, autosensing, 88% PSU (not included for TIO models)																		
Onboard SATA Media reader	SATA 3.0Gb/s controller, one connectors on planar None	Limited warranty ³	Some: 1-year, depot service / service upgrades available Some: 1-year or 3-year, limited onsite service / service upgrades available Some: 3-year, limited onsite service, IWS (International Warranty Service®) / service upgrades available For Lenovo service upgrade options, please go to S-TC sheet																		
Front ports	One USB 3.0 (Always On / Powered), one USB 2.0, one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)	Preload	Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Some: Windows 7 Professional 64 Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit Some: Windows 8.1 with Bing 64-bit Some: Genuine Windows® Embedded Standard 7 (WES 7) Some: LeTOS (Lenovo Terminal Operating System, Linux-based)																		
Rear ports	Three USB 2.0 (optional external optical box or external I/O box occupies one specific USB 2.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort, one optional port (USB 2.0 or serial on selected models)	Environment	ENERGY STAR® 6.0 (for Windows models only); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3																		
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port	Accessories	For compatible accessories, please go to TC-AQP sheet																		
Audio support	High Definition (HD) Audio, Realtek ALC283 / optional internal speaker (1.5 watt)																				
WLAN ¹³	Some: 11b/g/n wireless, Realtek RTL8723BE, Wi-Fi + BT 4.0 combo, 1x1 Some: 11b/g/n wireless, Realtek RTL8192EE, Wi-Fi + BT 4.0 combo, 2x2 Some: 11b/g/n, Intel Centrino® Wireless-N 7260, Wi-Fi + BT combo																				
Bluetooth™	Some: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																				
Ethernet	One gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®																				
Modem	None																				

See footnotes for more detailed information



ThinkCentre M73 Tiny with Optional WLAN



ThinkCentre M73 Tiny with ThinkVision Monitor



ThinkCentre M73 Tiny with optional I/O Box



ThinkCentre M73 Tiny with ThinkVision Monitor



ThinkCentre M73 Tiny with optional External Optical Box



ThinkCentre M73 Tiny



ThinkCentre M73 Small and Mini Tower



ThinkCentre M73 Small with ThinkVision Monitor



ThinkCentre M73 Small



ThinkCentre M73 Mini Tower with ThinkVision Monitor



ThinkCentre M73 Mini Tower



ThinkCentre M73 Mini Tower

ThinkCentre M73 Tiny (10AY) - Thin Client (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	Flash Memory	External optical / I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Preload	Ann date (mm/dd/yy)
10AY0037US	G1820T	2GBx1	8G DOM Card	None	Intel HD	Intel 105	None	None	Stand	None	USB	WES 7	02/25/14
10AY0038US	G1820T	2GBx1	8G DOM Card	None	Intel HD	Intel 105	None	None	Stand	None	USB	LeTOS	02/25/14
10AY0039US	G1820T	4GBx1	8G DOM Card	None	Intel HD	Intel 105	None	None	Stand	None	USB	WES 7	02/25/14

- 1-year depot warranty

Positioning	<i>Essential business features, exceptional value</i>										Preloaded operating system		
Processor	Intel® Celeron® G1820T Processor (2 cores / 2 threads, 2.4GHz, 2MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller										Some: Genuine Windows® Embedded Standard 7 (WES 7)		
Implementation	Processor in LGA1150 socket										Some: LeTOS (Lenovo Terminal Operating System, Linux-based)		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>										Preloaded applications (only some listed)		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports up to dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i>										- WES 7 only:		
DP dongle	None										<ul style="list-style-type: none"> • Intel Management Engine Components • RDP Client • Citrix Client • VMware Client • Internet Explorer 9 • Java • Flash • .Net Framework • Microsoft® Silverlight • Echo Agent • Ultra VNC • Adobe Reader • Intel Manageability Engine Firmware Recovery Agent 		
Flash Memory	8GB / DOM (Disk On Module) Card										- LeTOS only:		
External optical	Some: Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in, via USB 2.0										<ul style="list-style-type: none"> • xFreeRDP • Citrix ICA Client • VMware View Client • Java • Mozilla Firefox • NX NoMachine Client • X11 Client • VDI-In-A-Box Java Client • AnyConnect VPN Client 		
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset										Security		
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar										<ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s) 		
eSATA port	None										EPEAT™ Gold rating (WES models)		
Chipset	Intel H81 Express Chipset										ENERGY STAR® 6.0 (WES models) \		
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)										Cisco EnergyWise compatible		
Rear ports	Three USB 2.0 (optional external optical box or external I/O box occupies one specific USB 2.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)										GREENGUARD® certified		
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port										RoHS-compliant		
PCIe Mini Card	One PCI Express® Mini Card slot										Supports ThinkVantage Technologies		
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2										For compatible accessories, please go to TC-AQP sheet;		
Bluetooth	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1										For Lenovo service upgrade options, please go to S-TC sheet		
Audio	High Definition (HD) Audio, Realtek® ALC283 codec												
Speaker	Internal speaker for business audio (1.5 watt)												
Ethernet	Gigabit ethernet port, Intel I217-V, Wake on LAN®												
Intel AMT	None												
Modem	None												
Security chip	None												
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo												
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo												
Floor Stand	Optional System floor stand for vertical orientation												
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard												
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU												
Mechanical	<ul style="list-style-type: none"> • Tiny (1L), business black color; metal case • <i>M73 Tiny only:</i> <ul style="list-style-type: none"> 7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration • <i>With VESA mount & optical box:</i> <ul style="list-style-type: none"> 7.2" W X 7.2" D X 2.55" H 184mm W X 182mm D X 65mm H 5.1lb (2.3 kg), weight may vary by configuration 												
Limited Warranty	1-years - depot repair service / service upgrades available												

See footnotes for important warranty information
US model(s) announced February 25, 2013

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ThinkCentre M73 Tiny (10AY) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Preload	Ann date (mm/dd/yy)
10AY0005US	i5-4570T	4GBx1	128G SSD	DVD±RW	HD 4600	Intel 2230	USB	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AY0006US	i7-4765T	4GBx1	128G SSD	DVD±RW	HD 4600	Intel 2230	USB	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AY001RUS	i3-4130T	4GBx1	500G 7200	None	HD 4400	Intel 105	None	None	Stand	None	USB	Win7 Pro64 (DG)	10/01/13
10AY001SUS	i3-4130T	4GBx1	500G Hybrid	None	HD 4400	Intel 105	None	None	Stand	None	USB	Win7 Pro64 (DG)	10/01/13
10AY001TUS	G3220T	4GBx1	500G 7200	None	Intel HD	Intel 105	None	None	Stand	None	USB	Win7 Pro64 (DG)	10/01/13
10AY001UUS	G3220T	4GBx1	500G Hybrid	None	Intel HD	Intel 105	None	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AY001VUS	i3-4130T	4GBx1	500G Hybrid	None	HD 4400	Intel 2230	None	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AY001WUS	i3-4130T	4GBx1	500G 7200	DVD±RW	HD 4400	Intel 105	None	None	None	Mount	USB	Win7 Pro64 (DG)	10/01/13
10AY001XUS	i5-4570T	4GBx1	500G Hybrid	DVD±RW	HD 4600	Intel 105	USB	None	None	Mount	USB	Win7 Pro64 (DG)	10/22/13
10AY0004US	i5-4570T	4GBx1	500G Hybrid	DVD±RW	HD 4600	None	USB	None	None	Mount	USB	Win7 Pro64 (DG)	10/22/13
10AY0020US	i5-4570T	4GBx1	128G SSD	None	HD 4600	Intel 2230	None	None	Stand	None	USB	Win7 Pro64 (DG)	11/12/13
10AY001YUS	i5-4570T	4GBx1	500G Hybrid	None	HD 4600	Intel 2230	None	None	Stand	None	USB	Win7 Pro64 (DG)	11/12/13
10AY002SUS	G1820T	4GBx1	500G 7200	None	Intel HD	7260 ac	None	None	Stand	None	USB	Win7 P64 DG Win8.1	01/14/14
10AY003AUS	i5-4570T	4GBx1	128G SSD	None	HD 4600	Intel 6235	None	None	Stand	None	USB	Win7 Pro64 (DG)	02/11/14

Positioning	<i>Essential business features, exceptional value</i>										
Processor	<p>Intel® Celeron® G1820T Processor (2 cores / 2 threads, 2.4GHz, 2MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Pentium® G3220T Processor (2 cores / 2 threads, 2.6GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4765T Processor (4 cores / 8 threads, 2.0GHz, 8MB cache), Turbo Boost 2.0 (3.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller</p>										
Implementation	Processor in LGA1150 socket										
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1333MHz memory controller</i>										
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports up to dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i>										
DP dongle	None										
Disk	<p><i>Some:</i> SATA 6.0Gb/s, 2.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</p>										
External optical	<i>Some:</i> Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in, via USB 2.0										
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset										
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar										
eSATA port	None										
Chipset	Intel H81 Express Chipset										
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)										
Rear ports	Three USB 2.0 (optional external optical box or external I/O box occupies one specific USB 2.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)										
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port										
PCIe Mini Card	One PCI Express® Mini Card slot										
PCIe WLAN	<p><i>Some:</i> 11ac/a/b/g/n wireless, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo adapter, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11b/g/n, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + BT combo adapter, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter</p>										
Bluetooth	High Definition (HD) Audio, Realtek® ALC283 codec										
Audio	Internal speaker for business audio (1.5 watt)										
Speaker	Gigabit ethernet port, Intel I217-V, Wake on LAN®										
Ethernet	None										
Intel AMT	None										
Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	Optional System floor stand for vertical orientation										
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard										
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU										
Mechanical	<ul style="list-style-type: none"> Tiny (1L), business black color; metal case M73 Tiny only: <ul style="list-style-type: none"> 7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration With VESA mount & optical box: <ul style="list-style-type: none"> 7.2" W X 7.2" D X 2.55" H 184mm W X 182mm D X 65mm H 5.1lb (2.3 kg), weight may vary by configuration 										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										

Preloaded operating system	Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
	Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
Ready to install applications (only some listed)	<ul style="list-style-type: none"> Rescue and Recovery™ Password Manager
Preloaded applications (only some listed)	<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Power Manager View Management Utility PC Device Stage Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Evernote® Microsoft® Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Nitro Pro
Security	<ul style="list-style-type: none"> Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Individual USB port disablement Chassis intrusion switch on selected model(s)
	EPEAT™ Gold rating ENERGY STAR® 6.0-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
	Supports ThinkVantage Technologies
	For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

US model(s) announced Oct 1, Oct 22, or Nov 12, 2013 or Jan 14 or Feb 11, 2014

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(MLM1N-1) February 2014

ThinkCentre M73 Tiny (10AY) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Key-board / mouse	Warranty (year)	Preload	Ann date (mm/dd/yy)
10AY003JUS	G3220T	4GBx1	500G 7200	None	Intel HD	BCM4352	Serial	None	Stand	None	USB	3-onsite	Win7 P64 DG	Win8.1 04/01/14
10AY003KUS	i5-4570T	4GBx1	500G 7200	None	HD 4600	N7260	Serial	None	Stand	None	USB	3-onsite	Win7 P64 DG	Win8.1 04/01/14
10AY003HUS	i3-4130T	4GBx1	500G 7200	None	HD 4400	N7260	Serial	None	Stand	None	USB	3-onsite	Win7 P64 DG	Win8.1 04/01/14
10AY008HUS	i5-4570T	4GBx1	128G SSD	None	HD 4600	N105	None	None	None	None	USB	1-onsite	Win7 P64 DG	Win8 02/10/15
10AY008GUS	i3-4130T	4GBx1	500G 7200	None	HD 4400	N105	None	None	None	None	USB	1-onsite	Win7 P64 DG	Win8 02/10/15

• Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning	<i>Essential business features, exceptional value</i>										
Processor	Intel® Pentium® G3220T Processor (2 cores / 2 threads, 2.6GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130T Processor (2 cores / 4 threads, 2.9GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket										
Implementation											
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1333MHz memory controller</i>										
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports up to dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i>										
DP dongle	None										
Disk	<i>Some: SATA 6.0Gb/s, 2.5" Wide, 7200 rpm</i> <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</i>										
External optical	None										
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset										
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar										
eSATA port	None										
Chipset	Intel H81 Express Chipset										
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)										
Rear ports	Three USB 2.0 (optional external optical box or external I/O box occupies one specific USB 2.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)										
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port										
PCIe Mini Card	One PCI Express® Mini Card slot										
PCIe WLAN	<i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2</i> <i>Some: 11ac/b/g/n wireless, PCIe Half Mini Card, Broadcom BCM4352, dual band (2.4/5GHz), Wi-Fi + Bluetooth combo adapter, 2x2</i> <i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1</i> <i>Some: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter</i>										
Bluetooth	High Definition (HD) Audio, Realtek® ALC283 codec										
Audio	Internal speaker for business audio (1.5 watt)										
Speaker	Gigabit ethernet port, Intel I217-V, Wake on LAN®										
Ethernet	None										
Intel AMT	None										
Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	Optional System floor stand for vertical orientation										
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard										
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU										
Mechanical	<ul style="list-style-type: none"> Tiny (1L), business black color; metal case M73 Tiny only: <ul style="list-style-type: none"> 7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration With VESA mount & optical box: <ul style="list-style-type: none"> 7.2" W X 7.2" D X 2.55" H 184mm W X 182mm D X 65mm H 5.1lb (2.3 kg), weight may vary by configuration 										
Limited Warranty	1-year or 3-year, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										
	Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Ready to install applications (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Power Manager View Management Utility PC Device Stage Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Evernote® Microsoft® Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Nitro Pro 										
	Security <ul style="list-style-type: none"> Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Individual USB port disablement Chassis intrusion switch on selected model(s) 										
	EPEAT™ Gold rating ENERGY STAR® 6.0-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies										
	For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet										

See footnotes for important warranty information

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ThinkCentre M73 Tiny (10AY) - TopSeller - III

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical / I/O box	Graphics	PCle Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Preload	Ann date (mm/dd/yy)
10AY0081US	G3240T	4GBx1	500G 5400	None	Intel HD	8723BE	None	None	Stand	None	USB(slim)	Win7 P64 DG	Win8.1 10/14/14
10AY0082US	i3-4150T	4GBx1	500G 7200	None	HD 4400	7260 b/g/n	None	None	Stand	None	USB	Win7 P64 DG	Win8.1 10/14/14
10AY0083US	i3-4150T	4GBx1	180G SSD	None	HD 4400	7260 b/g/n	None	None	Stand	None	USB	Win7 P64 DG	Win8.1 10/14/14
10AY0085US	i3-4150T	8GBx1	256G SSD	None	HD 4400	7260 b/g/n	None	None	Stand	None	USB	Win7 P64 DG	Win8.1 10/14/14
10AY0086US	i3-4150T	4GBx1	500G 7200	None	HD 4400	7260 b/g/n	Serial	None	Stand	None	USB	Win7 P64 DG	Win8.1 10/14/14
10AY0087US	i3-4150T	4GBx1	500G 7200	None	HD 4400	7260 b/g/n	Serial	None	None	Mount	USB	Win7 P64 DG	Win8.1 10/14/14
10AY0088US	i5-4590T	8GBx1	256G SSD	None	HD 4600	7260 b/g/n	None	None	Stand	None	USB	Win7 P64 DG	Win8.1 10/14/14
10AY0089US	i5-4590T	4GBx1	500G 7200	None	HD 4600	7260 b/g/n	None	None	Stand	None	USB	Win7 P64 DG	Win8.1 10/14/14
10AY008AUS	i5-4590T	4GBx1	180G SSD	None	HD 4600	7260 b/g/n	None	None	Stand	None	USB	Win7 P64 DG	Win8.1 10/14/14
10AY008BUS	i5-4590T	4GBx1	180G SSD	None	HD 4600	7260 b/g/n	Serial	None	Stand	None	USB	Win7 P64 DG	Win8.1 10/14/14
10AY008CUS	i5-4590T	4GBx1	500G 7200	None	HD 4600	7260 b/g/n	Serial	None	Stand	None	USB	Win7 P64 DG	Win8.1 10/14/14
10AY008DUS	i7-4785T	4GBx1	500G 7200	None	HD 4600	7260 b/g/n	Serial	None	Stand	None	USB	Win7 P64 DG	Win8.1 10/14/14
10AY008EUS	i7-4785T	8GBx1	256G SSD	None	HD 4600	7260 b/g/n	Serial	None	Stand	None	USB	Win7 P64 DG	Win8.1 10/14/14
10AY008FUS	i7-4785T	4GBx1	180G SSD	None	HD 4600	7260 b/g/n	Serial	None	Stand	None	USB	Win7 P64 DG	Win8.1 10/14/14

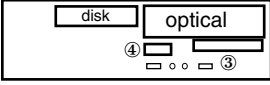
Positioning	<i>Essential business features, exceptional value</i>										
Processor	Intel® Pentium® G3240T Processor (2 cores / 2 threads, 2.7GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4150T Processor (2 cores / 4 threads, 3.0GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4590T Processor (4 cores / 4 threads, 2.0GHz, 6MB cache), Turbo Boost 2.0 (3.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4785T Processor (4 cores / 8 threads, 2.2GHz, 8MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket										
Implementation	Processor in LGA1150 socket										
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook), <i>System automatically clocks down for processors with 1333MHz memory controller</i>										
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports up to dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i>										
DP dongle	None										
Disk	<i>Some: harddisk, 2.5" Wide, 5400 or 7200 rpm</i> <i>Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</i> <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</i>										
External optical	<i>Some: Slim DVD burner box, SATA 1.5Gb/s, 12.7mm high, tray-in, via USB 2.0</i>										
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset										
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar										
eSATA port	None										
Chipset	Intel H81 Express Chipset										
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)										
Rear ports	Three USB 2.0 (optional external optical box or external I/O box occupies one specific USB 2.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial on selected models)										
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port										
PCle Mini Card	One PCI Express® Mini Card slot										
PCle WLAN	<i>Some: 11ac/a/b/g/n wireless, PCle Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT 4.0 combo adapter, 2x2</i> <i>Some: 11b/g/n wireless, PCle Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth 4.0 combo adapter, 2x2</i> <i>Some: 11b/g/n wireless, PCle Half Mini Card, Realtek RTL8723BE, Wi-Fi/BT 4.0, 1x1</i>										
Bluetooth	<i>Some: Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter</i>										
Audio	High Definition (HD) Audio, Realtek® ALC283 codec										
Speaker	Internal speaker for business audio (1.5 watt)										
Ethernet	Gigabit ethernet port, Intel I217-V, Wake on LAN®										
Intel AMT	None										
Security chip	None										
Keyboard	<i>Some: Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo</i> <i>Some: Lenovo Slim USB Keyboard (USB connector), black, Lenovo logo</i>										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Floor Stand	Optional System floor stand for vertical orientation										
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard										
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU										
Mechanical	<ul style="list-style-type: none"> Tiny (1L), business black color; metal case <i>M73 Tiny only:</i> <ul style="list-style-type: none"> 7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration <i>With VESA mount & optical box:</i> <ul style="list-style-type: none"> 7.2" W X 7.2" D X 2.55" H 184mm W X 182mm D X 65mm H 5.1lb (2.3 kg), weight may vary by configuration 										
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										
	Preloaded operating system Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Ready to install applications (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Power Manager View Management Utility PC Device Stage Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Evernote® Microsoft® Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Nitro Pro 										
	Security <ul style="list-style-type: none"> Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Individual USB port disablement Chassis intrusion switch on selected model(s) 										
	EPEAT™ Gold rating ENERGY STAR® 6.0-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies										
	For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet										

ThinkCentre M73 Small (10B6) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	Floor stand	ENERGY STAR 6.0 Global	Preload	Ann date (mm/dd/yy)
10B60008US	3x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	Stand	None	None	Win7 Pro64 (DG) 10/01/13
10B60009US	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	Stand	None	None	Win7 Pro64 (DG) 10/01/13
10B6000AUS	3x4	G3220	2GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	Stand	None	None	Win7 Pro64 (DG) 10/01/13
10B6000BUS	3x4	G3220	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	Stand	None	None	Win7 Pro64 (DG) 10/01/13
10B6000FUS	3x4	i3-4130	8GBx1	1TB 7200	DVD±RW	N105	None	GT620	None	Serial	Stand	None	None	Win7 Pro64 (DG) 10/01/13
10B6000GUS	3x4	G3220	4GBx1	500G Hybrid	DVD±RW	N105	None	Intel HD	None	Serial	Stand	None	None	Win7 Pro64 (DG) 10/01/13
10B6000PUS	3x4	i5-4570	4GBx1	128G SSD	DVD±RW	None	None	HD 4600	None	None	Stand	None	None	Win7 Pro64 (DG) 11/12/13
10B6000QUS	3x4	i7-4770	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	Stand	None	None	Win7 Pro64 (DG) 11/12/13
10B6000RUS	3x4	i7-4770	4GBx1	500G Hybrid	DVD±RW	None	None	HD 4600	None	None	Stand	None	None	Win7 Pro64 (DG) 11/12/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>		Preloaded operating system
Processor	Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager
Implementation	Processor in LGA1150 socket		Preloaded applications (only some listed)
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller		<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking) Some: NVIDIA® GeForce® GT 620 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz		
Disk	Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide Some: Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
Optical	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
SATA controller	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar		
Onboard SATA	None		
eSATA port	Optional 9-in-1 media reader, internal USB 2.0		
Media reader	None		
Chipset	Intel H81 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN ⁴	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1		
Bluetooth	None		
Speaker	Internal speaker for business audio (1 watt) (*No internal speaker for 10B6000PUS)		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®		
Manageability	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional system floor stand for vertical orientation		
Power supply	240 watts, autosensing, active PFC		
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 101mm H • 14.6 lb (6.6 kg) in maximum configuration • Highlighted optical drive button for easy access 		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 2.5", N/A, no access, opt 2nd SSD* Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed		
Slot	Slot 1: Low Profile, PCIe 2.0 x16 (40W max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

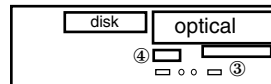
ThinkCentre M73 Small (10B6) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCle WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	Floor stand	ENERGY STAR 6.0 Global	Preload	Ann date (mm/dd/yy)
10B6000XUS	3x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 7450	None	None	Stand	None	None	Win7 P64 DG Win8.1 02/04/14
10B6000YUS	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 7450	None	None	Stand	None	None	Win7 P64 DG Win8.1 02/04/14
10B60011US	3x4	G1820	4GBx1	500G 7200	DVD±RW	None	None	HD 7450	None	None	Stand	None	None	Win7 P64 DG Win8.1 02/04/14
10B60013US	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	Stand	None	None	Win7 P64 DG Win8.1 02/11/14
10B60012US	3x4	G3220	2GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	Stand	None	None	Win7 P64 DG Win8.1 02/11/14
10B60014US	3x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	Stand	None	None	Win7 P64 DG Win8.1 02/11/14
10B60015US	3x4	i5-4570	4GBx1	128G SSD	DVD±RW	None	None	HD 4600	None	None	Stand	None	None	Win7 P64 DG Win8.1 03/25/14

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

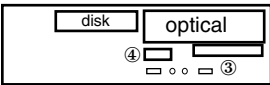
Positioning	<i>Essential business features, exceptional value</i>		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro
Processor	Intel® Celeron® G1820 Processor (2 cores / 2 threads, 2.7GHz, 2MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket		
Implementation	Processor in LGA1150 socket		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking) Some: AMD Radeon™ HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; Max resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz		
Disk	Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide Some: Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
Optical	Some: Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
SATA controller	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar		
Onboard SATA	None		
eSATA port	Optional 9-in-1 media reader, internal USB 2.0		
Media reader	None		
Chipset	Intel H81 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
PCIe WLAN ^d	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1		
Bluetooth	None		
Speaker	Internal speaker for business audio (1 watt)		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®		
Manageability	None		
Modem	None		
Security chip	None		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional system floor stand for vertical orientation		
Power supply	240 watts, autosensing, active PFC		
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 101mm H • 14.6 lb (6.6 kg) in maximum configuration • Highlighted optical drive button for easy access 		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 2.5", N/A, no access, opt 2nd SSD* Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed		
Slot	Slot 1: Low Profile, PCIe 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1		
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		
			Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)
			Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
			Supports ThinkVantage Technologies
			For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet



ThinkCentre M73 Small (10B6) - TopSeller - III

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	Floor stand	ENERGY STAR 6.0	Global	Preload	Ann date (mm/yy)
10B6001SUS	3x4	i5-4590	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG Win8.1	10/14
10B6001NUS	3x4	i3-4150	4GBx1	180G SSD	DVD±RW	None	None	HD 4400	None	None	None	None	None	Win7 P64 DG Win8.1	10/14
10B6001AUS	3x4	i3-4150	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	None	None	None	Win7 P64 DG Win8.1	10/14
10B6001RUS	3x4	G3240	2GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	None	None	None	Win7 P64 DG Win8.1	10/14
10B6001TUS	3x4	i5-4590	8GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG Win8.1	10/14
10B6001PUS	3x4	i3-4150	8GBx1	256G SSD	DVD±RW	None	None	HD 4400	None	None	None	None	None	Win7 P64 DG Win8.1	10/14
10B6001VUS	3x4	i5-4590	4GBx1	180G SSD	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG Win8.1	10/14
10B6001QUS	3x4	G3240	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	None	None	None	Win7 P64 DG Win8.1	10/14
10B6001UUS	3x4	i5-4590	8GBx1	256G SSD	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG Win8.1	10/14
10B6001WUS	3x4	i5-4590	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG Win8.1	10/14
10B6001YUS	3x4	i3-4150	4GBx1	1TB 7200	DVD±RW	7260 b/g/n	None	HD 4400	None	P	None	None	None	Win7 P64 DG Win8.1	10/14
10B6001XUS	3x4	i3-4150	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	P	None	None	None	Win7 P64 DG Win8.1	10/14

Positioning	<i>Essential business features, exceptional value</i>											Preloaded operating system			
Processor	Intel® Pentium® G3240 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4150 Processor (2 cores / 4 threads, 3.5GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4590 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit			
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)			
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller											<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed)			
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz;</i> 1920x1200 (VGA)@60Hz (Reduced Blanking) <i>Some: AMD Radeon™ HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts;</i> <i>Max resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz</i>											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro 			
Disk	<i>Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm</i> <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</i>														
Optical	<i>Some: Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive</i>														
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset														
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar														
eSATA port	None														
Media reader	Optional 9-in-1 media reader, internal USB 2.0														
Chipset	Intel H81 Express Chipset														
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
PCIe WLAN ⁴	<i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth 4.0 combo adapter, 2x2</i>														
Bluetooth	<i>Some: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter</i>														
Speaker	Internal speaker for business audio (1 watt)														
IEEE 1394	None														
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN [®]														
Manageability	None														
Modem	None														
Security chip	None														
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	Optional system floor stand for vertical orientation														
Power supply	240 watts, autosensing, active PFC														
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 101mm H • 14.6 lb (6.6 kg) in maximum configuration • Highlighted optical drive button for easy access 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 2.5", N/A, no access, opt 2nd SSD* Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed														
Slot	Slot 1: Low Profile, PCIe 2.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1											Security <ul style="list-style-type: none"> • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected mode(s) 			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies			
												For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet			

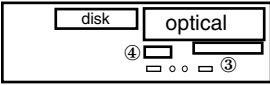
See footnotes for important warranty information

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ThinkCentre M73 Small (10B5) - ES 6.0 (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	Floor stand	ENERGY STAR 6.0	Internal Speaker	Preload	Ann date (mm/dd/yy)
10B50001US	3x4	i5-4570	4GBx2	500G Hybrid	DVD±RW	N2230	None	GT 620	None	S P	None	ES6.0	Speaker	Win7 Pro64 (DG)	10/13
10B5000MUS	3x4	G1820	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	Floor	ES6.0	Speaker	Win7 P64 DG	Win8.1 01/14
10B5000TUS	3x4	G3240	2GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	Floor	ES6.0	Speaker	Win7 P64 DG	Win8.1 10/14
10B5000WUS	3x4	i3-4150	2GBx1	1TB 7200	DVD±RW	7260 b/g/n	None	HD 4400	None	None	Floor	ES6.0	None	Win7 P64 DG	Win8.1 10/14
10B5000VUS	3x4	i3-4150	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	Floor	ES6.0	None	Win7 P64 DG	Win8.1 10/14
10B5000UUS	3x4	G3240	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	Floor	ES6.0	Speaker	Win7 P64 DG	Win8.1 10/14

Positioning Processor	<i>Essential business features, exceptional value</i> Intel® Celeron® G1820 Processor (2 cores / 2 threads, 2.7GHz, 2MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Pentium® G3240 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4150 Processor (2 cores / 4 threads, 3.5GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket	Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
Implementation		Ready to install applications (only some listed)
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller	<ul style="list-style-type: none"> Rescue and Recovery™ Password Manager
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking) <i>Some:</i> NVIDIA® Geforce® GT 620 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; <i>Max resolution:</i> 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz	Preloaded applications (only some listed)
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide	<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Power Manager View Management Utility PC Device Stage Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Evernote® Microsoft® Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Nitro Pro
Optical	<i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset	
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar	
eSATA port	None	
Media reader	Optional 9-in-1 media reader, internal USB 2.0	
Chipset	Intel H81 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
PCIe WLAN ⁴	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth 4.0 combo adapter, 2x2	
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter	
Speaker	Optional internal speaker for business audio (1 watt)	
IEEE 1394	None	
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®	
Manageability	None	
Modem	None	
Security chip	None	Security
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo	<ul style="list-style-type: none"> One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Serial port I/O control Individual USB port disablement Chassis intrusion switch on selected model(s)
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Floor Stand	Optional system floor stand for vertical orientation	
Power supply	<i>Some:</i> 240 watts, autosensing, active PFC, 85% PSU	
Machine	<ul style="list-style-type: none"> Business black color; metal case 13.2" W X 15.0" D X 3.9" H 335mm W X 382mm D X 101mm H 14.6 lb (6.6 kg) in maximum configuration Highlighted optical drive button for easy access 	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 2.5", N/A, no access, opt 2nd SSD* Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed	
Slot	Slot 1: Low Profile, PCIe 2.0 x16 (40W max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1	EPEAT™ Gold rating ENERGY STAR® 6.0-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

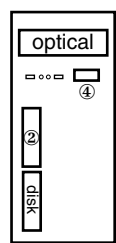
See footnotes for important warranty information

ThinkCentre M73 Mini Tower (10B0) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	ENERGY STAR 6.0 Global	Preload	Ann date (mm/dd/yy)
10B00005US	3x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	None	Win7 P64 DG Win8 10/01/13
10B00006US	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	None	None	Win7 P64 DG Win8 10/01/13
10B00007US	3x4	G3220	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	S P	None	None	Win7 P64 DG Win8 10/01/13
10B00008US	3x4	i7-4770	8GBx1	1TB 7200	DVD±RW	None	None	HD 4600	None	S P	None	None	Win7 P64 DG Win8 10/01/13
10B0000GUS	3x4	i5-4570	4GBx1	1TB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	Win7 P64 DG Win8 10/22/13
10B0000HUS	3x4	i5-4570	4GBx1	128G SSD	DVD±RW	None	None	HD 4600	None	None	None	None	Win7 P64 DG Win8 11/12/13
10B0000JUS	3x4	i5-4570	4GBx1	1TB Hybrid	DVD±RW	None	None	HD 4600	None	None	None	None	Win7 P64 DG Win8 11/12/13
10B0000KUS	3x4	i3-4130	4GBx1	2 x 500G 7200	DVD±RW	None	None	HD 7450	None	None	None	None	Win7 P64 DG Win8.1 02/04/14
10B0000LUS	3x4	i5-4570	4GBx1	2 x 500G 7200	DVD±RW	None	None	HD 7450	None	None	None	None	Win7 P64 DG Win8.1 02/04/14
10B0000NUS	3x4	G3220	4GBx1	2 x 500G 7200	DVD±RW	None	None	HD 7450	None	None	None	None	Win7 P64 DG Win8.1 02/04/14
10B0000QUS	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	None	None	Win7 P64 DG Win8.1 02/11/14
10B0000RUS	3x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	None	Win7 P64 DG Win8.1 02/11/14

Positioning	<i>Essential business features, exceptional value</i>
Processor	Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache) , Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache) , Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache) , Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache) , Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller
Implementation	Processor in LGA1150 socket
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz;</i> 1920x1200 (VGA)@60Hz (Reduced Blanking) <i>Some: AMD Radeon™ HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts;</i> <i>Max resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz</i>
Disk	<i>Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm</i> <i>Some: 1TB (7200 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 3.5" wide</i> <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</i> <i>Some: Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive</i>
Optical	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset
SATA controller	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar
Onboard SATA	None
eSATA port	Optional 9-in-1 media reader, internal USB 2.0
Media reader	None
Chipset	Intel H81 Express Chipset
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)
Audio	High Definition (HD) Audio, Realtek® ALC662 codec
PCIe WLAN ⁴	None
Bluetooth	None
Speaker	Internal speaker for business audio (1.5 watt)
IEEE 1394	None
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®
Manageability	None
Modem	None
Security chip	None
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo
Power supply	280 watts, autosensing, active PFC
Mechanical	<ul style="list-style-type: none"> Business black color; metal case 6.3" W X 16.6" D X 15.3" H (with handle) 160mm W X 422mm D X 388mm H 20.7 lb (9.4 kg) in maximum configuration Handle on top front Highlighted optical drive button for easy access
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk* Bay 3: 3.5", 1" high, no access, std disk Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed
Slot	Slot 1: half-length, full-height, PCIe 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available



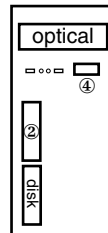
Preloaded operating system
<i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
<i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
Ready to install applications (only some listed)
<ul style="list-style-type: none"> Rescue and Recovery™ Password Manager
Preloaded applications (only some listed)
<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Power Manager View Management Utility PC Device Stage Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Evernote® Microsoft® Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Nitro Pro
Security
<ul style="list-style-type: none"> One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Serial port I/O control Individual USB port disablement Chassis intrusion switch on selected model(s)
Cisco EnergyWise compatible
GREENGUARD® certified
RoHS-compliant
Supports ThinkVantage Technologies
For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

ThinkCentre M73 Mini Tower (10B0) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	ENERGY STAR 6.0 Global	Preload	Ann date (mm/dd/yy)
10B00017US	3x4	G3240	4GBx2	500G 7200	DVD±RW	None	None	Intel HD	None	None	None	None	Win7 P64 DG Win8.1 10/28/14
10B00016US	3x4	i5-4590	4GBx1	1TB 7200	DVD±RW	7260 b/g/n	None	HD 7450	None	None	None	None	Win7 P64 DG Win8.1 10/28/14
10B00019US	3x4	i7-4790	8GBx1	1TB 7200	DVD±RW	7260 b/g/n	None	HD 4600	None	None	None	None	Win7 P64 DG Win8.1 10/28/14
10B00011US	3x4	G3240	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	None	None	Win7 P64 DG Win8.1 10/28/14
10B00014US	3x4	i5-4590	8GBx1	1TB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	Win7 P64 DG Win8.1 10/28/14
10B00013US	3x4	i5-4590	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	None	Win7 P64 DG Win8.1 10/28/14
10B00012US	3x4	G3240	4GBx1	1TB 7200	DVD±RW	7260 b/g/n	None	Intel HD	None	None	None	None	Win7 P64 DG Win8.1 10/28/14
10B00018US	3x4	i7-4790	4GBx1	500G 7200	DVD±RW	7260 b/g/n	None	HD 4600	None	None	None	None	Win7 P64 DG Win8.1 10/28/14
10B00015US	3x4	i5-4590	4GBx1	1TB 7200	DVD±RW	7260 b/g/n	None	HD 4600	None	None	None	None	Win7 P64 DG Win8.1 10/28/14

Positioning	<i>Essential business features, exceptional value</i>	Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
Processor	Intel® Pentium® G3240 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i5-4590 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4790 Processor (4 cores / 8 threads, 3.6GHz, 8MB cache), Turbo Boost 2.0 (4.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket	
Implementation	Processor in LGA1150 socket	Ready to install applications (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Power Manager View Management Utility PC Device Stage Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Evernote® Microsoft® Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Nitro Pro
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller	
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i> <i>Some: AMD Radeon™ HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express® 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; Max resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz</i>	
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 1TB (7200 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 3.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide <i>Some:</i> Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
Optical	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset	
SATA controller	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar	
Onboard SATA	None	
eSATA port	None	
Media reader	Optional 9-in-1 media reader, internal USB 2.0	
Chipset	Intel H81 Express Chipset	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
PCIe WLAN [†]	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth 4.0 combo adapter, 2x2	
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Speaker	Internal speaker for business audio (1.5 watt)	
IEEE 1394	None	
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN®	
Manageability	None	
Modem	None	
Security chip	None	
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	280 watts, autosensing, active PFC	
Mechanical	<ul style="list-style-type: none"> Business black color; metal case 6.3" W X 16.6" D X 15.3" H (with handle) 160mm W X 422mm D X 388mm H 20.7 lb (9.4 kg) in maximum configuration Handle on top front Highlighted optical drive button for easy access 	
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk* Bay 3: 3.5", 1" high, no access, std disk Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed	
Slot	Slot 1: full-length, full-height, PCIe 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	



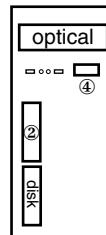
ThinkCentre M73 Mini Tower (10B2) - ES 6.0 (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis Intrusion switch	2nd Serial / Parallel	ENERGY STAR 6.0 Global	Preload	Ann date (mm/dd/yy)	
10B20002US	3x4	i5-4670	4GBx2	500G Hybrid	DVD±RW	N2230	None	GT 620	None	S P	ES6.0	None	Win7 Pro64 (DG)	10/01/13
10B2000QUS	3x4	G1820	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	ES6.0	None	Win7 P64 DG Win8.1	01/14/14

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Essential business features, exceptional value</i>										
Processor	Intel® Celeron® G1820 Processor (2 cores / 2 threads, 2.7GHz, 2MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket										
Implementation											
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3 , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller										
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort) @60Hz; 1920x1200 (VGA) @60Hz (Reduced Blanking) Some: NVIDIA® GeForce® GT 620 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz										
Disk	Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide										
Optical	Some: Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive										
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset										
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar										
eSATA port	None										
Media reader	Optional 9-in-1 media reader, internal USB 2.0										
Chipset	Intel H81 Express Chipset										
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
Rear ports	Two USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), VGA DB-15, DisplayPort										
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)										
Audio	High Definition (HD) Audio, Realtek® ALC662 codec										
PCIe WLAN ⁴	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2										
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter										
Speaker	Internal speaker for business audio (1.5 watt)										
IEEE 1394	None										
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN [®]										
Manageability	None										
Modem	None										
Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Power supply	Some: 280 watts, autosensing, active PFC, 85% PSU										
Mechanical	<ul style="list-style-type: none"> • Business black color; metal case • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration • Handle on top front • Highlighted optical drive button for easy access 										
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, opt disk* Bay 3: 3.5", 1" high, no access, std disk Bay 4: 1.5", .35" high, access, opt reader* *bay only available on models with HDD/SSD/reader installed										
Slot	Slot 1: half-length, full-height, PCIe 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1										
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										



Preloaded operating system

Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
 Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit

Ready to install applications (only some listed)

- Rescue and Recovery™
 - Password Manager
- ## Preloaded applications (only some listed)
- ThinkVantage® Product Recovery
 - ThinkVantage System Update
 - ThinkVantage Communication Utility
 - ThinkVantage Power Manager
 - View Management Utility
 - PC Device Stage
 - Lenovo Cloud Storage by SugarSync
 - Lenovo Solution Center
 - Lenovo Message Center Plus
 - Norton™ Internet Security (30 days of virus definitions)
 - Adobe® Reader®
 - Skype™
 - Evernote®
 - Microsoft® Office preloaded; purchase a product key to activate
 - Cyberlink Power2Go (DVD±RW)
 - Cyberlink PowerProducer (DVD±RW)
 - Nitro Pro

Security

- One lock to secure both cover and entire system to fixed object:
 - Padlock loop (in rear for opt padlock)
 - Security slot (in rear for optional Kensington® MicroSaver® cable)
- Power-on password
- Administrator password
- Hard disk password
- Boot sequence control
- Boot without keyboard and mouse
- Serial port I/O control
- Individual USB port disablement
- Chassis intrusion switch on selected model(s)

EPEAT™ Gold rating
 ENERGY STAR® 6.0-compliant
 Cisco EnergyWise compatible
 GREENGUARD® certified
 RoHS-compliant

Supports ThinkVantage Technologies

For compatible accessories, please go to TC-AQP sheet;
 For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
 US model(s) announced October 1, 2013 or January 14, 2014

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ThinkCentre M73z with Frame Stand and optional wireless keyboard and mouse



ThinkCentre M73z with Monitor Stand and optional wireless keyboard and mouse



ThinkCentre M73z with Frame Stand with optional PS/2 and Serial ports



ThinkCentre M73z with Monitor Stand with optional PS/2 and Serial ports



ThinkCentre M73z with Frame Stand with optional wireless keyboard and mouse



ThinkCentre M73z with Monitor Stand with optional wireless keyboard and mouse

ThinkCentre M73z (10BC) - TopSeller (1-year Onsite)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial & PS/2 port	Stand type	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
10BC0005US	i5-4430S	4GBx1 1600MHz	720p	500G 7200	HD 4600	N105	None	None	None	Frame	USB	None	Win7 Pro64 DG	09/24/13
10BC000HUS	G3220	2GBx1 1600MHz	720p	500G 7200	Intel HD	N105	None	None	None	Frame	USB	None	Win7 Pro64 DG	09/24/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Mainstream All-In-One PC for the enterprise</i>											<p>Preloaded operating system²⁰</p> <p>Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Device Experience • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Nitro Pro <p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) <p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 6.0-compliant</p> <p>Cisco EnergyWise compatible</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p> <p>EuP 2013 Certified</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to TC-AQP sheet;</p> <p>For Lenovo service upgrade options, please go to S-TC sheet</p>
Processor	<p>Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller</p> <p>Intel Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket</p>											
Implementation	<p>Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; <i>Maximum resolution:</i> 1600x900 (panel) @60Hz; 1920x1200 (VGA) @60Hz (Reduced Blanking)</p>											
Memory	<p>16GB max, 1600MHz DDR3L, two 204-pin SODIMM sockets (notebook) *System automatically clocks down for processors with 1333MHz memory controller</p>											
Graphics	<p>Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; <i>Maximum resolution:</i> 1600x900 (panel) @60Hz; 1920x1200 (VGA) @60Hz (Reduced Blanking)</p>											
DP dongle	None											
Display	<p>20.0" (508mm) HD+ (1600x900) TFT color, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio</p>											
Multi-touch	None											
Camera	Optional camera on top of screen, 1.0-megapixel, fixed focus, supports 720p, with digital microphone, physical switch on/off											
Controls	Side buttons for brightness up, brightness down, and power on/off											
Disk	Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm											
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high											
Media reader	Optional 7-in-1 Single Slot media reader, via internal USB 2.0											
Chipset	Intel H81 Express Chipset											
Rear ports	Four USB 2.0, ethernet (RJ-45), VGA out connector, optional serial (9-pin), two optional PS/2 ports (keyboard and mouse)											
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
PCIe Mini Card	One PCI Express® Mini Card slot											
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1											
Bluetooth	None											
Ethernet	One gigabit ethernet port, Intel I217-V											
Audio	High Definition (HD) Audio, Realtek ALC269VC											
Speaker	Two internal stereo speakers (2watt x 2)											
Intel AMT	None											
Modem	None											
IEEE 1394	None											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, Lenovo logo											
Power supply	150 watts, autosensing, 85% PSU											
Mechanical	<ul style="list-style-type: none"> • Business black color • Carry handle in rear • Support VESA mount (100mm) <p><i>With Frame stand:</i> 19.9" W X 3.56" D X 15.9" H 506mm W X 90.5mm D X 404.75mm H 16.4 lb (7.46 kg) in maximum configuration Adjustable stand (between 10° and 35°)</p> <p><i>With Monitor stand:</i> 19.9" W X 9.83" D X 16.7" H 506mm W X 249.8mm D X 423.9mm H 19.5 lb (8.84 kg) in maximum configuration Tilt: 10° to 25°; Lift: 110mm; Swivel: +/-45°;</p>											
Limited Warranty	<p>1-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>											

See footnotes for important warranty information
US model(s) announced September 24, 2012

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(MDST1-4) September 2013

ThinkCentre M73z (10BC) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial PS/2 port	Stand type	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
10BC0001US	i7-4770S	8GBx1 1600MHz	720p	500G Hybrid	HD 4600	N2230	Media	None	S P	Monitor	2.4G	None	Win7 Pro64 DG	09/24/13
10BC0002US	i7-4770S	4GBx1 1600MHz	720p	1TB 7200	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC0003US	i5-4430S	4GBx1 1600MHz	720p	500G 7200	HD 4600	N2230	Media	None	None	Frame	USB	None	Win7 Pro64 DG	09/24/13
10BC0004US	i5-4570S	4GBx1 1600MHz	720p	500G 7200	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC0006US	i5-4570S	4GBx1 1600MHz	720p	500G Hybrid	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC0007US	i5-4570S	4GBx1 1600MHz	720p	500G 7200	HD 4600	N2230	None	None	None	Frame	USB	None	Win7 Pro64 DG	09/24/13
10BC0008US	i5-4570S	4GBx1 1600MHz	720p	180G SSD	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC0009US	i5-4570S	4GBx1 1600MHz	720p	128G SSD	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Mainstream All-In-One PC for the enterprise</i>											Preloaded operating system²⁰
Processor	Intel® Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)
Memory	16GB max, 1600MHz DDR3L , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; <i>Maximum resolution:</i> 1600x900 (panel) @60Hz; 1920x1200 (VGA) @60Hz (Reduced Blanking)											Preloaded applications (only some listed)
DP dongle	None											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Device Experience • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Nitro Pro
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio											
Multi-touch	None											
Camera	Optional camera on top of screen, 1.0-megapixel, fixed focus, supports 720p, with digital microphone, physical switch on/off											
Controls	Side buttons for brightness up, brightness down, and power on/off											
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide											
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high											
Media reader	Optional 7-in-1 Single Slot media reader, via internal USB 2.0											
Chipset	Intel H81 Express Chipset											
Rear ports	Four USB 2.0, ethernet (RJ-45), VGA out connector, optional serial (9-pin), two optional PS/2 ports (keyboard and mouse)											
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
PCIe Mini Card	One PCI Express® Mini Card slot											
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter											Security
Ethernet	One gigabit ethernet port, Intel I217-V											<ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)
Audio	High Definition (HD) Audio, Realtek ALC269VC											
Speaker	Two internal stereo speakers (2watt x 2)											
Intel AMT	None											
Modem	None											
IEEE 1394	None											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black											
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black											
Power supply	150 watts, autosensing, 85% PSU											
Mechanical	<ul style="list-style-type: none"> • Business black color • Carry handle in rear • Support VESA mount (100mm) <i>With Frame stand:</i> 19.9" W X 3.56" D X 15.9" H 506mm W X 90.5mm D X 404.75mm H 16.4 lb (7.46 kg) in maximum configuration Adjustable stand (between 10° and 35°) <i>With Monitor stand:</i> 19.9" W X 9.83" D X 16.7" H 506mm W X 249.8mm D X 423.9mm H 19.5 lb (8.84 kg) in maximum configuration Tilt: 10° to 25°; Lift: 110mm; Swivel: +/-45°;											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant EuP 2013 Certified Supports ThinkVantage Technologies
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
 US model(s) announced September 24, 2012

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 (MDST1-1) September 2013

ThinkCentre M73z (10BC) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media intrusion reader	Chassis intrusion switch	Serial PS/2 port	Stand type	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
10BC000BUS	i5-4670S	8GBx1	720p	1TB 7200	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC000CUS	i7-4770S	8GBx1	720p	1TB 7200	HD 4600	N2230	Media	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC000DUS	i3-4130	4GBx1	720p	500G 7200	HD 4400	N2230	None	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC000EUS	i3-4130	4GBx1	720p	500G 7200	HD 4400	N2230	None	None	None	Frame	USB	None	Win7 Pro64 DG	09/24/13
10BC000FUS	i3-4130	4GBx1	720p	500G Hybrid	HD 4400	N2230	None	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC000GUS	G3220	2GBx1	720p	500G 7200	Intel HD	N2230	None	None	None	Monitor	USB	None	Win7 Pro64 DG	09/24/13
10BC000QUS	i5-4570S	4GBx1	720p	500G 7200	HD 4600	N2230	Media	None	None	None	USB	None	Win7 Pro64 DG	11/12/13
10BC000YUS	G3220	2GBx1	720p	500G 7200	Intel HD	N7260	None	None	None	Monitor	USB	None	Win7 P64 DG Win8.1	01/21/14
10BC0010US	i3-4130	4GBx1	720p	500G 7200	HD 4400	N7260	None	None	None	Monitor	USB	None	Win7 P64 DG Win8.1	01/21/14
10BC0011US	i5-4570S	4GBx1	720p	500G 7200	HD 4400	N7260	None	None	None	Monitor	USB	None	Win7 P64 DG Win8.1	01/21/14
10BC0014US	G1820	2GBx1	720p	500G 7200	Intel HD	N7260	None	None	None	Frame	USB	None	Win7 P64 DG Win8.1	03/04/14
Positioning Processor	Mainstream All-In-One PC for the enterprise Intel® Celeron® G1820 Processor (2 cores / 2 threads, 2.7GHz, 2MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Preloaded operating system²⁰ <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Device Experience • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Nitro Pro 		
Implementation	Processor in LGA1150 socket													
Memory	16GB max, 1600MHz DDR3L , two 204-pin SODIMM sockets (notebook) *System automatically clocks down for processors with 1333MHz memory controller													
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; <i>Maximum resolution:</i> 1600x900 (panel)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)													
DP dongle	None													
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio													
Multi-touch	None													
Camera	Optional camera on top of screen, 1.0-megapixel, fixed focus, supports 720p, with digital microphone, physical switch on/off													
Controls	Side buttons for brightness up, brightness down, and power on/off													
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide													
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high													
Media reader	Optional 7-in-1 Single Slot media reader, via internal USB 2.0													
Chipset	Intel H81 Express Chipset													
Rear ports	Four USB 2.0, ethernet (RJ-45), VGA out connector, optional serial (9-pin), two optional PS/2 ports (keyboard and mouse)													
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)													
PCIe Mini Card	One PCI Express® Mini Card slot													
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2													
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter													
Ethernet	One gigabit ethernet port, Intel I217-V													
Audio	High Definition (HD) Audio, Realtek ALC269VC													
Speaker	Two internal stereo speakers (2watt x 2)													
Intel AMT	None													
Modem	None													
IEEE 1394	None													
Security chip	Trusted Platform Module (TPM 1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, Lenovo logo													
Power supply	150 watts, autosensing, 85% PSU													
Mechanical	<ul style="list-style-type: none"> • Business black color • Carry handle in rear • Support VESA mount (100mm) <i>With Frame stand:</i> 19.9" W X 3.56" D X 15.9" H 506mm W X 90.5mm D X 404.75mm H 16.4 lb (7.46 kg) in maximum configuration Adjustable stand (between 10° and 35°) <i>With Monitor stand:</i> 19.9" W X 9.83" D X 16.7" H 506mm W X 249.8mm D X 423.9mm H 19.5 lb (8.84 kg) in maximum configuration Tilt: 10° to 25°; Lift: 110mm; Swivel: +/-45°;											Security <ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) 		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant EuP 2013 Certified Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information

US model(s) announced September 24 or November 12, 2013 or January 21 or March 4, 2014

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(MDST1-2) March 2014

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial & PS/2 port	Stand type	Key-board/Mouse	Global	Preload	Ann date (mm/dd/yy)
10BC001DUS	I3-4150	8GBx1	720p	256G SSD	HD 4400	7260 b/g/n	None	None	None	Frame	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001WUS	I7-4790S	4GBx1	720p	180G SSD	HD 4600	7260 b/g/n	Media	None	None	Frame	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001RUS	I5-4590S	4GBx1	720p	500G 7200	HD 4600	7260 ac	None	None	None	Frame	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001EUS	I3-4150	4GBx1	720p	1TB 7200	HD 4400	7260 b/g/n	None	None	None	Frame	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001GUS	I3-4150	4GBx1	720p	500G 7200	HD 4400	7260 b/g/n	None	None	None	Monitor	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001NUS	I5-4590S	8GBx1	720p	256G SSD	HD 4600	7260 b/g/n	None	None	None	Monitor	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001SUS	I7-4790S	4GBx1	720p	500G 7200	HD 4600	7260 b/g/n	Media	None	None	Monitor	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001JUS	I5-4590S	4GBx1	720p	500G 7200	HD 4600	7260 b/g/n	None	None	None	Frame	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001VUS	I7-4790S	4GBx1	720p	180G SSD	HD 4600	7260 b/g/n	Media	None	None	Monitor	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001UUS	I7-4790S	8GBx1	720p	256G SSD	HD 4600	7260 b/g/n	Media	None	None	Monitor	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001HUS	I3-4150	4GBx1	720p	180G SSD	HD 4400	7260 b/g/n	None	None	None	Monitor	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001TUS	I7-4790S	8GBx1	720p	1TB 7200	HD 4600	7260 b/g/n	Media	None	None	Monitor	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001CUS	I3-4150	4GBx1	720p	180G SSD	HD 4400	7260 b/g/n	None	None	None	Frame	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001MUS	I5-4590S	4GBx1	720p	180G SSD	HD 4600	7260 b/g/n	None	None	None	Monitor	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001LUS	I5-4590S	4GBx1	720p	180G SSD	HD 4600	7260 b/g/n	None	None	None	Frame	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001FUS	I3-4150	4GBx1	720p	500G 7200	HD 4400	7260 ac	None	None	None	Frame	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001BUS	I3-4150	4GBx1	720p	500G 7200	HD 4400	7260 b/g/n	None	None	None	Frame	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001KUS	I5-4590S	4GBx1	720p	1TB 7200	HD 4600	7260 b/g/n	None	None	None	Frame	USB	None	Win7 P64 DG Win8.1	10/28/14
10BC001YUS	I5-4590S	4GBx1	None	500G 7200	HD 4600	None	Media	None	None	Monitor	USB	None	Win7 P64 DG Win8.1	02/03/15

Positioning Processor	<i>Mainstream All-In-One PC for the enterprise</i> Intel® Core™ i3-4150 Processor (2 cores / 4 threads, 3.5GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4590S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4790S Processor (4 cores / 8 threads, 3.2GHz, 8MB cache), Turbo Boost 2.0 (4.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller	Preloaded operating system²⁰ Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8/8.1 Pro 64-bit Ready to install applications (only some listed)
Implementation	Processor in LGA1150 socket	Ready to install applications (only some listed)
Memory	16GB max, 1600MHz DDR3L , two 204-pin SODIMM sockets (notebook) *System automatically clocks down for processors with 1333MHz memory controller	Preloaded applications (only some listed)
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; <i>Max resolution: 1600x900 (panel)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blank-ing)</i>	<ul style="list-style-type: none">ThinkVantage® Product RecoveryThinkVantage System UpdateThinkVantage Communication UtilityThinkVantage Device ExperienceThinkVantage AutoLockDesktop Power ManagerView Management UtilityLenovo Cloud Storage by SugarSyncLenovo Solution CenterLenovo Message Center PlusNorton™ Internet Security (30 days of virus definitions)Adobe® Reader®Skype™Microsoft Office preloaded; purchase a product key to activateCyberlink Power2Go (DVD±RW)Cyberlink PowerProducer (DVD±RW)
DP dongle	None	<ul style="list-style-type: none">EvernoteNitro Pro
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio	
Multi-touch	None	
Camera	Optional camera on top of screen, 1.0-megapixel, fixed focus, supports 720p, with digital microphone, physical switch on/off	
Controls	Side buttons for brightness up, brightness down, and power on/off	
Disk	<i>Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm</i> <i>Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</i>	
Optical Media reader	DVD burner, SATA 1.5Gb/s, 12.7mm high Optional 7-in-1 Single Slot media reader, via internal USB 2.0	
Chipset	Intel H81 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), VGA out connector, optional serial (9-pin), two optional PS/2 ports (keyboard and mouse)	
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	<i>Some: 11ac/a/b/g/n wireless, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo adapter, 2x2</i> <i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2</i>	Security <ul style="list-style-type: none">Security chip (see information on left)Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis)Power-on passwordAdministrator passwordHard disk passwordBoot sequence controlBoot without keyboard and mouseUSB port disablementChassis intrusion switch on selected model(s)
Bluetooth	<i>Some: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter</i>	
Ethernet	One gigabit ethernet port, Intel I217-V	
Audio	High Definition (HD) Audio, Realtek ALC269VC	
Speaker	Two internal stereo speakers (2watt x 2)	
Intel AMT	None	
Modem	None	
IEEE 1394	None	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Mechanical	<ul style="list-style-type: none">Business black colorCarry handle in rearSupport VESA mount (100mm) <i>With Frame stand: (WxDxH) 19.9" X 3.56" X 15.9"; 506mm X 90.5mm X 404.75mm</i> 16.4 lb (7.46 kg) in maximum configuration Adjustable stand (between 10° and 35°) <i>With Monitor stand: (WxDxH) 19.9" X 9.83" X 16.7"; 506mm X 249.8mm X 423.9mm</i> 19.5 lb (8.84 kg) in maximum configuration Tilt: 10° to 25°; Lift: 110mm; Swivel: +/-45°	EPEAT™ Gold rating ENERGY STAR® 6.0-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant EuP 2013 Certified Supports ThinkVantage Technologies
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

ThinkCentre M73z (10BC) - TopSeller (Win8)

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Chassis intrusion switch	Serial & PS/2 port	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
10BC000AUS	i5-4570S	4GBx1 1600MHz	720p	500GB 7200	HD 4600	N2230	Media	None	None	Frame	USB	None	Win8 Pro64 09/24/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Mainstream All-In-One PC for the enterprise</i>										Preloaded operating system
Processor	Intel® Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller										Windows® 8 Pro 64-bit
Implementation	Processor in LGA1150 socket										Web install applications (only some listed)
Memory	16GB max, 1600MHz DDR3L , two 204-pin SODIMM sockets (notebook)										<ul style="list-style-type: none"> • Password Manager
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, external digital monitor support via VGA, supports dual independent display; <i>Maximum resolution: 1600x900 (panel)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i>										Preloaded applications (only some listed)
DP dongle	None										<ul style="list-style-type: none"> • ThinkVantage System Update • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Support • Lenovo Companion • Norton Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote® • Intel AppUp • Nitro Pro • AccuWeather • Norton™ Studio
Display	20.0" (508mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio										
Multi-touch	None										
Camera	Optional camera on top of screen, 1.0-megapixel, fixed focus, supports 720p, with digital microphone, physical switch on/off										
Controls	Side buttons for brightness up, brightness down, and power on/off										
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm										
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high										
Media reader	Optional 7-in-1 Single Slot media reader, via internal USB 2.0										
Chipset	Intel H81 Express Chipset										
Rear ports	Four USB 2.0, ethernet (RJ-45), VGA out connector, optional serial (9-pin), two optional PS/2 ports (keyboard and mouse)										
Side ports	Two USB 3.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)										
PCIe Mini Card	One PCI Express® Mini Card slot										
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2										
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter										
Ethernet	One gigabit ethernet port, Intel I217-V										
Audio	High Definition (HD) Audio, Realtek ALC269VC										
Speaker	Two internal stereo speakers (2watt x 2)										
Intel AMT	None										
Modem	None										
IEEE 1394	None										
Security chip	Trusted Platform Module (TPM 1.2-compliant)										Security
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo										<ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)
Mouse	Enhanced Optical USB Mouse, Lenovo logo										
Power supply	150 watts, autosensing, 85% PSU										
Mechanical	<ul style="list-style-type: none"> • Business black color • Carry handle in rear • Support VESA mount (100mm) <p><i>With Frame stand:</i> 19.9" W X 3.56" D X 15.9" H 506mm W X 90.5mm D X 404.75mm H 16.4 lb (7.46 kg) in maximum configuration Adjustable stand (between 10° and 35°)</p> <p><i>With Monitor stand:</i> 19.9" W X 9.83" D X 16.7" H 506mm W X 249.8mm D X 423.9mm H 19.5 lb (8.84 kg) in maximum configuration Tilt: 10° to 25°; Lift: 110mm; Swivel: +/-45°;</p>										EPEAT™ Gold rating ENERGY STAR® 6.0-compliant Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant EuP 2013 Certified
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										Supports ThinkVantage Technologies
											For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US model(s) announced September 24, 2012

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ThinkCentre M78 Small and Tower



Lenovo ThinkCentre M78
Small and Tower



Lenovo ThinkCentre M78 Tower
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M78 Small



Lenovo ThinkCentre M78 Small
with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M78 Tower



Lenovo ThinkCentre M78 Tower

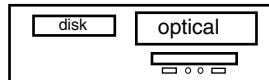
ThinkCentre M78 Small (10BU) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis intrusion switch	PS/2 port	Floor stand	DP to DP Cable	Global	Preload	Ann date (mm/dd/yy)
10BU0000US	4x3	A4-5300	2GBx1	250G 7200	DVD±RW	None	None	HD 7480D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BU0001US	4x3	A6-5400B	4GBx1	500G 7200	DVD±RW	None	None	HD 7540D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BU0002US	4x3	A4-6300B	4GBx1	500G 7200	DVD±RW	None	None	HD 8370D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BU0003US	4x3	A6-6400B	4GBx1	500G 7200	DVD±RW	None	None	HD 8470D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BU0004US	4x3	A8-6500B	4GBx1	500G 7200	DVD±RW	None	None	HD 8570D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/01/13
10BU0005US	4x3	A8-6500B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Stand	Cable	None	Win7 Pro64 (DG)	10/01/13
10BU0006US	4x3	A6-6400B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Stand	Cable	None	Win7 Pro64 (DG)	10/01/13
10BU0007US	4x3	A4-6300B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Stand	Cable	None	Win7 Pro64 (DG)	10/01/13
10BU0008US	4x3	A4-6300B	2GBx1	500G 7200	DVD±RW	None	None	HD 8370D	None	None	Stand	None	None	Win7 Pro64 (DG)	10/22/13
10BU0009US	4x3	A6-6400B	2GBx1	500G 7200	DVD±RW	None	None	HD 8470D	None	None	None	None	None	Win7 Pro64 (DG)	12/10/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	<i>Mainstream enterprise stability and manageability</i>		<p>Preloaded operating system</p> <p>Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro
Processor	<p>AMD APU A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core (up to 3.6GHz), AMD Radeon™ HD 7480D Graphics, DDR3 memory controller (up to 1600MHz)</p> <p>AMD APU A4-6300B (dual-core, 3.7GHz, 1MB L2 cache), Turbo Core (up to 3.9GHz), AMD Radeon HD 8370D Graphics, DDR3 memory controller (up to 1600MHz)</p> <p>AMD APU A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core (up to 3.8GHz), AMD Radeon HD 7540D Graphics, DDR3 memory controller (up to 1866MHz)</p> <p>AMD APU A6-6400B (dual-core, 3.9GHz, 1MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8470D Graphics, DDR3 memory controller (up to 1866MHz)</p> <p>AMD APU A8-6500B (quad-core, 3.5GHz, 4MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8570D Graphics, DDR3 memory controller (up to 1866MHz)</p>		
Implementation	Processor in Socket FM2		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets		
Graphics	<p>AMD Radeon HD Graphics, integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display, works along with optional discrete graphics to support up to four independent monitors;</p> <p><i>Maximum resolution:</i> 1920x1200 (VGA) @ 60Hz; 2560x2048 (DisplayPort) @ 60Hz</p> <p><i>Some:</i> AMD Radeon™ HD 8570, DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts;</p> <p><i>Max resolution:</i> 4096x2160 (HDMI) @ 24Hz; 2048x1536 (VGA) @ 85Hz</p>		
DP cable	<i>Some:</i> DisplayPort to DisplayPort monitor cable		
Disk	SATA 6.0Gb/s 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1		
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar		
eSATA port	None		
Media reader	None		
Chipset	AMD A75 Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
PCIe WLAN	None		
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®		
Modem	None		
Security chip	Trusted Platform Module (TPM 1.2-compliant)		
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional System floor stand for vertical orientation		
Power supply	240 watts, autosensing		
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 13.3" W X 15.0" D X 3.9" H • 339mm W X 381mm D X 100mm H • 16.5 lb (7.5 kg) in maximum configuration • Toolless cover flips up and tilts backward on rear hinges • Toolless disk and optical drive removal • Toolless adapter retention 		
Bay	<p>Bay 1: 5.25", 1.6" high, access, std optical</p> <p>Bay 2: 3.5", 1" high, no access, std disk</p> <p>Bay 3: 3.5", .5" high, access, opt reader</p>		
Slot	<p>Slot 1: Low Profile, PCI Express 2.0 x16 (40w max)</p> <p>Slot 2: Low Profile, PCIe 2.0 x1</p> <p>Slot 3: Low Profile, 32-bit PCI 2.3</p> <p>Slot 4: Low Profile, 32-bit PCI 2.3</p>		
Limited Warranty	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>		



See footnotes for important warranty information
US model(s) announced October 1, 2013, October 22, 2013, or December 10, 2013

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ThinkCentre M78 Tower (10BR) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Chassis intrusion switch	PS/2 port	DP to DP Cable	Global	Preload	Ann date (mm/dd/yy)
10BR0000US	4x5	A4-5300	2GBx1	250G 7200	DVD±RW	None	None	HD 7480D	None	None	None	None	Win7 P64 DG Win8	10/01/13
10BR0001US	4x5	A6-5400B	4GBx1	500G 7200	DVD±RW	None	None	HD 7540D	None	None	None	None	Win7 P64 DG Win8	10/01/13
10BR0002US	4x5	A4-6300B	2GBx1	500G 7200	DVD±RW	None	None	HD 8370D	None	None	None	None	Win7 P64 DG Win8	10/01/13
10BR0004US	4x5	A6-6400B	4GBx1	500G 7200	DVD±RW	None	None	HD 8470D	None	None	None	None	Win7 P64 DG Win8	10/01/13
10BR0005US	4x5	A8-6500B	4GBx1	500G 7200	DVD±RW	None	None	HD 8570D	None	None	None	None	Win7 P64 DG Win8	10/01/13
10BR0006US	4x5	A8-6500B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Cable	None	Win7 P64 DG Win8	10/01/13
10BR0007US	4x5	A6-6400B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Cable	None	Win7 P64 DG Win8	10/01/13
10BR0008US	4x5	A4-6300B	8GBx1	1TB 7200	DVD±RW	None	None	HD 8570	None	None	Cable	None	Win7 P64 DG Win8	10/01/13
10BR000AUS	4x5	A4-6300B	4GBx1	500G 7200	DVD±RW	None	None	HD 8370D	None	None	None	None	Win7 P64 DG Win8.1	04/08/14

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 3-year limited warranty

Positioning	Mainstream enterprise stability and manageability											Preloaded operating system
Processor	AMD APU A4-5300 (dual-core, 3.4GHz, 1MB L2 cache), Turbo Core (up to 3.6GHz), AMD Radeon™ HD 7480D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A4-6300B (dual-core, 3.7GHz, 1MB L2 cache), Turbo Core (up to 3.9GHz), AMD Radeon HD 8370D Graphics, DDR3 memory controller (up to 1600MHz) AMD APU A6-5400B (dual-core, 3.6GHz, 1MB L2 cache), Turbo Core (up to 3.8GHz), AMD Radeon HD 7540D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A6-6400B (dual-core, 3.9GHz, 1MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8470D Graphics, DDR3 memory controller (up to 1866MHz) AMD APU A8-6500B (quad-core, 3.5GHz, 4MB L2 cache), Turbo Core (up to 4.1GHz), AMD Radeon HD 8570D Graphics, DDR3 memory controller (up to 1866MHz)											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
Implementation	Processor in Socket FM2											Ready to install applications (only some listed)
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager
Graphics	AMD Radeon HD Graphics , integrated in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, supports dual independent display, works along with optional discrete graphics to support up to four independent monitors; <i>Maximum resolution:</i> 1920x1200 (VGA)@60Hz; 2560x2048 (DisplayPort)@60Hz <i>Some:</i> AMD Radeon™ HD 8570 , DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; <i>Max resolution:</i> 4096x2160 (HDMI)@24Hz; 2048x1536 (VGA)@85Hz											Preloaded applications (only some listed)
DP cable	<i>Some:</i> DisplayPort to DisplayPort monitor cable											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • View Management Utility • PC Device Stage • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro
Disk	SATA 6.0Gb/s 7200 rpm											Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> - Padlock loop (in rear for opt padlock) - Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Chassis intrusion switch on selected model(s)
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1											
Onboard SATA	Two SATA cables (each 1-drop to device), four SATA 6.0Gb/s connectors on planar											
eSATA port	None											
Media reader	None											
Chipset	AMD A75 Chipset											
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), ethernet (RJ-45), VGA DB-15, DisplayPort, optional keyboard (PS/2), optional mouse (PS/2)											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)											
PCIe WLAN	None											
Internal connector	Two USB 2.0 planar conn (1 used; one open for additional USB device)											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Realtek RTL8111E, Wake on LAN®											
Modem	None											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts, manual switch											
Machine	<ul style="list-style-type: none"> • Business black color; metal case • 6.9" W X 17.4" D X 16.3" H • 175mm W X 442mm D X 414mm H • 27.5 lb (12.5 kg) in maximum configuration • Toolless cover removal, toolless adapter retention • Toolless disk, optical drive removal 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader* Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk* *bay only available on models with HDD/SSD/reader installed											
Slot	Slot 1: half-length, full-height, PCI Express 2.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, 32-bit PCI 2.3 Slot 4: half-length, full-height, 32-bit PCI 2.3											
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
 US model(s) announced October 1, 2013 or April 8, 2014

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 (ADR1T-1) April 2014

Memory

2GB PC3-12800 DDR3 UDIMM	0A65728	ann	06/05/12
4GB PC3-12800 DDR3 UDIMM	0A65729	ann	06/05/12
8GB PC3-12800 DDR3 UDIMM	0A65730	ann	06/05/12

More information at

www.lenovo.com/support/desktopmemorycompatibility

Optical

Lenovo® Super Multi-Burner SATA Drive	0A65618	ann	08/23/11
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Storage and removable storage

500GB SATA 3.0Gb/s Disk (7200 rpm)	43R1990	ann	11/06/07
1TB SATA 3.0Gb/s Disk (7200 rpm)	45J7918	ann	08/19/08

USB 2.0 Portable 500GB Hard Disk	45K1690	ann	05/26/09
USB 3.0 Secure 500GB Hard Drive	0A65619	ann	11/29/11
USB 3.0 Secure 750GB Hard Drive	0A65616	ann	11/29/11
USB 3.0 Secure 1TB Hard Drive	0A65621	ann	08/28/12
Slim USB Portable DVD Burner	0A33988	ann	06/14/11

Graphics

Small 5100/4865/2113/2114 support Low Profile:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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Tower 2111/1766/1562/1565 support 75 watts max:

NVIDIA NVS 510 2GB Graphics Card by Lenovo ⁶⁷	0B47077	ann	01/29/13
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⁶⁷ Simultaneously use the graphic card monitor ports along with the systems integrated monitor ports when Multi-Monitor Support is enabled in BIOS Setup.

More information at www.lenovo.com/support/graphiccards

Keyboard

Preferred Pro USB Keyboard	73P5220	ann	06/21/05
Enhanced Performance USB Keyboard	73P2620	ann	03/23/04
UltraSlim Plus Wireless Keyboard and Mouse ⁵²	0A34032	ann	04/05/11
ThinkPad® USB Keyboard with TrackPoint	55Y9003	ann	08/18/09
Lenovo USB Fingerprint Keyboard	73P4730	ann	02/22/05
Lenovo USB Smartcard Keyboard	51J0155	ann	03/24/09

⁵² Wireless via 2.4GHz technology using a micro-size USB receiver.

More information at www.lenovo.com/support/keyboards

Mouse

Lenovo Optical Mouse (USB)	06P4069	ann	05/21/03
Lenovo ScrollPoint® Mouse(USB, Optical)	31P7405	ann	08/27/02
ThinkPad Travel Mouse (USB, Optical)	31P7410	ann	06/04/02
Lenovo Laser Mouse (USB)	41U3074	ann	01/23/07
Lenovo Wireless Laser Mouse ⁵²	0A36188	ann	12/20/11
ThinkPad USB Laser Mouse	57Y4635	ann	12/15/09

More information at www.lenovo.com/support/mice

Modem

USB 2.0 Lenovo Modem	43R1814	ann	02/26/08
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Multimedia

ThinkPad In-Ear Headphones with mic ⁶⁰	57Y4488	ann	01/07/10
Lenovo Mini Speakers M220	55Y2033	ann	01/07/10
Lenovo Speakers M0520 (black)	57Y6360	ann	02/08/11
Lenovo Speakers M0520 (red)	57Y6361	ann	02/08/11
Lenovo Headset P550	55Y2065		
Lenovo Headset P950 (black)	57Y6605	ann	02/08/11

⁶⁰ Has a 1.2 meter (3.9-foot) cable. Best when systems are in close proximity. Example: SFF placed on a desk.

Security

Kensington® MicroSaver® Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
USB Gemplus GemPC Smart Card Reader	41N3040	ann	02/21/06

⁵⁶ Attaching to any form factor not only secures the ThinkCentre to the work area, but it also prevents users from opening the chassis itself.

Monitors

ThinkVision LT1952p Wide 19" (VGA, DP, DVI-D) ⁶⁹	2448MB6	ann	09/13/11
ThinkVision L2251x Wide 22" (VGA, DP)	2578HB6	ann	10/20/09
ThinkVision LT2323p Wide 23" (VGA, DP, DVI-D) ⁶⁹	3024HC1	ann	05/01/12

⁶⁹ DisplayPort cable is not included; use optional DisplayPort to DisplayPort Monitor Cable (0A36537).

More information at www.lenovo.com/support/monitors

Monitor Accessories⁴⁶

DisplayPort™ to Single-link DVI-D Cable	45J7915	ann	08/05/08
DisplayPort to VGA Monitor Cable	57Y4393	ann	08/04/09
DisplayPort to DisplayPort Monitor Cable	0A36537	ann	09/13/11
Lenovo USB Soundbar	0A36190	ann	05/01/12
Kensington MicroSaver Cable Lock ⁵⁶	73P2582	ann	12/29/03
Kensington Twin Head Cable Lock ⁵⁶	45K1620	ann	09/30/08
Lenovo Security Cable Lock ⁵⁶	57Y4303	ann	08/24/10
ThinkCentre Extend Arm	57Y4352	ann	07/06/10

⁴⁶ Compatible on selected Lenovo and ThinkVision monitors.

More information at www.lenovo.com/support/monitoraccessories

For more information on accessories:

www.lenovo.com/accessories

Purchase Lenovo accessories

www.lenovo.com/support/accessories

Product specifications on Lenovo Support

www.lenovo.com/accessoriesguide

Option Compatibility Matrix (OCM) and accessory brochures

www.lenovoquickpick.com

An Options Compatibility Configurator for Lenovo systems



ThinkCentre M79
SFF and Tower



ThinkCentre M79 SFF with
optional monitor



ThinkCentre M79 Tower with
optional monitor



ThinkCentre M79 SFF
front and back view



ThinkCentre M79 Tower
front and back view



ThinkCentre M79 SFF
inside view

ThinkCentre M79 SFF Platform Specifications

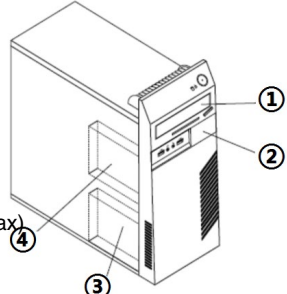
Product Specifications Reference (PSREF)

Processor	AMD A4, A6, A8, or A10 series APUs						Keyboard	Some: Preferred Pro USB Keyboard (USB connector), Lenovo logo Some: Lenovo USB Fingerprint Keyboard (USB connector) Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black
	APU	Cores	Frequency (Max/Base)	L2 Cache	Memory Types	Integrated Graphics	Mouse	Some: Enhanced Optical USB Mouse, black, Lenovo logo Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black
	A4-6300B	2	3.9 / 3.7	1MB	DDR3-1600	HD 8370D		
	A6-6400B	2	4.1 / 3.9	1MB	DDR3-1866	HD 8470D		
	A8-6500B	4	4.1 / 3.5	4MB	DDR3-1866	HD 8570D		
	A6 PRO-7400B	2	3.9 / 3.5	1MB	DDR3-1866	Radeon R5 Series		
	A8 PRO-7600B	4	3.8 / 3.1	4MB	DDR3-2133	Radeon R7 Series		
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3, four 240-pin DIMM sockets						Mechanical	<ul style="list-style-type: none"> Business black color; metal case, 11L 13.2" W X 15.0" D X 3.9" H 335mm W X 382mm D X 101mm H 14.6 lb (6.6 kg) in maximum configuration Bay 1: N/A, N/A, internal, opt SSD Bay 2: 5.25", 1.6" high, external, std disk Bay 3: N/A, N/A, external, opt reader Bay 4: 3.5", 1" high, internal, std disk *bay only available on models with HDD/SSD/reader installed Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1 Slot 4: Low Profile, 32-bit PCI 2.3 
Disk	Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide Some: 1TB (7200 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 3.5" wide						Floor Stand	Optional system floor stand for vertical orientation
Optical	Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide Some: DVD-ROM SATA 1.5Gb/s Drive Some: Super Multi-Burner DVD±RW SATA 1.5Gb/s Drive						Power supply	Some: 180 watts, autosensing, 100-240V (50-60Hz) Some: 240 watts, autosensing, 100-240V (50-60Hz) Some: 240 watts, autosensing, 85% PSU, 100-240V (50-60Hz)
Onboard SATA Media reader	SATA 6.0Gb/s controller, three connectors on planar, RAID 0/1 support Optional 7-in-1 single slot media card reader						Limited warranty ³	Some: 3-years, limited onsite service / service upgrades available Some: 3-years, limited onsite service, IWS (International Warranty Service ⁹) / service upgrades available For Lenovo service upgrade options, please go to S-TC sheet
Graphics	AMD Radeon™ Graphics in processor, uses main memory, one VGA, one DisplayPort™, one optional DP, supports up to three independent displays, works along with optional discrete graphics to support up to five independent displays; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i> Some: AMD Radeon HD 8570 , DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40W; <i>Max resolution: 4096x2160 (HDMI) @24Hz; 2048x1536 (VGA) @85Hz</i> Some: NVIDIA® GeForce® GT 620 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; <i>Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz</i> Some: AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Max resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz</i>						Preload	Some: Windows® 7 Professional 32/64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Some: Windows 7 Professional 32 Some: Windows 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Device Experience Desktop Power Manager View Management Utility Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote® Nitro Pro
DP cable	Optional DisplayPort to DVI-D monitor cable							Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit Web install applications (only some listed) <ul style="list-style-type: none"> Password Manager Preloaded applications ThinkVantage System Update Desktop Power Manager Lenovo Solution Center Lenovo Support Lenovo Companion Lenovo SHAREit Norton Internet Security (30 days of virus definitions) Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote® Accu Pro NitroWeather Norton™ Studio Pokki Hightail
Chipset	AMD A78 Chipset						Environment	ENERGY STAR® 6.0 (Need 85% PSU and Windows OS); EPEAT™ Gold rating (Need 85% PSU and Windows OS); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)						Accessories	For compatible accessories, please go to TC-AQP sheet
Rear ports	Up to six USB ports (2x USB 3.0 + 2x USB 2.0 + 2x optional USB 2.0), serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA, DisplayPort (1x standard + 1x optional), two PS/2 ports							
Rear audio ports IEEE 1394	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm) Optional FireWire PCIe adapter, 1394a-2000, 400Mbps, two 6-pin ports on rear							
Audio support	High Definition (HD) Audio, Realtek ALC662 / internal speakers (1watt x 2)							
WLAN ¹³	Some: 11b/g/n wireless, PCIe Half Mini Card, Realtek RTL8723BE, Wi-Fi + Bluetooth 4.0 combo adapter, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Realtek RTL8192EE, Wi-Fi + Bluetooth 4.0 combo adapter, 2x2 Some: 11ac/b/g/n wireless, PCIe Half Mini Card, Broadcom BCM4352, dual band (2.4/5GHz), Wi-Fi + Bluetooth 4.0 combo adapter, 2x2							
Bluetooth™ Ethernet Modem	Some: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter One gigabit ethernet port, Realtek 8111EPV, Wake on LAN® None							
Manageability Security chip	Enhanced Manageability with DASH 1.1 Trusted Platform Module, TCG 1.2-compliant							
Security features	<ul style="list-style-type: none"> Padlock loop (in rear for opt padlock) Security slot (in rear for optional Kensington® MicroSaver® cable) Cable lock to physically lock both keyboard and mouse (optional) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Individual USB port disablement Optional Chassis intrusion switch 							

See footnotes for more detailed information

ThinkCentre M79 Tower Platform Specifications

Product Specifications Reference (PSREF)

Processor	AMD A4, A6, A8, or A10 series APUs	Keyboard	Some: Preferred Pro USB Keyboard (USB connector), Lenovo logo Some: Lenovo USB Fingerprint Keyboard (USB connector) Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black Some: Enhanced Optical USB Mouse, black, Lenovo logo Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black																																				
	<table border="1"> <thead> <tr> <th>APU</th> <th>Cores</th> <th>Frequency (Max/Base)</th> <th>L2 Cache</th> <th>Memory Types</th> <th>Integrated Graphics</th> </tr> </thead> <tbody> <tr> <td>A4-6300B</td> <td>2</td> <td>3.9 / 3.7</td> <td>1MB</td> <td>DDR3-1600</td> <td>HD 8370D</td> </tr> <tr> <td>A6-6400B</td> <td>2</td> <td>4.1 / 3.9</td> <td>1MB</td> <td>DDR3-1866</td> <td>HD 8470D</td> </tr> <tr> <td>A8-6500B</td> <td>4</td> <td>4.1 / 3.5</td> <td>4MB</td> <td>DDR3-1866</td> <td>HD 8570D</td> </tr> <tr> <td>A6 PRO-7400B</td> <td>2</td> <td>3.9 / 3.5</td> <td>1MB</td> <td>DDR3-1866</td> <td>Radeon R5 Series</td> </tr> <tr> <td>A8 PRO-7600B</td> <td>4</td> <td>3.8 / 3.1</td> <td>4MB</td> <td>DDR3-2133</td> <td>Radeon R7 Series</td> </tr> </tbody> </table>	APU	Cores	Frequency (Max/Base)	L2 Cache	Memory Types	Integrated Graphics	A4-6300B	2	3.9 / 3.7	1MB	DDR3-1600	HD 8370D	A6-6400B	2	4.1 / 3.9	1MB	DDR3-1866	HD 8470D	A8-6500B	4	4.1 / 3.5	4MB	DDR3-1866	HD 8570D	A6 PRO-7400B	2	3.9 / 3.5	1MB	DDR3-1866	Radeon R5 Series	A8 PRO-7600B	4	3.8 / 3.1	4MB	DDR3-2133	Radeon R7 Series	Mouse	
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Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3, four 240-pin DIMM sockets	Mechanical	<ul style="list-style-type: none"> Business black color; metal case, 20L 6.3" W X 16.6" D X 15.3" H (with handle) 160mm W X 422mm D X 388mm H 20.7 lb (9.4 kg) in maximum configuration Bay 1: 5.25", 1.6" high, access, std optical Bay 2: N/A, N/A, access, opt reader Bay 3: 3.5", 1" high, no access, std disk Bay 4: 3.5", 1" high, no access, opt disk *bay only available on models with HDD/SSD/reader installed Slot 1: half-length, full-height, PCIe 3.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1 Slot 4: half-length, full-height, 32-bit PCI 2.3 																																				
Disk	Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide Some: 1TB (7200 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 3.5" wide	Power supply	Some: 180 watts, autosensing, 100-240V (50-60Hz) Some: 280 watts, autosensing, 100-240V (50-60Hz) Some: 280 watts, autosensing, 85% PSU, 100-240V (50-60Hz)																																				
Optical	Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide Some: DVD-ROM SATA 1.5Gb/s Drive Some: Super Multi-Burner DVD±RW SATA 1.5Gb/s Drive	Limited warranty ³	Some: 3-years, limited onsite service / service upgrades available Some: 3-years, limited onsite service, IWS (International Warranty Service ⁹) / service upgrades available <i>For Lenovo service upgrade options, please go to S-TC sheet</i>																																				
Onboard SATA Media reader	SATA 6.0Gb/s controller, three connectors on planar, RAID 0/1 support Optional 7-in-1 single slot media card reader	Preload	Some: Windows [®] 7 Professional 32/64 preinstalled through downgrade Some: Windows 7 Professional 32 Some: Windows 7 Professional 64 Ready to install applications (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage[®] Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Device Experience Desktop Power Manager View Management Utility Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe[®] Reader[®] Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote[®] Nitro Pro 																																				
Graphics	AMD Radeon™ Graphics in processor, uses main memory, one VGA, one DisplayPort™, one optional DP, supports up to three independent displays, works along with optional discrete graphics to support up to five independent displays; <i>Maximum resolution: 1920x1200 (VGA) @60Hz; 2560x2048 (DisplayPort) @60Hz</i> Some: AMD Radeon HD 8570 , DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40W; <i>Max resolution: 4096x2160 (HDMI) @24Hz; 2048x1536 (VGA) @85Hz</i> Some: NVIDIA[®] GeForce[®] GT 620 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; <i>Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz</i> Some: AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Max resolution: 2560x1600 (DisplayPort, DVI-I) @60Hz</i>	Web install applications (only some listed) <ul style="list-style-type: none"> Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage System Update Desktop Power Manager Lenovo Solution Center Lenovo Support Lenovo Companion Lenovo SHAREit Norton Internet Security (30 days of virus definitions) Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote[®] Nitro Pro AccuWeather Norton™ Studio Pokki Hightail 																																					
DP cable	Optional DisplayPort to DVI-D monitor cable	Environment	ENERGY STAR [®] 6.0 (Need 85% PSU and Windows OS); EPEAT™ Gold rating (Need 85% PSU and Windows OS); GREENGUARD [®] ; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3																																				
Chipset	AMD A78 FCH	Accessories	For compatible accessories, please go to TC-AQP sheet																																				
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)																																						
Rear ports	Up to six USB ports (2x USB 3.0 + 2x USB 2.0 + 2x optional USB 2.0), serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA, DisplayPort (1x standard + 1x optional), two PS/2 ports																																						
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)																																						
IEEE 1394	Optional FireWire PCIe adapter, 1394a-2000, 400Mbps, two 6-pin ports on rear																																						
Audio support	High Definition (HD) Audio, Realtek ALC662 / internal speakers (1.5watt x 2)																																						
WLAN ¹³	Some: 11b/g/n wireless, PCIe Half Mini Card, Realtek RTL8723BE, Wi-Fi + Bluetooth 4.0 combo adapter, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Realtek RTL8192EE, Wi-Fi + Bluetooth 4.0 combo adapter, 2x2 Some: 11ac/b/g/n wireless, PCIe Half Mini Card, Broadcom BCM4352, dual band (2.4/5GHz), Wi-Fi + Bluetooth 4.0 combo adapter, 2x2																																						
Bluetooth™	Some: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																																						
Ethernet	One gigabit ethernet port, Realtek 8111EPV, Wake on LAN [®]																																						
Modem	None																																						
Manageability	Enhanced Manageability with DASH 1.1																																						
Security chip	Trusted Platform Module, TCG 1.2-compliant																																						
Security features	<ul style="list-style-type: none"> Padlock loop (in rear for opt padlock) Security slot (in rear for optional Kensington[®] MicroSaver[®] cable) Cable lock to physically lock both keyboard and mouse (optional) Power-on password 	<ul style="list-style-type: none"> Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Individual USB port disablement Optional <i>Chassis intrusion switch</i> 																																					

See footnotes for more detailed information

ThinkCentre M79 SFF (10CV) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Graphics	Storage	Optical	WLAN	Media reader	2nd Serial / Parallel	PS/2 Ports	2nd DP Port	Optional 2 rear USB	IEEE 1394	Chassis intrusion switch	Cable lock	Floor Stand	Key-board/ Mouse	Power Supply	Preload	Base Warranty (year)	Global	Ann Date (mm/yy)
10CV0000US	A6 6400B	4Gx1	HD 8470D	500G 7200	DVD±RW	None	None	None	PS/2	None	None	None	None	None	None	USB	180W	Win7 P64 DG Win8.1	3-onsite	No	07/14
10CV0001US	A8 6500B	4Gx1	HD 8570D	500G 7200	DVD±RW	None	None	None	PS/2	None	None	None	None	None	None	USB	180W	Win7 P64 DG Win8.1	3-onsite	No	07/14
10CV0002US	A8 7600B	4Gx1	Radeon R7 500G 7200	DVD±RW	None	None	None	None	PS/2	None	None	None	None	None	None	USB	240W	Win7 P64 DG Win8.1	3-onsite	No	07/14
10CV0003US	A4 6300B	4Gx1	HD 8370D	500G 7200	DVD	None	None	None	PS/2	None	None	None	None	None	None	USB	180W	Win7 P64 DG Win8.1	3-onsite	No	10/14
10CV000VUS	A6 7400B	4Gx1	Radeon R5 500GB 7200	DVD±RW	None	Media	None	None	PS/2	None	None	None	None	None	None	USB	180W	Win7 P64 DG Win8.1	3-onsite	No	02/15
10CV000WUS	A8 7600B	4Gx1	Radeon R7 500GB 7200	DVD±RW	None	None	None	None	PS/2	None	USB	None	None	Cable	None	USB	180W	Win7 P64 DG Win8.1	3-onsite	No	02/15
10CV000UUS	A10 7800B	8Gx1	Radeon R7 500GB 7200	DVD±RW	None	Media	None	None	PS/2	None	None	None	None	None	None	USB	180W	Win7 P64 DG Win8.1	3-onsite	No	02/15
10CV000TUS	A10 7800B	4Gx1	Radeon R7 500GB 7200	DVD±RW	None	Media	None	None	PS/2	None	None	None	None	None	None	USB	180W	Win7 P64 DG Win8.1	3-onsite	No	02/15

• For detailed platform specifications, please see [ThinkCentre M79 SFF Platform Specifications sheet](#)

Processor	AMD A4, A6, A8, or A10 series APUs	Manageability	Enhanced Manageability with DASH 1.1																																				
	<table border="1"> <thead> <tr> <th>APU</th> <th>Cores</th> <th>Frequency (Max/Base)</th> <th>L2 Cache</th> <th>Memory Types</th> <th>Integrated Graphics</th> </tr> </thead> <tbody> <tr> <td>A4-6300B</td> <td>2</td> <td>3.9 / 3.7</td> <td>1MB</td> <td>DDR3-1600</td> <td>HD 8370D</td> </tr> <tr> <td>A6-6400B</td> <td>2</td> <td>4.1 / 3.9</td> <td>1MB</td> <td>DDR3-1866</td> <td>HD 8470D</td> </tr> <tr> <td>A8-6500B</td> <td>4</td> <td>4.1 / 3.5</td> <td>4MB</td> <td>DDR3-1866</td> <td>HD 8570D</td> </tr> <tr> <td>A6 PRO-7400B</td> <td>2</td> <td>3.9 / 3.5</td> <td>1MB</td> <td>DDR3-1866</td> <td>Radeon R5 Series</td> </tr> <tr> <td>A8 PRO-7600B</td> <td>4</td> <td>3.8 / 3.1</td> <td>4MB</td> <td>DDR3-2133</td> <td>Radeon R7 Series</td> </tr> </tbody> </table>	APU	Cores	Frequency (Max/Base)	L2 Cache	Memory Types	Integrated Graphics	A4-6300B	2	3.9 / 3.7	1MB	DDR3-1600	HD 8370D	A6-6400B	2	4.1 / 3.9	1MB	DDR3-1866	HD 8470D	A8-6500B	4	4.1 / 3.5	4MB	DDR3-1866	HD 8570D	A6 PRO-7400B	2	3.9 / 3.5	1MB	DDR3-1866	Radeon R5 Series	A8 PRO-7600B	4	3.8 / 3.1	4MB	DDR3-2133	Radeon R7 Series	Security chip	Trusted Platform Module, TCG 1.2-compliant
APU	Cores	Frequency (Max/Base)	L2 Cache	Memory Types	Integrated Graphics																																		
A4-6300B	2	3.9 / 3.7	1MB	DDR3-1600	HD 8370D																																		
A6-6400B	2	4.1 / 3.9	1MB	DDR3-1866	HD 8470D																																		
A8-6500B	4	4.1 / 3.5	4MB	DDR3-1866	HD 8570D																																		
A6 PRO-7400B	2	3.9 / 3.5	1MB	DDR3-1866	Radeon R5 Series																																		
A8 PRO-7600B	4	3.8 / 3.1	4MB	DDR3-2133	Radeon R7 Series																																		
		Security features	<ul style="list-style-type: none"> • Padlock loop (in rear for opt padlock) • Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock to physically lock both keyboard and mouse (optional) • Power-on, Admin, Hard Disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Optional <i>Chassis intrusion switch</i> 																																				
		Keyboard	USB: Preferred Pro USB Keyboard (USB connector), Lenovo logo Finger: Lenovo USB Fingerprint Keyboard (USB connector) 2.4G: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black USB: Enhanced Optical USB Mouse, black, Lenovo logo 2.4G: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black																																				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3, four 240-pin DIMM sockets	Mouse																																					
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB flash, SATA 6.0Gb/s, 2.5" <i>Some:</i> 1TB (7200 rpm) hybrid hard disk / with 8GB flash, SATA 6.0Gb/s, 3.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide	Mechanical	<ul style="list-style-type: none"> • Business black color; metal case, 11L • 13.2" W X 15.0" D X 3.9" H • 335mm W X 382mm D X 101mm H • 14.6 lb (6.6 kg) in maximum configuration Bay: 5.25" x1, 3.5"x1, SSD bay x1, MCR bay x1 *SSD bay only available on models with 2nd SSD installed Slot (Low Profile): one PCIe 3.0 x16 (40w max), two PCIe 2.0 x1, one PCI 2.3 																																				
Optical	<i>Some:</i> DVD-ROM SATA 1.5Gb/s Drive <i>Some:</i> Super Multi-Burner DVD±RW SATA 1.5Gb/s Drive	Floor Stand	Optional system floor stand for vertical orientation																																				
Onboard SATA	SATA 6.0Gb/s controller, three connectors on planar, RAID 0/1 support	Power supply	180W: 180 watts, autosensing, 100-240V (50-60Hz) 240W: 240 watts, autosensing, 100-240V (50-60Hz) 240W ES: 240 watts, autosensing, 85% PSU, 100-240V (50-60Hz)																																				
Media reader	Optional 7-in-1 single slot media card reader	Limited warranty ³	<i>Some:</i> 3-years, limited onsite service / service upgrades available <i>Some:</i> 3-years, limited onsite service, IWS (International Warranty Service ⁹) / service upgrades available <i>For Lenovo service upgrade options, please go to S-TC sheet</i>																																				
Graphics	AMD Radeon™ Graphics in processor, uses main memory, one VGA, one DisplayPort™, one optional DP, supports up to three independent displays, works along with optional discrete graphics to support up to five independent displays; <i>Some:</i> AMD Radeon HD 8570 , DirectX 11, one VGA, one HDMI, 40W; <i>Some:</i> NVIDIA® GeForce® GT 620 , DirectX 11, one VGA, one DisplayPort, 30W; <i>Some:</i> AMD Radeon™ HD 7450 , DirectX 11, one DVI-I one DisplayPort, 25W; Optional DisplayPort to DVI-D monitor cable	Preload	<i>Some:</i> Windows® 7 Professional 32/64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <i>Some:</i> Windows 7 Professional 32 <i>Some:</i> Windows 7 Professional 64 <i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit																																				
DP cable	Optional DisplayPort to DVI-D monitor cable	Environment	ENERGY STAR® 6.0 (Need 85% PSU and Windows OS); EPEAT™ Gold rating (Need 85% PSU and Windows OS); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3																																				
Chipset	AMD A78 Chipset	Accessories	For compatible accessories, please go to TC-AQP sheet																																				
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)																																						
Rear ports	Up to six USB ports (2x USB 3.0 + 2x USB 2.0 + 2x optional USB 2.0), serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA, DisplayPort (1x standard + 1x optional), two PS/2 ports																																						
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)																																						
IEEE 1394	Optional FireWire PCIe adapter, 1394a-2000, 400Mbps, two 6-pin ports on rear																																						
Audio support	High Definition (HD) Audio, Realtek ALC662 / internal speakers (1watt x 2)																																						
WLAN ¹³	<i>Some:</i> 11b/g/n wireless, Realtek RTL8723BE, Wi-Fi + BT 4.0 combo, 1x1 <i>Some:</i> 11b/g/n wireless, Realtek RTL8192EE, Wi-Fi + BT 4.0 combo, 2x2 <i>Some:</i> 11ac/b/g/n wireless, Broadcom BCM4352, 2.4/5GHz, Wi-Fi + BT 4.0, 2x2																																						
Bluetooth™	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																																						
Ethernet	One gigabit ethernet port, Realtek 8111EPV, Wake on LAN®																																						
Modem	None																																						

See footnotes for more detailed information

ThinkCentre M79 Tower (10CN) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Graphics	Storage	Optical	WLAN	Media reader	2nd Serial / Parallel	PS/2 Ports	2nd DP Port	Optional 2 rear USB	IEEE 1394	Chassis intrusion switch	Cable lock	Floor Stand	Key-board/ Mouse	Power Supply	Preload	Base Warranty (year)	Global	Ann Date (mm/yy)
10CN0000US	A4 6300B	4Gx1	HD 8370D	500G 7200	DVD±RW	None	None	None	PS/2	None	None	None	None	None	None	USB	180W	Win7 P64 DG Win8.1	3-onsite	No	07/14
10CN0001US	A8 6500B	4Gx1	HD 8570D	500G 7200	DVD±RW	None	None	None	PS/2	None	None	None	None	None	None	USB	180W	Win7 P64 DG Win8.1	3-onsite	No	07/14
10CN0002US	A8 7600B	4Gx1	Radeon R7	500G 7200	DVD±RW	None	None	None	PS/2	None	None	None	None	None	None	USB	280W	Win7 P64 DG Win8.1	3-onsite	No	07/14
10CN0003US	A6 6400B	4Gx1	HD 8470D	500G 7200	DVD±RW	None	None	None	PS/2	None	None	None	None	None	None	USB	180W	Win7 P64 DG Win8.1	3-onsite	No	07/14
10CN000WUS	A10 7800B	8Gx1	Radeon R7	500GB 7200	DVD±RW	None	None	None	PS/2	None	None	None	None	None	None	USB	280W	Win7 P64 DG Win8.1	3-onsite	No	11/14
10CN000VUS	A10 7800B	4Gx1	Radeon R7	500GB 7200	DVD±RW	None	None	None	PS/2	None	None	None	None	None	None	USB	280W	Win7 P64 DG Win8.1	3-onsite	No	11/14
10CN000XUS	A6 7400B	4Gx1	Radeon R5	500GB 7200	DVD±RW	None	None	None	PS/2	None	None	None	None	None	None	USB	180W	Win7 P64 DG Win8.1	3-onsite	No	02/15

• For detailed platform specifications, please see [ThinkCentre M79 Tower Platform Specifications sheet](#)

Processor	AMD A4, A6, A8, or A10 series APUs						Manageability Security chip Security features	Enhanced Manageability with DASH 1.1 Trusted Platform Module, TCG 1.2-compliant • Padlock loop (in rear for opt padlock) • Security slot (in rear for optional Kensington® MicroSaver® cable) • Cable lock to physically lock both keyboard and mouse (optional) • Power-on, Admin, Hard Disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Optional <i>Chassis intrusion switch</i>
	APU	Cores	Frequency (Max/Base)	L2 Cache	Memory Types	Integrated Graphics		
	A4-6300B	2	3.9 / 3.7	1MB	DDR3-1600	HD 8370D		
	A6-6400B	2	4.1 / 3.9	1MB	DDR3-1866	HD 8470D		
	A8-6500B	4	4.1 / 3.5	4MB	DDR3-1866	HD 8570D		
A6 PRO-7400B	2	3.9 / 3.5	1MB	DDR3-1866	Radeon R5 Series			
A8 PRO-7600B	4	3.8 / 3.1	4MB	DDR3-2133	Radeon R7 Series			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3, four 240-pin DIMM sockets						Keyboard	<i>USB:</i> Preferred Pro USB Keyboard (USB connector), Lenovo logo <i>Finger:</i> Lenovo USB Fingerprint Keyboard (USB connector)
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB flash, SATA 6.0Gb/s, 2.5" <i>Some:</i> 1TB (7200 rpm) hybrid hard disk / with 8GB flash, SATA 6.0Gb/s, 3.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide						Mouse	<i>USB:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>2.4G:</i> Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black
Optical	<i>Some:</i> DVD-ROM SATA 1.5Gb/s Drive <i>Some:</i> Super Multi-Burner DVD±RW SATA 1.5Gb/s Drive						Mechanical	• Business black color; metal case, 20L • 6.3" W X 16.6" D X 15.3" H (with handle) • 160mm W X 422mm D X 388mm H • 20.7 lb (9.4 kg) in maximum configuration Bay: 5.25" x1, 3.5" x2, MCR Bay x1 Slot (half-length): one PCIe 3.0 x16 (60w max), two PCIe 2.0 x1, one PCI 2.3
Onboard SATA Media reader	SATA 6.0Gb/s controller, three connectors on planar, RAID 0/1 support Optional 7-in-1 single slot media card reader						Power supply	<i>180W:</i> 180 watts, autosensing, 100-240V (50-60Hz) <i>280W:</i> 280 watts, autosensing, 100-240V (50-60Hz) <i>280W ES:</i> 280 watts, autosensing, 85% PSU, 100-240V (50-60Hz)
Graphics	AMD Radeon™ Graphics in processor, uses main memory, one VGA, one DisplayPort™, one optional DP, supports up to three independent displays, works along with optional discrete graphics to support up to five independent displays; <i>Some:</i> AMD Radeon HD 8570 , DirectX 11, one VGA, one HDMI, 40W; <i>Some:</i> NVIDIA® GeForce® GT 620 , DirectX 11, one VGA, one DisplayPort, 30W; <i>Some:</i> AMD Radeon™ HD 7450 , DirectX 11, one DVI-I one DisplayPort, 25W; Optional DisplayPort to DVI-D monitor cable						Limited warranty ³	<i>Some:</i> 3-years, limited onsite service / service upgrades available <i>Some:</i> 3-years, limited onsite service, IWS (International Warranty Service®) / service upgrades available <i>For Lenovo service upgrade options, please go to S-TC sheet</i>
DP cable	Optional DisplayPort to DVI-D monitor cable						Preload	<i>Some:</i> Windows® 7 Professional 32/64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <i>Some:</i> Windows 7 Professional 32 <i>Some:</i> Windows 7 Professional 64 <i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit
Chipset	AMD A78 FCH						Environment	ENERGY STAR® 6.0 (Need 85% PSU and Windows OS); EPEAT™ Gold rating (Need 85% PSU and Windows OS); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)						Accessories	For compatible accessories, please go to TC-AQP sheet
Rear ports	Up to six USB ports (2x USB 3.0 + 2x USB 2.0 + 2x optional USB 2.0), serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA, DisplayPort (1x standard + 1x optional), two PS/2 ports							
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)							
IEEE 1394	Optional FireWire PCIe adapter, 1394a-2000, 400Mbps, two 6-pin ports on rear							
Audio support	High Definition (HD) Audio, Realtek ALC662 / internal speakers (1.5watt x 2)							
WLAN ¹³	<i>Some:</i> 11b/g/n wireless, Realtek RTL8723BE, Wi-Fi + BT 4.0 combo, 1x1 <i>Some:</i> 11b/g/n wireless, Realtek RTL8192EE, Wi-Fi + BT 4.0 combo, 2x2 <i>Some:</i> 11ac/b/g/n wireless, Broadcom BCM4352, 2.4/5GHz, Wi-Fi + BT 4.0, 2x2							
Bluetooth™	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter							
Ethernet	One gigabit ethernet port, Realtek 8111EPV, Wake on LAN®							
Modem	None							

See footnotes for more detailed information



ThinkCentre M83 Tiny with optional floor stand, wireless keyboard/mouse, and monitor



ThinkCentre M83 Tiny with optional floor stand



ThinkCentre M83 Tiny with optional VESA mount kit



ThinkCentre M83 Tiny with optional optical box



ThinkCentre M83 Tiny with optional I/O box



ThinkCentre M83 Tiny

ThinkCentre M83 Tiny Platform Specifications

Product Specifications Reference (PSREF)

Processor	Intel® Celeron®, Intel Pentium®, or 4th Generation Intel Core™ i3 / i5 / i7 Processor						Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo logo <i>Some:</i> Lenovo USB Fingerprint Keyboard (USB connector) <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black <i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black	
	Processor	Cores / Threads	Frequency (Max/Base)	Cache	Memory Types	Integrated Graphics	Mouse		
	Core i3-4130T	2 / 4	2.90 GHz	3MB	DDR3-1600	Intel HD 4400	Mechanical	Tiny (1L), business black color; metal case	
	Core i3-4150T	2 / 4	3.00 GHz	3MB	DDR3-1600	Intel HD 4400		M83 Tiny only	7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration
	Core i5-4590T	4 / 4	2.00 / 3.00 GHz	6MB	DDR3-1600	Intel HD 4600		M83 Tiny with VESA mount & optical box	7.2" W X 7.2" D X 2.6" H 184mm W X 182mm D X 65mm H 5.1 lb (2.3 kg), weight may vary by configuration
Core i7-4785T	4 / 8	2.20 / 3.20 GHz	8MB	DDR3-1600	Intel HD 4600				
Memory	16GB max / DDR3 Low Voltage, DDR3L-1600*, non-parity, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller						VESA mount Floor Stand	Optional VESA mount bracket kit, supports VESA 75mm and 100mm Optional system floor stand for vertical orientation	
Disk	<i>Some:</i> hard disk, 2.5" Wide, 5400 or 7200 rpm, Active Protection System™ <i>Some:</i> 500GB (5400 rpm) Solid State Hybrid Drive (SSHD) / with 8GB MLC NAND flash memory, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / 2.5" Wide						Power supply	65 watts AC/DC adapter, autosensing, 88% PSU (not included for TIO models)	
Optical	<i>Some:</i> external optical box with slim DVD-ROM, 12.7mm high, tray-in, via USB <i>Some:</i> external optical box with slim DVD±RW, 12.7mm high, tray-in, via USB						Limited warranty ³	<i>Some:</i> 3-years, limited onsite service / service upgrades available <i>Some:</i> 3-years, limited onsite service, IWS (International Warranty Service ⁹) / service upgrades available <i>For Lenovo service upgrade options, please go to S-TC sheet</i>	
Onboard SATA Media reader	SATA 6.0Gb/s controller, one connector on planar None						Preload	<i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <i>Some:</i> Windows 7 Professional 32/64 Ready to install applications (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility PC Device Stage Desktop Power Manager View Management Utility Lenovo Solution Center Lenovo Message Center Plus Lenovo SHAREit Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote® Nitro Pro 	
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600, in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional HDMI or one optional 2nd DisplayPort on some models, supports up to 3 independent displays; Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1080 (HDMI) @60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)							<i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit Web install applications (only some listed) <ul style="list-style-type: none"> Password Manager Preloaded applications ThinkVantage System Update Desktop Power Manager Lenovo Solution Center PC Device Stage Lenovo Companion Lenovo SHAREit Lenovo Reach Norton Internet Security (30 days of virus definitions) Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote® Nitro Pro Norton™ Studio Pokki 	
DP cable	Optional DisplayPort to DVI-D monitor cable								
Chipset	Intel Q85 Chipset								
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)								
Rear ports	Two USB 3.0, one USB 2.0 (optional external optical box or external I/O box occupies specific USB 2.0 on some models), ethernet (RJ-45), VGA, DisplayPort, one optional port (USB 2.0 / serial / 2nd DisplayPort / HDMI on some models)								
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port								
Audio support	High Definition (HD) Audio, Realtek ALC233 / optional internal speaker (1.5 watt)								
WLAN ¹³	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Realtek RTL8723BE, Wi-Fi + Bluetooth 4.0 combo adapter, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Realtek RTL8192EE, Wi-Fi + Bluetooth 4.0 combo adapter, 2x2 <i>Some:</i> 11ac/b/g/n wireless, PCIe Half Mini Card, Broadcom BCM4352, dual band (2.4/5GHz), Wi-Fi + Bluetooth 4.0 combo adapter, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 7260, Wi-Fi + Bluetooth 4.0 combo adapter, 2x2 <i>Some:</i> 11ac/a/b/g/n wireless, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo 4.0 adapter, 2x2								
Bluetooth™	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter								
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®								
Modem	None								
Manageability	Intel Standard Manageability Trusted Platform Module, TCG 1.2-compliant						Environment	ENERGY STAR® 6.0; EPEAT™ Gold rating (U.S.); GREENGUARD®; RoHS-compliant; ErP Lot 3; UL Environment Gold; TUV; Cisco EnergyWise compatible	
Security chip							Accessories	For compatible accessories, please go to TC-AQP sheet	
Security features	<ul style="list-style-type: none"> Security slot (in rear for optional Kensington® MicroSaver® cable) Smart USB protection, allows keyboard/mouse only, blocks all storage devices Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Individual USB port disablement Optional Chassis intrusion switch 								

See footnotes for more detailed information

ThinkCentre M83 Tiny (10E9) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Graphics	Memory	Storage	External optical / I/O box	WLAN	DP Cable	Optional port	Chassis intrusion switch	Floor Stand	VESA mount	Keyboard/ Mouse	Internal Speaker	Kensington cable lock	Preload	Base Warranty (year)	Global	Ann Date (mm/yy)
10E9000NUS	i3-4130T	Intel HD 4400	4GBx1	500GB 7200	None	7260 b/g/n	None	USB	None	Stand	None	USB	Speaker	None	Win7 P64 DG Win8.1	3-onsite	No	10/14
10E9000PUS	i3-4130T	Intel HD 4400	4GBx1	500GB 7200	None	7260 b/g/n	None	2nd DP	None	Stand	None	USB	Speaker	None	Win7 P64 DG Win8.1	3-onsite	No	10/14
10E9000QUS	i3-4130T	Intel HD 4400	4GBx1	256GB SSD	None	7260 b/g/n	None	2nd DP	None	Stand	None	USB	Speaker	None	Win7 P64 DG Win8.1	3-onsite	No	10/14
10E9000RUS	i3-4130T	Intel HD 4400	8GBx1	500GB 7200	None	7260 b/g/n	None	None	None	Stand	None	USB	Speaker	None	Win7 P64 DG Win8.1	3-onsite	No	10/14
10E9000SUS	i5-4590T	Intel HD 4600	4GBx1	500GB 7200	None	7260 b/g/n	None	None	None	Stand	None	USB	Speaker	None	Win7 P64 DG Win8.1	3-onsite	No	10/14
10E9000TUS	i5-4590T	Intel HD 4600	8GBx1	500GB 7200	None	7260 b/g/n	None	2nd DP	None	Stand	None	USB	Speaker	None	Win7 P64 DG Win8.1	3-onsite	No	10/14
10E9000UUS	i5-4590T	Intel HD 4600	4GBx1	256GB SSD	None	7260 b/g/n	None	2nd DP	None	Stand	None	USB	Speaker	None	Win7 P64 DG Win8.1	3-onsite	No	10/14
10E9000VUS	i7-4785T	Intel HD 4600	4GBx1	500GB 7200	None	7260 b/g/n	None	2nd DP	None	Stand	Mount	USB	Speaker	None	Win7 P64 DG Win8.1	3-onsite	No	10/14
10E9000WUS	i7-4785T	Intel HD 4600	8GBx1	500GB 7200	None	7260 b/g/n	None	2nd DP	None	Stand	Mount	USB	Speaker	None	Win7 P64 DG Win8.1	3-onsite	No	10/14
10E9000XUS	i7-4785T	Intel HD 4600	8GBx1	256GB SSD	None	7260 b/g/n	None	USB	None	Stand	Mount	USB	Speaker	None	Win7 P64 DG Win8.1	3-onsite	No	10/14
10E9000YUS	i7-4785T	Intel HD 4600	4GBx1	256GB SSD	None	7260 b/g/n	None	USB	None	Stand	Mount	USB	Speaker	None	Win7 P64 DG Win8.1	3-onsite	No	10/14
10E90010US	i7-4785T	Intel HD 4600	4GBx1	180GB SSD	None	7260 b/g/n	None	2nd DP	None	Stand	None	USB	Speaker	None	Win7 P64 DG Win8.1	3-onsite	No	10/14

• For detailed platform specifications, please see [ThinkCentre M83 Tiny Platform Specifications sheet](#)

Processor	Intel® Celeron®, Intel Pentium®, or 4th Generation Intel Core™ i3 / i5 / i7 Processor	Manageability Security chip	Intel Standard Manageability Trusted Platform Module, TCG 1.2-compliant																														
	<table border="1"> <thead> <tr> <th>Processor</th> <th>Cores / Threads</th> <th>Frequency (Max/Base)</th> <th>Cache</th> <th>Memory Types</th> <th>Integrated Graphics</th> </tr> </thead> <tbody> <tr> <td>Core i3-4130T</td> <td>2 / 4</td> <td>2.90 GHz</td> <td>3MB</td> <td>DDR3-1600</td> <td>Intel HD 4400</td> </tr> <tr> <td>Core i3-4150T</td> <td>2 / 4</td> <td>3.00 GHz</td> <td>3MB</td> <td>DDR3-1600</td> <td>Intel HD 4400</td> </tr> <tr> <td>Core i5-4590T</td> <td>4 / 4</td> <td>2.00 / 3.00 GHz</td> <td>6MB</td> <td>DDR3-1600</td> <td>Intel HD 4600</td> </tr> <tr> <td>Core i7-4785T</td> <td>4 / 8</td> <td>2.20 / 3.20 GHz</td> <td>8MB</td> <td>DDR3-1600</td> <td>Intel HD 4600</td> </tr> </tbody> </table>	Processor	Cores / Threads	Frequency (Max/Base)	Cache	Memory Types	Integrated Graphics	Core i3-4130T	2 / 4	2.90 GHz	3MB	DDR3-1600	Intel HD 4400	Core i3-4150T	2 / 4	3.00 GHz	3MB	DDR3-1600	Intel HD 4400	Core i5-4590T	4 / 4	2.00 / 3.00 GHz	6MB	DDR3-1600	Intel HD 4600	Core i7-4785T	4 / 8	2.20 / 3.20 GHz	8MB	DDR3-1600	Intel HD 4600	Security features	<ul style="list-style-type: none"> • Security slot (in rear for optional Kensington® MicroSaver® cable) • Smart USB protection, allows keyboard/ mouse only, blocks all storage devices • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement • Optional <i>Chassis intrusion switch</i>
Processor	Cores / Threads	Frequency (Max/Base)	Cache	Memory Types	Integrated Graphics																												
Core i3-4130T	2 / 4	2.90 GHz	3MB	DDR3-1600	Intel HD 4400																												
Core i3-4150T	2 / 4	3.00 GHz	3MB	DDR3-1600	Intel HD 4400																												
Core i5-4590T	4 / 4	2.00 / 3.00 GHz	6MB	DDR3-1600	Intel HD 4600																												
Core i7-4785T	4 / 8	2.20 / 3.20 GHz	8MB	DDR3-1600	Intel HD 4600																												
Memory	16GB max / DDR3 Low Voltage, DDR3L-1600*, non-parity, two 204-pin SO-DIMM sockets * System automatically clocks down for processors with 1333MHz DDR3 memory controller	Keyboard	USB: Preferred Pro USB Keyboard (USB connector), Lenovo logo Finger: Lenovo USB Fingerprint Keyboard (USB connector) 2.4G: Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black																														
Disk	<i>Some:</i> hard disk, 2.5" Wide, 5400 or 7200 rpm, Active Protection System™ <i>Some:</i> 500GB (5400 rpm) SSHD / with 8GB flash memory, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / 2.5" Wide	Mouse	USB: Enhanced Optical USB Mouse, black, Lenovo logo 2.4G: Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black																														
Optical	<i>Some:</i> external optical box with slim DVD-ROM, 12.7mm high, tray-in, via USB <i>Some:</i> external optical box with slim DVD±RW, 12.7mm high, tray-in, via USB	Mechanical	Tiny (1L), business black color; metal case																														
Onboard SATA Media reader	SATA 6.0Gb/s controller, one connector on planar None		<table border="1"> <tr> <td>M83 Tiny only</td> <td>7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration</td> </tr> <tr> <td>M83 Tiny with VESA mount & optical box</td> <td>7.2" W X 7.2" D X 2.6" H 184mm W X 182mm D X 65mm H 5.1 lb (2.3 kg), weight may vary by configuration</td> </tr> </table>	M83 Tiny only	7.0" W X 7.2" D X 1.4" H 179mm W X 182mm D X 34.5mm H 2.9 lb (1.3 kg), weight may vary by configuration	M83 Tiny with VESA mount & optical box	7.2" W X 7.2" D X 2.6" H 184mm W X 182mm D X 65mm H 5.1 lb (2.3 kg), weight may vary by configuration																										
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M83 Tiny with VESA mount & optical box	7.2" W X 7.2" D X 2.6" H 184mm W X 182mm D X 65mm H 5.1 lb (2.3 kg), weight may vary by configuration																																
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600, in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional HDMI or one optional 2nd DisplayPort on some models, supports up to 3 independent displays; Maximum resolution: 2560x1600 (DisplayPort) @60Hz; 1920x1080 (HDMI) @60Hz; 1920x1200 (VGA) @60Hz (Reduced Blanking)	VESA mount Floor Stand	Optional VESA mount bracket kit, supports VESA 75mm and 100mm Optional system floor stand for vertical orientation																														
DP cable	Optional DisplayPort to DVI-D monitor cable	Power supply	65 watts AC/DC adapter, autosensing, 88% PSU (not included for TIO models)																														
Chipset	Intel Q85 Chipset	Limited warranty ³	<i>Some:</i> 3-years, limited onsite service / service upgrades available <i>Some:</i> 3-years, limited onsite service, IWS (International Warranty Service ⁹) / service upgrades available For Lenovo service upgrade options, please go to S-TC sheet																														
Front ports Rear ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm) Two USB 3.0, one USB 2.0 (optional external optical box or external I/O box occupies specific USB 2.0 on some models), ethernet (RJ-45), VGA, DisplayPort, one optional port (USB 2.0 / serial / 2nd DisplayPort / HDMI on some models)	Preload	<i>Some:</i> Windows® 7 Professional 32/64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit <i>Some:</i> Windows 7 Professional 64 <i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit																														
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 2.0 port	Environment	ENERGY STAR® 6.0; EPEAT™ Gold rating (U.S.) GREENGUARD®; RoHS-compliant; ErP Lot 3; UL Environment Gold; TUV; Cisco EnergyWise compatible																														
Audio support	High Definition (HD) Audio, Realtek ALC233 / optional internal speaker (1.5 watt)	Accessories	For compatible accessories, please go to TC-AQP sheet																														
WLAN ¹³	<i>Some:</i> 11b/g/n, Realtek RTL8723BE, Wi-Fi + BT 4.0 combo, 1x1 <i>Some:</i> 11b/g/n, Realtek RTL8192EE, Wi-Fi + BT 4.0 combo, 2x2 <i>Some:</i> 11ac/b/g/n, Broadcom BCM4352, dual band, Wi-Fi + BT 4.0 combo, 2x2 <i>Some:</i> 11b/g/n, Intel Centrino® Wireless-N 7260, Wi-Fi + BT 4.0 combo, 2x2 <i>Some:</i> 11ac/a/b/g/n, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo, 2x2																																
Bluetooth™ Ethernet Modem	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN® None																																

See footnotes for more detailed information

ThinkCentre M83 Small Pro, Mini Tower



Lenovo ThinkCentre M83 Mini Tower with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M83 Mini Tower with optional WLAN and graphic card



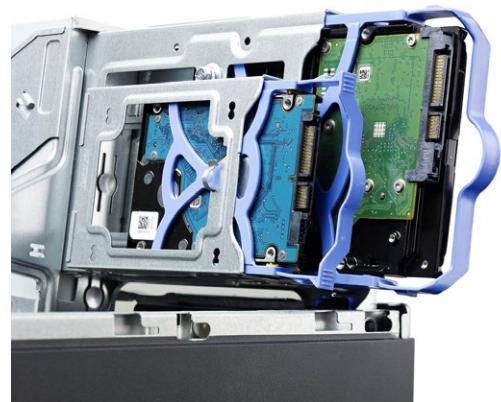
Lenovo ThinkCentre M83 Small Pro with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M83 Small Pro with optional dual graphic cards
* Cable lock only available on some special bid models



Lenovo ThinkCentre M83 Small Pro (inside view)

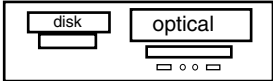


Optional 2.5 inch bay on Lenovo ThinkCentre M83 Small Pro
* Come with optional 2.5 inch 2nd HDD

ThinkCentre M83 SFF Pro (10AM) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Pro-cessor	Memory ^a	SATA disk GB rpm	2nd disk	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	Floor stand	ENERGY STAR 6.0	Preload	Ann date (mm/dd/yy)
10AM0002US	3x4	i5-4670	4GBx1	1TB 7200		None		HD 4600	USB	None	None	None	None	None	Win7 Pro64 (DG)	07/30/13
10AM0003US	3x4	i5-4570	4GBx1	500G 7200		None		HD 4600	None	None	None	None	None	None	Win7 Pro64 (DG)	07/30/13
10AM0004US	3x4	i7-4770	8GBx1	1TB 7200		Intel 105		GT 620	USB	Serial	Parallel	None	Stand	None	Win7 Pro64 (DG)	07/30/13
10AM0005US	3x4	i5-4570	8GBx1	1TB 7200		Intel 105		GT 620	USB	Serial	Parallel	None	Stand	None	Win7 Pro64 (DG)	07/30/13
10AM0006US	3x4	i7-4770	4GBx1	500G 7200		None		HD 4600	None	None	None	None	Stand	None	Win7 Pro64 (DG)	07/30/13
10AM0007US	3x4	i5-4570	4GBx1	500G 7200		None		HD 4600	None	None	None	None	Stand	None	Win7 Pro64 (DG)	07/30/13
10AM000AUS	3x4	i7-4770	4GBx1	1TB 7200		None		HD 4600	None	None	None	None	Stand	None	Win7 Pro64 (DG)	08/20/13
10AM000BUS	3x4	i5-4570	4GBx1	128G SSD	1TB	None	Media	HD 4600	None	None	None	None	Stand	None	Win7 Pro64 (DG)	08/20/13
10AM0009US	3x4	i3-4130	4GBx1	500G 7200		None		HD 4400	None	None	None	None	Stand	None	Win7 Pro64 (DG)	08/20/13
10AM000CUS	3x4	i3-4130	4GBx1	500G Hybrid		None		HD 4400	None	None	None	None	Stand	None	Win7 Pro64 (DG)	08/20/13

Positioning	<i>Mainstream enterprise stability and manageability</i>											Preloaded operating system				
Processor	Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit				
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 				
Graphics	Intel HD Graphics 4400 or 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i> Some: NVIDIA® Geforce® GT 620 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; <i>Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz</i>											Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Intel Small Business Advantage • Nitro Pro 				
DP dongle	None															
Disk	Some: SATA 6.0Gb/s, 7200 rpm, 3.5" wide Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide															
2nd disk	Some: SATA 6.0Gb/s, 7200 rpm, 3.5" wide															
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive															
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset															
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)															
eSATA port	None															
Media reader	Some: 29-in-1 media reader, internal USB 2.0															
Chipset	Intel Q85 Express Chipset															
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models															
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)															
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1															
Bluetooth	None															
Audio	High Definition (HD) Audio, Realtek® ALC662 codec															
Speaker	Internal speaker for business audio (1 watt)															
IEEE 1394	None															
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®															
Manageability	Intel Standard Manageability															
Modem	None															
Security chip	Trusted Platform Module (TPM1.2-compliant)											Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 				
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Floor Stand	Optional system floor stand for vertical orientation															
Power supply	240 watts, autosensing															
Machine	<ul style="list-style-type: none"> • SFF Pro (12.9L), business black color; metal case • (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm • 17.20 lb (7.8 kg) in maximum configuration • Toolless cover removal, adapter retention • Toolless disk and optical drive removal 															
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 3: 2.5", N/A, internal, opt or come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader															
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max)											ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information
 US model(s) announced July 30, 2013 or August 20, 2013

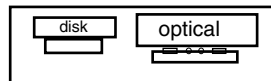
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ThinkCentre M83 SFF Pro (10AM) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁶	SATA disk	Optional 2.5" Bay	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	Floor stand	ENERGY STAR 6.0	Preload	Ann date (mm/dd/yy)
10AM000JUS	3x4	i3-4130	4GBx1	500G 3.5"	2.5" bay	None	None	HD 7450	USB	None	None	None	Stand	None	Win7 P64 DG Win8.1	02/04/14
10AM000KUS	3x4	i5-4570	4GBx1	500G 3.5"	2.5" bay	None	None	HD 7450	USB	None	None	None	Stand	None	Win7 P64 DG Win8.1	02/04/14
10AM000LUS	3x4	i7-4770	4GBx1	500G 3.5"	2.5" bay	None	None	HD 7450	USB	None	None	None	Stand	None	Win7 P64 DG Win8.1	02/04/14
10AM000MUS	3x4	i7-4770	8GBx1	1TB Hybrid	2.5" bay	None	None	HD 7450	USB	None	None	None	Stand	None	Win7 P64 DG Win8.1	02/04/14
10AM000NUS	3x4	G3220	4GBx1	500G 3.5"	2.5" bay	None	None	HD 7450	USB	None	None	None	Stand	None	Win7 P64 DG Win8.1	02/04/14
10AM000PUS	3x4	i3-4130	4GBx1	500G 2.5"	2.5" bay	None	None	HD 4400	None	None	None	None	None	None	Win7 P64 DG Win8.1	02/25/14
10AM000QUS	3x4	i5-4570	4GBx1	500G 2.5"	2.5" bay	None	None	HD 4600	None	None	None	None	None	None	Win7 P64 DG Win8.1	02/25/14
10AM000RUS	3x4	i5-4670	4GBx1	1TB 3.5"	2.5" bay	None	None	HD 4600	None	None	None	None	None	None	Win7 P64 DG Win8.1	02/25/14
10AM000SUS	3x4	i7-4770	4GBx1	1TB 3.5"	2.5" bay	None	None	HD 4600	None	None	None	None	None	None	Win7 P64 DG Win8.1	02/25/14
10AM000TUS	3x4	i3-4130	4GBx1	500G 3.5"	2.5" bay	None	None	HD 4400	None	None	None	None	Stand	None	Win7 P64 DG Win8.1	04/01/14

Positioning Processor	<i>Mainstream enterprise stability and manageability</i> Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Preloaded operating system Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Intel Small Business Advantage • Nitro Pro				
Implementation Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											Security • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s)				
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Max resolution: 2560x1600 (DP)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i> <i>Some: AMD Radeon™ HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts;</i> <i>Max resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz</i>															
DP dongle	None															
Disk	<i>Some: SATA 6.0Gb/s, 7200 rpm, 2.5" wide</i> <i>Some: SATA 6.0Gb/s, 7200 rpm, 3.5" wide</i> <i>Some: 1TB (7200 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 3.5" wide</i>															
Optical SATA controller Onboard SATA	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive Serial ATA, SATA 6.0Gb/s, integrated in chipset SATA cables match SATA devices (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)															
eSATA port Media reader	None															
Chipset	Intel Q85 Express Chipset															
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models															
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)															
PCIe WLAN Bluetooth	None															
Audio Speaker	High Definition (HD) Audio, Realtek® ALC662 codec Internal speaker for business audio (1 watt)															
IEEE 1394 Ethernet	None One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®															
Manageability Modem	Intel Standard Manageability None															
Security chip	Trusted Platform Module (TPM1.2-compliant)															
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Floor Stand	Optional system floor stand for vertical orientation															
Power supply	240 watts, autosensing															
Machine	<ul style="list-style-type: none"> • SFF Pro (12.9L), business black color; metal case • (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm • 17.20 lb (7.8 kg) in maximum configuration • Toolless cover removal, adapter retention • Toolless disk and optical drive removal 															
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 3: 2.5", N/A, internal, opt or come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader															
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max)															
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet				

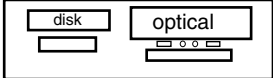


See footnotes for important warranty information
US model(s) announced February 04, February 25, or April 1, 2014

ThinkCentre M83 SFF Pro (10AM) - TopSeller - III

Product Specifications Reference (PSREF)

Type-model	Slot x Pro-bay	Processor	Memory ⁸	SATA disk	Optional 2.5" Bay	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	Floor stand	ENERGY STAR 6.0	Preload	Ann date (mm/dd/yy)
10AM000VUS	3x4	i5-4590	4GBx1	500G 2.5"	2.5" bay	None	None	HD 4600	None	None	None	None	Stand	None	Win7 P64 DG	Win8.1 02/10/15
10AM000YUS	3x4	i5-4690	4GBx1	1TB 3.5"	2.5" bay	None	None	HD 4600	None	None	None	None	Stand	None	Win7 P64 DG	Win8.1 02/10/15
10AM000UUS	3x4	i7-4790	4GBx1	1TB 3.5"	2.5" bay	None	None	HD 4600	None	None	None	None	Stand	None	Win7 P64 DG	Win8.1 02/10/15
10AM000WUS	3x4	i3-4150	4GBx1	500G 2.5"	2.5" bay	None	None	HD 4400	None	None	None	None	Stand	None	Win7 P64 DG	Win8.1 02/10/15
10AM000XUS	3x4	i5-4590	4GBx1	180G SSD opal	2.5" bay	None	None	HD 4600	None	None	None	None	Stand	None	Win7 P64 DG	Win8.1 02/10/15

Positioning	<i>Mainstream enterprise stability and manageability</i>											Preloaded operating system				
Processor	Intel® Core™ i3-4150 Processor (2 cores / 4 threads, 3.5GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4590 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4690 Processor (4 cores / 4 threads, 3.5GHz, 6MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4790 Processor (4 cores / 8 threads, 3.6GHz, 8MB cache), Turbo Boost 2.0 (4.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 				
Implementation	Processor in LGA1150 socket											Preloaded applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Intel Small Business Advantage • Nitro Pro 				
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Max resolution: 2560x1600 (DP)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i> Some: AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Max resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz</i>															
DP dongle	None															
Disk	Some: SATA 6.0Gb/s, 7200 rpm, 2.5" wide Some: SATA 6.0Gb/s, 7200 rpm, 3.5" wide Some: 1TB (7200 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 3.5" wide Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide															
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive															
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset															
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)															
eSATA port	None															
Media reader	None															
Chipset	Intel Q85 Express Chipset															
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models															
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)															
PCIe WLAN	None															
Bluetooth	None															
Audio	High Definition (HD) Audio, Realtek® ALC662 codec															
Speaker	Internal speaker for business audio (1 watt)															
IEEE 1394	None															
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®															
Manageability	Intel Standard Manageability															
Modem	None															
Security chip	Trusted Platform Module (TPM1.2-compliant)											Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 				
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Floor Stand	Optional system floor stand for vertical orientation															
Power supply	240 watts, autosensing															
Machine	<ul style="list-style-type: none"> • SFF Pro (12.9L), business black color; metal case • (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm • 17.20 lb (7.8 kg) in maximum configuration • Toolless cover removal, adapter retention • Toolless disk and optical drive removal 															
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 3: 2.5", N/A, internal, opt or come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader											ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max)											Supports ThinkVantage Technologies				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information

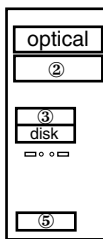
ThinkCentre M83 Mini Tower (10AL) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Additional Front Graphics	2nd serial USB 2.0	Parallel port	Chassis intrusion switch	ENERGY STAR 6.0	Preload	Ann date (mm/dd/yy)
10AL0008US	3x5	i5-4670	4GBx1	1TB 7200	DVD±RW	None	None	HD 4600	USB	None	None	None	None	Win7 Pro64 (DG) 07/30/13
10AL0009US	3x5	i5-4570	4GBx1	500GB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 Pro64 (DG) 07/30/13
10AL000AUS	3x5	i7-4770	4GBx1	500GB 7200	DVD±RW	None	None	HD 4600	USB	None	None	None	None	Win7 Pro64 (DG) 07/30/13
10AL000BUS	3x5	i5-4670	4GBx1	500GB 7200	DVD±RW	None	None	HD 4600	USB	None	None	None	None	Win7 Pro64 (DG) 07/30/13
10AL000CUS	3x5	i5-4670	4GBx2	1TB 7200	DVD±RW	None	None	HD 4600	USB	Serial	Parallel	None	None	Win7 Pro64 (DG) 07/30/13
10AL000DUS	3x5	i5-4670	4GBx1	500GB 7200	DVD±RW	None	None	HD 8470	USB	Serial	Parallel	None	None	Win7 Pro64 (DG) 07/30/13
10AL000EUS	3x5	i7-4770	4GBx2	1TB 7200	DVD±RW	None	None	GT 620	USB	Serial	Parallel	None	None	Win7 Pro64 (DG) 07/30/13
10AL000FUS	3x5	i7-4770	4GBx2	500GB 7200	DVD±RW	None	None	HD 8570	USB	Serial	Parallel	None	None	Win7 Pro64 (DG) 07/30/13
10AL000GUS	3x5	i7-4770	4GBx1	1TB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 Pro64 (DG) 08/20/13

• Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning	<i>Mainstream enterprise stability and manageability</i>											Preloaded operating system
Processor	Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											<ul style="list-style-type: none"> Rescue and Recovery™ Password Manager
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i> Some: AMD Radeon™ HD 8470 , DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, <i>Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz</i> Some: AMD Radeon HD 8570 , DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; <i>Max resolution: 4096x2160 (HDMI)@24Hz; 2048x1536 (VGA)@85Hz</i> Some: NVIDIA® GeForce® GT 620 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; <i>Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz</i>											Preloaded applications (only some listed)
DP dongle	None											<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Intel Small Business Advantage Nitro Pro
Disk	SATA 6.0Gb/s 7200 rpm, 3.5" wide											Security <ul style="list-style-type: none"> Security chip (see information on left) One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Serial port I/O control Individual USB port disablement Chassis intrusion switch on selected model(s)
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive											
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset											
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)											
eSATA port	None											
Media reader	None											
Chipset	Intel Q85 Express Chipset											
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models											
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)											
PCIe WLAN	None											
Bluetooth	None											
Audio	High Definition (HD) Audio, Realtek® ALC662 codec											
Speaker	Internal speaker for business audio (1.5 watt)											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®											
Manageability	Intel Standard Manageability											
Modem	None											
Security chip	Trusted Platform Module (TPM1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	280 watts, autosensing											
Machine	<ul style="list-style-type: none"> Mini Tower (25L), business black color, metal case (WxDxH) 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm 24.69 lb (11.20 kg) in maximum configuration Toolless cover removal, adapter retention Toolless disk, optical drive removal 											
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk											
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max)											
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

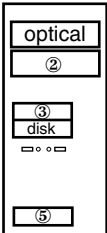


ThinkCentre M83 Mini Tower (10AL) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ³	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	ENERGY STAR 6.0	Preload	Ann date (mm/dd/yy)
10AL000QUS	3x5	i5-4570	4GBx1	500GB 7200	DVD±RW	None	None	HD 7450	USB	None	None	None	None	Win7 P64 DG Win8.1	02/04/14
10AL000RUS	3x5	i7-4770	8GBx1	500GB 7200	DVD±RW	None	None	HD 7450	USB	None	None	None	None	Win7 P64 DG Win8.1	02/04/14
10AL000SUS	3x5	i7-4770	8GBx1	1TB 7200	DVD±RW	None	None	HD 7450	USB	None	None	None	None	Win7 P64 DG Win8.1	02/04/14
10AL000TUS	3x5	i7-4770	8GBx1	1TB Hybrid	DVD±RW	None	None	HD 7450	USB	None	None	None	None	Win7 P64 DG Win8.1	02/04/14
10AL000UUS	3x5	i5-4570	4GBx1	500GB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG Win8.1	02/25/14
10AL000VUS	3x5	i7-4770	4GBx1	1TB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG Win8.1	02/25/14

• Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning	Mainstream enterprise stability and manageability											Preloaded operating system			
Processor	Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											<i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit			
Implementation	Processor in LGA1150 socket														
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets														
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i> <i>Some: AMD Radeon™ HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; Max resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz</i>											Ready to install applications (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Intel Small Business Advantage Nitro Pro 			
DP dongle	None														
Disk	<i>Some:</i> SATA 6.0Gb/s 7200 rpm, 3.5" wide <i>Some:</i> 1TB (7200 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 3.5" wide														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset														
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)														
eSATA port	None														
Media reader	None														
Chipset	Intel Q85 Express Chipset														
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
PCIe WLAN	None														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio (1.5 watt)														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®														
Manageability	Intel Standard Manageability														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)											Security <ul style="list-style-type: none"> Security chip (see information on left) One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Serial port I/O control Individual USB port disablement Chassis intrusion switch on selected model(s) 			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing														
Machine	<ul style="list-style-type: none"> Mini Tower (25L), business black color, metal case (WxDxH) 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm 24.69 lb (11.20 kg) in maximum configuration Toolless cover removal, adapter retention Toolless disk, optical drive removal 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max)											ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information

US model(s) announced February 4, 2014 or February 25, 2014

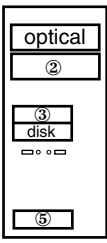
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(MSK1T-6) February 2014

ThinkCentre M83 Mini Tower (10AL) - TopSeller - III

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ³	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	ENERGY STAR 6.0	Preload	Ann date (mm/yy)
10AL0014US	3x5	i7-4790	4GBx1	500GB 7200	DVD±RW	None	None	HD 7450	None	None	None	None	None	Win7 P64 DG	Win8.1 10/14
10AL0017US	3x5	G3240	4GBx1	500GB 7200	DVD±RW	None	None	Intel HD	None	None	None	None	None	Win7 P64 DG	Win8.1 10/14
10AL000XUS	3x5	i5-4590	4GBx1	500GB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG	Win8.1 10/14
10AL0013US	3x5	i7-4790	8GBx1	256G SSD	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG	Win8.1 10/14
10AL000YUS	3x5	i5-4590	4GBx1	1TB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG	Win8.1 10/14
10AL0016US	3x5	i3-4150	4GBx1	1TB 7200	DVD±RW	None	None	HD 4400	None	None	None	None	None	Win7 P64 DG	Win8.1 10/14
10AL0012US	3x5	i7-4790	4GBx1	1TB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG	Win8.1 10/14
10AL0010US	3x5	i5-4590	8GBx1	256G SSD	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG	Win8.1 10/14
10AL0015US	3x5	i3-4150	4GBx1	500GB 7200	DVD±RW	None	None	HD 4400	None	None	None	None	None	Win7 P64 DG	Win8.1 10/14
10AL0011US	3x5	i7-4790	4GBx1	500GB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	None	Win7 P64 DG	Win8.1 10/14

Positioning	<i>Mainstream enterprise stability and manageability</i>											Preloaded operating system			
Processor	Intel® Pentium® G3240 Processor (2 cores / 2 threads, 3.1GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i3-4150 Processor (2 cores / 4 threads, 3.5GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4590 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4790 Processor (4 cores / 8 threads, 3.6GHz, 8MB cache), Turbo Boost 2.0 (4.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller											Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit			
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											<ul style="list-style-type: none"> Rescue and Recovery™ Password Manager 			
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i> Some: AMD Radeon™ HD 7450 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Max resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz</i>											Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Intel Small Business Advantage Nitro Pro 			
DP dongle	None														
Disk	Some: SATA 6.0Gb/s 7200 rpm, 3.5" wide Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset														
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)														
eSATA port	None														
Media reader	None														
Chipset	Intel Q85 Express Chipset														
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Two USB 3.0, four USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
PCIe WLAN	None														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio (1.5 watt)														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®														
Manageability	Intel Standard Manageability														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)											Security <ul style="list-style-type: none"> Security chip (see information on left) One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Serial port I/O control Individual USB port disablement Chassis intrusion switch on selected mode(s) 			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing														
Machine	<ul style="list-style-type: none"> Mini Tower (25L), business black color, metal case (WxDxH) 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm 24.69 lb (11.20 kg) in maximum configuration Toolless cover removal, adapter retention Toolless disk, optical drive removal 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk														
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max)														
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information

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(MSK1T-7) October 2014



Lenovo ThinkCentre M93/M93p Tiny with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M93/M93p Tiny with optional WLAN



Lenovo ThinkCentre M93/M93p Tiny with optional external I/O box



Lenovo ThinkCentre M93/M93p Tiny with optional external optical box



Lenovo ThinkCentre M93/M93p Tiny (inside view)



Lenovo ThinkCentre M93/M93p Tiny

ThinkCentre M93/M93p Tiny, Small Pro, Mini Tower - II



Lenovo ThinkCentre M93/M93p Mini Tower with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M93/M93p Mini Tower with optional WLAN and graphic card



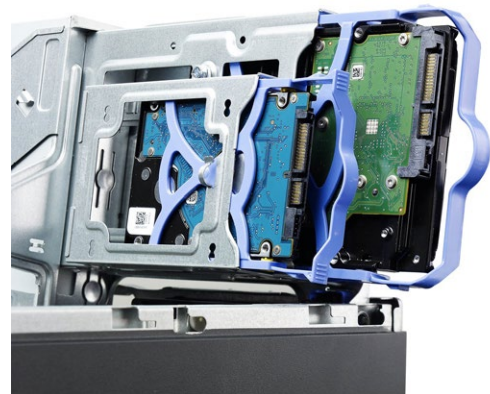
Lenovo ThinkCentre M93/M93p Small Pro with Lenovo ThinkVision Monitor



Lenovo ThinkCentre M93/M93p Small Pro with optional dual graphic cards
* Cable lock only available on some special bid models



Lenovo ThinkCentre M93/M93p Small Pro (inside view)



Optional 2.5" bay on
Lenovo ThinkCentre M93/M93p Small Pro
* Come with optional 2.5" 2nd HDD

ThinkCentre M93p Tiny (10AB) - TopSeller I

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Intel vPro	Preload	Ann date (mm/dd/yy)
10AB000DUS	i5-4570T	4GBx1	500G Hybrid	None	HD 4600	Intel 105	2nd DP	None	None	None	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000EUS	i5-4570T	4GBx1	500G Hybrid DVD±RW	None	HD 4600	Intel 105	2nd DP	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000FUS	i7-4765T	8GBx1	500G Hybrid DVD±RW	None	HD 4600	Intel 105	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000GUS	i7-4765T	4GBx2	180G SSD DVD±RW	None	HD 4600	Intel 6235	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000HUS	i7-4765T	4GBx1	500G Hybrid DVD±RW	None	HD 4600	Intel 105	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000JUS	i5-4570T	4GBx2	180G SSD DVD±RW	None	HD 4600	Intel 6235	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000KUS	i5-4570T	4GBx1	500G Hybrid DVD±RW	None	HD 4600	Intel 105	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000QUS	i7-4765T	4GBx1	500G Hybrid DVD±RW	None	HD 4600	Intel 2230	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000RUS	i5-4570T	4GBx1	500G Hybrid DVD±RW	None	HD 4600	Intel 2230	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning	Ultimate security, stability, and manageability for the enterprise											Preloaded operating system
Processor	Intel® Core™ i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Implementation	Intel Core i7-4765T Processor (4 cores / 8 threads, 2.0GHz, 8MB cache), Turbo Boost 2.0 (3.0GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Ready to install applications (only some listed)
Memory	Processor in LGA1150 socket											<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager
Graphics	16GB max, PC3-12800 1600MHz DDR3, two 204-pin SODIMM sockets (notebook)											Preloaded applications (only some listed)
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional HDMI or one optional 2nd DisplayPort on select models, supports up to triple independent display; Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1080 (HDMI)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro
DP dongle	None											
Disk	Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide											
External optical SATA controller	Some: external optical box with slim DVD burner, 12.7mm high, tray-in, via USB 3.0											
Onboard SATA eSATA port	Serial ATA, SATA 6.0Gb/s support, integrated in chipset One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar											
Chipset	None											
Chipset	Intel Q87 Express Chipset											
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)											
Rear ports	Three USB 3.0 (optional external optical box or external I/O box occupies one specific USB 3.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / 2nd DisplayPort / HDMI on selected models)											
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 3.0 port											
PCIe Mini Card	One PCI Express® Mini Card slot (Half Size)											
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2											
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter											Security
Audio	High Definition (HD) Audio, Realtek® ALC283 codec											<ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable)
Speaker	Internal speaker for business audio (1.5 watt)											<ul style="list-style-type: none"> ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s)
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®											
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)											
Modem	None											
Security chip	Trusted Platform Module (TPM1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	Optional system floor stand for vertical orientation											
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard											
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU											
Machine	<ul style="list-style-type: none"> ● Tiny (1L), business black color; metal case ● M93p Tiny only: 7.0" W X 7.2" D X 1.4" H ● M93p Tiny only: 179mm W X 182mm D X 34.5mm H ● M93p Tiny only: 2.9 lb (1.3 kg), weight may vary by configuration ● With VESA mount & optical box: 7.2" W X 7.2" D X 2.55" H ● With VESA mount & optical box: 184mm W X 182mm D X 65mm H ● With VESA mount & optical box: 5.1 lb (2.3 kg), weight may vary by configuration 											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US model(s) announced July 2, 2013

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(MSS1N-1) July 2013

ThinkCentre M93p Tiny (10AB) - TopSeller II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe Mini Card WLAN / BT	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Intel vPro	Preload	Ann date (mm/dd/yy)
10AB000SUS	i7-4765T	4GBx1	500G Hybrid	I/O box	HD 4600	Intel 105	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000TUS	i5-4570T	4GBx1	500G Hybrid	I/O box	HD 4600	Intel 105	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB000UUS	i5-4570T	4GBx1	500G Hybrid	I/O box	HD 4600	None	None	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0010US	i5-4570T	4GBx1	500G 7200	None	HD 4600	Intel 105	2nd DP	None	Stand	None	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0011US	i7-4765T	8GBx1	128G SSD	DVD±RW	HD 4600	Intel 6235	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0012US	i7-4765T	4GBx1	128G SSD	DVD±RW	HD 4600	Intel 2230	HDMI	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0013US	i5-4570T	4GBx1	500G 7200	DVD±RW	HD 4600	Intel 105	2nd DP	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0014US	i5-4570T	4GBx1	500G 7200	I/O box	HD 4600	Intel 105	2nd DP	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0015US	i5-4570T	4GBx1	500G 7200	DVD±RW	HD 4600	Intel 2230	2nd DP	None	None	Mount	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB0016US	i5-4570T	4GBx1	500G 7200	None	HD 4600	Intel 105	Serial	None	Stand	None	USB	vPro	Win7 Pro64 (DG)	07/02/13
10AB002AUS	i5-4570T	4GBx1	128G SSD	None	HD 4600	Intel 2230	2nd DP	None	Stand	None	USB	vPro	Win7 Pro64 (DG)	12/10/13

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system
Processor	Intel® Core™ i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4765T Processor (4 cores / 8 threads, 2.0GHz, 8MB cache), Turbo Boost 2.0 (3.0GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed)
Implementation	Processor in LGA1150 socket											<ul style="list-style-type: none"> Rescue and Recovery™ Password Manager
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											Preloaded applications (only some listed)
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional HDMI or one optional 2nd DisplayPort on select models, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1080 (HDMI)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i>											<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Intel Small Business Advantage Nitro Pro
DP dongle	None											
Disk	<i>Some: SATA 6.0Gb/s, 2.5" Wide, 7200 rpm</i> <i>Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</i> <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</i>											
External optical	<i>Some: external optical box with slim DVD burner, 12.7mm high, tray-in, via USB 3.0</i>											
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset											
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar											
eSATA port	None											
Chipset	Intel Q87 Express Chipset											
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)											
Rear ports	Three USB 3.0 (optional external optical box or external I/O box occupies one specific USB 3.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / 2nd DisplayPort / HDMI on selected models)											
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 3.0 port											
PCIe Mini Card	One PCI Express® Mini Card slot (Half Size)											
PCIe WLAN	<i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1</i> <i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2</i> <i>Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2</i>											
Bluetooth	<i>Some: Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter</i>											
Audio	High Definition (HD) Audio, Realtek® ALC283 codec											
Speaker	Internal speaker for business audio (1.5 watt)											
IEEE 1394	None											
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®											
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)											
Modem	None											
Security chip	Trusted Platform Module (TPM1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Floor Stand	Optional system floor stand for vertical orientation											
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard											
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU											
Machine	<ul style="list-style-type: none"> Tiny (1L), business black color; metal case <i>M93/p Tiny only:</i> 7.0" W X 7.2" D X 1.4" H <i>M93/p Tiny only:</i> 179mm W X 182mm D X 34.5mm H <i>M93/p Tiny only:</i> 2.9 lb (1.3 kg), weight may vary by configuration <i>With VESA mount & optical box:</i> 7.2" W X 7.2" D X 2.55" H <i>With VESA mount & optical box:</i> 184mm W X 182mm D X 65mm H <i>With VESA mount & optical box:</i> 5.1 lb (2.3 kg), weight may vary by configuration 											Security <ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Individual USB port disablement Chassis intrusion switch on selected model(s)
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies

See footnotes for important warranty information
US model(s) announced July 2, 2013 or December 10, 2013

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(MSS1N-2) December 2013

ThinkCentre M93p Tiny (10AB) - TopSeller III

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe WLAN	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Intel vPro	Preload	Ann date (mm/dd/yy)
10AB002TUS	i7-4765T	4GBx1	500G 7200	None	HD 4600	7260 ac	HDMI	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 01/14/14
10AB002VUS	i5-4570T	4GBx1	500G 7200	None	HD 4600	7260 bn	2nd DP	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 01/14/14
10AB002WUS	i7-4765T	8GBx1	128G SSD	None	HD 4600	7260 ac	2nd DP	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 01/14/14
10AB002UUS	i5-4570T	4GBx1	500G 7200	None	HD 4600	7260 ac	HDMI	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 01/14/14
10AB002XUS	i5-4570T	4GBx1	500G Hybrid	DVD±RW	HD 4600	7260 bn	2nd DP	None	None	Mount	USB	vPro	Win7 P64 DG	Win8.1 02/25/14
10AB002YUS	i7-4765T	4GBx1	500G Hybrid	DVD±RW	HD 4600	7260 bn	2nd DP	None	None	Mount	USB	vPro	Win7 P64 DG	Win8.1 02/25/14
10AB0030US	i7-4765T	8GBx1	128G SSD	DVD±RW	HD 4600	7260 ac	2nd DP	None	None	Mount	USB	vPro	Win7 P64 DG	Win8.1 02/25/14
10AB003JUS	i7-4765T	8GBx1	256G SSD OPAL	None	HD 4600	7260 ac	2nd DP	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 06/17/14
10AB003KUS	i5-4570T	4GBx1	256G SSD OPAL	None	HD 4600	7260 ac	2nd DP	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 06/17/14

● Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system		
Processor	Intel® Core™ i5-4570T Processor (2 cores / 4 threads, 2.9GHz, 4MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4765T Processor (4 cores / 8 threads, 2.0GHz, 8MB cache), Turbo Boost 2.0 (3.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller											<i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit		
Implementation	Processor in LGA1150 socket													
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)													
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional HDMI or one optional 2nd DisplayPort on select models, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1080 (HDMI)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i>											Ready to install applications (only some listed) <ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager 		
DP dongle	None											Preloaded applications (only some listed) <ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro 		
Disk	<i>Some:</i> SATA 6.0Gb/s, 2.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide													
External optical	<i>Some:</i> external optical box with slim DVD burner, 12.7mm high, tray-in, via USB 3.0													
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset													
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar													
eSATA port	None													
Chipset	Intel Q87 Express Chipset													
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)													
Rear ports	Three USB 3.0 (optional external optical box or external I/O box occupies one specific USB 3.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / 2nd DisplayPort / HDMI on selected models)													
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 3.0 port													
PCIe Mini Card	One PCI Express® Mini Card slot (Half Size)													
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11ac/a/b/g/n wireless, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo adapter, 2x2													
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter													
Audio	High Definition (HD) Audio, Realtek® ALC283 codec													
Speaker	Internal speaker for business audio (1.5 watt)													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®													
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)													
Modem	None													
Security chip	Trusted Platform Module (TPM1.2-compliant)											Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● Individual USB port disablement ● Chassis intrusion switch on selected model(s) 		
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	Optional system floor stand for vertical orientation													
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard													
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU													
Machine	<ul style="list-style-type: none"> ● Tiny (1L), business black color; metal case ● <i>M93/p Tiny only:</i> 7.0" W X 7.2" D X 1.4" H ● <i>M93/p Tiny only:</i> 179mm W X 182mm D X 34.5mm H ● <i>M93/p Tiny only:</i> 2.9 lb (1.3 kg), weight may vary by configuration ● <i>With VESA mount & optical box:</i> 7.2" W X 7.2" D X 2.55" H ● <i>With VESA mount & optical box:</i> 184mm W X 182mm D X 65mm H ● <i>With VESA mount & optical box:</i> 5.1 lb (2.3 kg), weight may vary by configuration 											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information
 US model(s) announced January 14 or February 25, 2014

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 (MSS1N-8) February 2014

ThinkCentre M93p Tiny (10AB) - TopSeller IV

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe WLAN	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Intel vPro	Preload	Ann date (mm/dd/yy)
10AB004AUS	I5-4590T	4GBx1	500G 7200	None	HD 4600	7260 b/g/n	None	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004CUS	I5-4590T	4GBx1	500G 7200	None	HD 4600	7260 ac	2nd DP	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004MUS	I7-4785T	4GBx1	180G SSD	None	HD 4600	7260 b/g/n	USB	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004EUS	I5-4590T	4GBx1	180G SSD	None	HD 4600	7260 b/g/n	Serial	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004DUS	I5-4590T	8GBx1	256G SSD	None	HD 4600	7260 ac	2nd DP	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004QUS	I7-4785T	4GBx1	180G SSD	None	HD 4600	7260 b/g/n	2nd DP	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004NUS	I7-4785T	8GBx1	256G SSD	None	HD 4600	7260 b/g/n	2nd DP	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004KUS	I5-4590T	4GBx1	500G 7200	None	HD 4600	7260 b/g/n	USB	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004FUS	I5-4590T	4GBx1	180G SSD	None	HD 4600	7260 b/g/n	Serial	None	None	Mount	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004LUS	I7-4785T	4GBx1	500G 7200	None	HD 4600	7260 b/g/n	USB	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14

● Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system		
Processor	Intel® Core i5-4590T Processor (4 cores / 4 threads, 2.0GHz, 6MB cache), Turbo Boost 2.0 (3.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4785T Processor (4 cores / 8 threads, 2.2GHz, 8MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit		
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed) ● Rescue and Recovery™ ● Password Manager Preloaded applications (only some listed) ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Intel Small Business Advantage ● Nitro Pro		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)													
Graphics	Intel HD Graphics 4600 in processor, uses main memory, Direct ^X ® 11, one VGA, one DisplayPort™, one optional HDMI or one optional 2nd DisplayPort on select models, supports up to triple independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1080 (HDMI)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i>													
DP dongle	None													
Disk	Some: SATA 6.0Gb/s, 2.5" Wide, 7200 rpm Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide													
External optical	Some: external optical box with slim DVD burner, 12.7mm high, tray-in, via USB 3.0													
SATA controller	Serial ATA, SATA 6.0Gb/s support, integrated in chipset													
Onboard SATA	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar													
eSATA port	None													
Chipset	Intel Q87 Express Chipset													
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)													
Rear ports	Three USB 3.0 (optional external optical box or external I/O box occupies one specific USB 3.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / 2nd DisplayPort / HDMI on selected models)													
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 3.0 port													
PCIe Mini Card	One PCI Express® Mini Card slot (Half Size)													
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 Some: 11ac/a/b/g/n wireless, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo adapter, 2x2													
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter													
Audio	High Definition (HD) Audio, Realtek® ALC283 codec													
Speaker	Internal speaker for business audio (1.5 watt)													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®													
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)													
Modem	None													
Security chip	Trusted Platform Module (TPM1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	Optional system floor stand for vertical orientation													
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard													
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU													
Machine	<ul style="list-style-type: none"> Tiny (1L), business black color; metal case M93/p Tiny only: 7.0" W X 7.2" D X 1.4" H M93/p Tiny only: 179mm W X 182mm D X 34.5mm H M93/p Tiny only: 2.9 lb (1.3 kg), weight may vary by configuration With VESA mount & optical box: 7.2" W X 7.2" D X 2.55" H With VESA mount & optical box: 184mm W X 182mm D X 65mm H With VESA mount & optical box: 5.1 lb (2.3 kg), weight may vary by configuration 											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet		

See footnotes for important warranty information

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(MSS1N-10) October 2014

ThinkCentre M93p Tiny (10AB) - TopSeller V

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ^a	SATA disk GB rpm	External optical / I/O box	Graphics	PCIe WLAN	Optional port	Chassis intrusion switch	Floor stand	VESA mount	Keyboard / mouse	Intel vPro	Preload	Ann date (mm/dd/yy)
10AB004TUS	I7-4785T	4GBx1	256G SSD	None	HD 4600	7260 b/g/n	2nd DP	None	None	Mount	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004RUS	I7-4785T	4GBx1	180G SSD	None	HD 4600	7260 b/g/n	HDMI	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004SUS	I7-4785T	4GBx1	256G SSD	None	HD 4600	7260 b/g/n	HDMI	None	None	Mount	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004HUS	I5-4590T	4GBx1	500G 7200	None	HD 4600	7260 b/g/n	Serial	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004PUS	I7-4785T	4GBx1	180G SSD	None	HD 4600	7260 b/g/n	Serial	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004UUS	I7-4785T	8GBx1	180G SSD	None	HD 4600	7260 b/g/n	USB	None	None	Mount	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004JUS	I5-4590T	4GBx1	500G 7200	None	HD 4600	7260 b/g/n	HDMI	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004BUS	I5-4590T	4GBx1	500G 7200	None	HD 4600	7260 b/g/n	2nd DP	None	Stand	None	USB	vPro	Win7 P64 DG	Win8.1 10/28/14
10AB004GUS	I5-4590T	4GBx1	500G 7200	None	HD 4600	7260 b/g/n	Serial	None	None	Mount	USB	vPro	Win7 P64 DG	Win8.1 10/28/14

● Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system		
Processor	Intel® Core i5-4590T Processor (4 cores / 4 threads, 2.0GHz, 6MB cache), Turbo Boost 2.0 (3.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4785T Processor (4 cores / 8 threads, 2.2GHz, 8MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller											<i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit		
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Intel Small Business Advantage Nitro Pro 		
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)													
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, one DisplayPort™, one optional HDMI or one optional 2nd DisplayPort on select models, supports up to triple independent display; <i>Maximum resolution:</i> 2560x1600 (DisplayPort)@60Hz; 1920x1080 (HDMI)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)											Security <ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Individual USB port disablement Chassis intrusion switch on selected model(s) 		
DP dongle	None													
Disk	<i>Some:</i> SATA 6.0Gb/s, 2.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies		
External optical SATA controller	<i>Some:</i> external optical box with slim DVD burner, 12.7mm high, tray-in, via USB 3.0 Serial ATA, SATA 6.0Gb/s support, integrated in chipset													
Onboard SATA eSATA port	One SATA cable (1-drop to device), one SATA 6.0Gb/s connector on planar											For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet		
Chipset	Intel Q87 Express Chipset													
Front ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)													
Rear ports	Three USB 3.0 (optional external optical box or external I/O box occupies one specific USB 3.0 on some models), ethernet (RJ-45), VGA DB-15, DisplayPort connector, one optional port (USB 2.0 / serial / 2nd DisplayPort / HDMI on selected models)													
I/O box	Optional external I/O box, extends four USB 2.0 (two on front and two on rear), one serial, and two PS/2 (for keyboard and mouse), via USB 3.0 port													
PCIe Mini Card	One PCI Express® Mini Card slot (Half Size)													
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11ac/a/b/g/n wireless, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo adapter, 2x2													
Bluetooth	<i>Some:</i> Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter													
Audio	High Definition (HD) Audio, Realtek® ALC283 codec													
Speaker	Internal speaker for business audio (1.5 watt)													
IEEE 1394	None													
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®													
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)													
Modem	None													
Security chip	Trusted Platform Module (TPM1.2-compliant)													
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo													
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo													
Floor Stand	Optional system floor stand for vertical orientation													
VESA mount	Optional VESA mount bracket kit, supports VESA 75mm and 100mm mount standard													
Power supply	65 watts AC/DC adapter, autosensing, 88% PSU													
Machine	<ul style="list-style-type: none"> Tiny (1L), business black color; metal case <i>M93/p Tiny only:</i> 7.0" W X 7.2" D X 1.4" H <i>M93/p Tiny only:</i> 179mm W X 182mm D X 34.5mm H <i>M93/p Tiny only:</i> 2.9 lb (1.3 kg), weight may vary by configuration <i>With VESA mount & optical box:</i> 7.2" W X 7.2" D X 2.55" H <i>With VESA mount & optical box:</i> 184mm W X 182mm D X 65mm H <i>With VESA mount & optical box:</i> 5.1 lb (2.3 kg), weight may vary by configuration 											Supports ThinkVantage Technologies		
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies		

See footnotes for important warranty information

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(MSS1N-11) October 2014

ThinkCentre M93p SFF Pro (10A9) - TopSeller - I

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Pro-processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	Floor stand	Intel vPro	Preload	Ann date (mm/dd/yy)
10A9000HUS	4x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	HD 4600	None	None	None	None	None	vPro	Win7 Pro64 (DG)	06/18/13
10A9000JUS	4x4	i5-4670	4GBx1	500G Hybrid	DVD±RW	None	HD 4600	USB	None	None	None	None	vPro	Win7 Pro64 (DG)	06/18/13
10A9000KUS	4x4	i7-4770	4GBx1	1TB 7200	DVD±RW	None	GT 620	USB	None	None	None	None	vPro	Win7 Pro64 (DG)	06/18/13
10A9000LUS	4x4	i7-4770	8GBx1	500G Hybrid	DVD±RW	None	GT 620	None	None	None	None	None	vPro	Win7 Pro64 (DG)	06/18/13
10A9000MUS	4x4	i7-4770	4GBx2	500G Hybrid	DVD±RW	None	GT 620	USB	Serial	None	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A90014US	4x4	i7-4770	8GBx1	1TB 7200	DVD±RW	105	GT 620	USB	Serial	Parallel	None	Stand	vPro	Win7 Pro64 (DG)	08/13/13

- Next Generation Intel platform with latest Intel vPro™ Technology and Intel Active Management Technology
- Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), integrated Intel HD Graphics 4600, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Processor in LGA1150 socket											Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit			
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 			
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz;</i> 1920x1200 (VGA)@60Hz (Reduced Blanking) Some: NVIDIA® GeForce® GT 620 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; <i>Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz</i>											Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Intel Small Business Advantage • Nitro Pro 			
DP dongle	None														
Disk	Some: SATA 6.0Gb/s 7200 rpm, 3.5" wide Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)														
eSATA port	None														
Media reader	None														
Chipset	Intel Q87 Express Chipset														
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
PCIe WLAN	Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio (1 watt)														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®														
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)											Security <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) 			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Floor Stand	Some: System floor stand for vertical orientation														
Power supply	240 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • SFF Pro (12.9L), business black color; metal case • (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm • 17.20 lb (7.8 kg) in maximum configuration • Toolless cover removal, adapter retention • Toolless disk and optical drive removal 														
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 3: 2.5", N/A, internal, opt, come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader														
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max) Slot 4: Low Profile, 32-bit PCI 2.3											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
 US model(s) announced June 18, 2013 or August 13, 2013

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 (MSS1S-3) August 2013

ThinkCentre M93p SFF Pro (10A9) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Pro-processor	Memory ⁸	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Chassis intrusion switch	Floor stand	Intel vPro	Preload	Ann date (mm/dd/yy)
10A9000NUS	4x4	i7-4770	4GBx1	1TB 7200	DVD±RW	None	None	HD 8470	USB	None	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A9000PUS	4x4	i7-4770	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A9000QUS	4x4	i5-4670	4GBx2	500G Hybrid	DVD±RW	None	None	GT 620	USB	Serial	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A9000RUS	4x4	i5-4670	4GBx1	1TB 7200	DVD±RW	None	None	HD 8470	USB	None	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A9000SUS	4x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	Stand	vPro	Win7 Pro64 (DG)	06/18/13
10A90016US	4x4	i7-4770	4GBx1	1TB 7200	DVD±RW	None	None	HD 4600	None	None	None	Stand	vPro	Win7 Pro64 (DG)	10/08/13
10A90017US	4x4	i5-4570	4GBx1	128G SSD	DVD±RW	None	None	HD 4600	None	None	None	Stand	vPro	Win7 Pro64 (DG)	10/08/13
10A9002CUS	4x4	i5-4670	4GBx1	500G Hybrid	DVD±RW	None	None	GT 620	None	None	None	Stand	vPro	Win7 Pro64 (DG)	12/10/13

• Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning Processor	<p><i>Ultimate security, stability, and manageability for the enterprise</i></p> <p>Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller</p> <p>Intel Core i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller</p> <p>Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller</p>	<p>Preloaded operating system</p> <p>Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> <p>Ready to install applications (only some listed)</p> <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager <p>Preloaded applications (only some listed)</p> <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Intel Small Business Advantage • Nitro Pro
Implementation	Processor in LGA1150 socket	
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets	
Graphics	<p>Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors;</p> <p><i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz;</i></p> <p>1920x1200 (VGA)@60Hz (Reduced Blanking)</p> <p><i>Some: AMD Radeon™ HD 8470, DirectX 11, 3D Hardware Acceleration, 512MB, PCI Express® 2.0 x16 adapter, one VGA, one DisplayPort, 25 watts, Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz,</i></p> <p><i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz,</i></p>	
DP dongle	None	
Disk	<p><i>Some: SATA 6.0Gb/s 7200 rpm, 3.5" wide</i></p> <p><i>Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</i></p> <p><i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</i></p>	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support	
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)	
eSATA port	None	
Media reader	None	
Chipset	Intel Q87 Express Chipset	
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
PCIe WLAN	None	
Bluetooth	None	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio (1 watt)	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®	
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)	
Modem	None	
Security chip	Trusted Platform Module (TPM1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Floor Stand	System floor stand for vertical orientation	
Power supply	240 watts, autosensing, 85% PSU	
Machine	<ul style="list-style-type: none"> • SFF Pro (12.9L), business black color; metal case • (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm • 17.20 lb (7.8 kg) in maximum configuration • Toolless cover removal, adapter retention • Toolless disk and optical drive removal 	
Bay	<p>Bay 1: 5.25", 1.6" high, external, std optical</p> <p>Bay 2: 3.5", 1" high, internal, std disk</p> <p>Bay 3: 2.5", N/A, internal, opt, come with opt 2.5" 2nd disk</p> <p>Bay 4: 3.5", 0.5" high, external, opt reader</p>	
Slot	<p>Slot 1: Low Profile, PCI Express 3.0 x16 (40w max)</p> <p>Slot 2: Low Profile, PCIe 2.0 x1</p> <p>Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max)</p> <p>Slot 4: Low Profile, 32-bit PCI 2.3</p>	
Limited Warranty	3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	<p>Security</p> <ul style="list-style-type: none"> • Security chip (see information on left) • One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Serial port I/O control • Individual USB port disablement • Chassis intrusion switch on selected model(s) <p>EPEAT™ Gold rating ENERGY STAR® 6.0-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p> <p>For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>

See footnotes for important warranty information

US model(s) announced June 18, 2013, October 8, 2013, or December 10, 2013

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(MSS1S-4) December 2013

ThinkCentre M93p SFF Pro (10A9) - TopSeller - III

Product Specifications Reference (PSREF)

Type-model	Slot x Pro-bay	Processor	Memory [®]	SATA disk GB rpm	SATA optical	Optional 2.5" Bay	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial intrusion port	Chassis switch	Floor stand	Intel vPro	Preload	Ann date (mm/dd/yy)
10A9002TUS	4x4	i5-4570	4GBx1	500G 7200	DVD±RW	None	None	None	HD 7450	USB	None	None	Stand	vPro	Win7 P64 DG Win8.1	02/04/14
10A9002UUS	4x4	i7-4770	8GBx1	500G 7200	DVD±RW	None	None	None	HD 7450	USB	None	None	Stand	vPro	Win7 P64 DG Win8.1	02/04/14
10A9002VUS	4x4	i7-4770	8GBx1	1TB 7200	DVD±RW	None	None	None	HD 7450	USB	None	None	Stand	vPro	Win7 P64 DG Win8.1	02/04/14
10A9002WUS	4x4	i5-4670	4GBx1	1TB 7200	DVD±RW	2.5" bay	None	None	HD 7450	USB	None	None	Stand	vPro	Win7 P64 DG Win8.1	02/11/14
10A90034US	4x4	i5-4570	4GBx1	500G 7200	DVD±RW	2.5" bay	None	None	HD 8570	None	None	None	Stand	vPro	Win7 P64 DG Win8.1	03/25/14
10A9003TUS	4x4	i7-4770	8GBx1	256G SSD OPAL	DVD±RW	2.5" bay	None	None	HD 7450	USB	None	None	Stand	vPro	Win7 P64 DG Win8.1	06/17/14

• Small and medium business (SMB) model(s), part of the US TopSeller™ Program

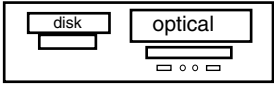
Positioning Processor	<i>Ultimate security, stability, and manageability for the enterprise</i> Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller	Preloaded operating system Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
Implementation	Processor in LGA1150 socket	Ready to install applications (only some listed)
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets	<ul style="list-style-type: none"> Rescue and Recovery™ Password Manager
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i> <i>Some: AMD Radeon™ HD 7450, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; Max resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz</i> <i>Some: AMD Radeon HD 8570, DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; Max resolution: 4096x2160 (HDMI)@24Hz; 2048x1536 (VGA)@85Hz,</i>	Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Intel Small Business Advantage Nitro Pro
DP dongle	None	
Disk	<i>Some: SATA 6.0Gb/s 7200 rpm, 3.5" wide</i> <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide</i>	
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support	
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)	
eSATA port	None	
Media reader	None	
Chipset	Intel Q87 Express Chipset	
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
PCIe WLAN	None	
Bluetooth	None	
Audio	High Definition (HD) Audio, Realtek® ALC662 codec	
Speaker	Internal speaker for business audio (1 watt)	
IEEE 1394	None	
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville) - Wake on LAN®	
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)	
Modem	None	
Security chip	Trusted Platform Module (TPM1.2-compliant)	Security <ul style="list-style-type: none"> Security chip (see information on left) One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Serial port I/O control Individual USB port disablement Chassis intrusion switch on selected model(s)
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Floor Stand	System floor stand for vertical orientation	
Power supply	240 watts, autosensing, 85% PSU	
Machine	<ul style="list-style-type: none"> SFF Pro (12.9L), business black color; metal case (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm 17.20 lb (7.8 kg) in maximum configuration Toolless cover removal, adapter retention Toolless disk and optical drive removal 	
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 3: 2.5", N/A, internal, opt, come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader	
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max) Slot 4: Low Profile, 32-bit PCI 2.3	
Limited Warranty	3-years, limited onsite service. 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

ThinkCentre M93p SFF Pro (10A9) - TopSeller - IV

Product Specifications Reference (PSREF)

Type-model	Slot x Pro-bay	Processor	Memory [®]	SATA disk GB rpm	SATA optical	Optional 2.5" Bay	PCIe WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Chassis intrusion switch	Floor stand	Intel vPro	Preload	Ann date (mm/dd/yy)
10A90049US	4x4	i7-4790	8GBx1	256G SSD	DVD±RW	2.5" bay	7260 b/g/n	None	HD 4600	None	None	None	None	vPro	Win7 P64 DG Win8.1	10/28/14
10A90045US	4x4	i5-4590	4GBx1	500G 7200	DVD±RW	None	None	None	HD 4600	None	None	None	None	vPro	Win7 P64 DG Win8.1	10/28/14
10A9004CUS	4x4	i5-4590	4GBx1	1TB 7200	DVD±RW	2.5" bay	7260 b/g/n	None	HD 4600	None	None	None	None	vPro	Win7 P64 DG Win8.1	10/28/14
10A90048US	4x4	i7-4790	8GBx1	1TB 7200	DVD±RW	2.5" bay	7260 b/g/n	None	GT 620	None	None	None	None	vPro	Win7 P64 DG Win8.1	10/28/14
10A90046US	4x4	i5-4590	4GBx1	1TB 7200	DVD±RW	None	None	None	HD 4600	None	None	None	None	vPro	Win7 P64 DG Win8.1	10/28/14
10A9004AUS	4x4	i5-4590	4GBx1	500G 7200	DVD±RW	2.5" bay	None	None	HD 4600	None	None	None	None	vPro	Win7 P64 DG Win8.1	10/28/14
10A90047US	4x4	i7-4790	4GBx1	1TB 7200	DVD±RW	2.5" bay	None	None	HD 4600	None	None	None	None	vPro	Win7 P64 DG Win8.1	10/28/14
10A9004BUS	4x4	i5-4590	4GBx1	1TB 7200	DVD±RW	2.5" bay	None	None	HD 4600	None	None	None	None	vPro	Win7 P64 DG Win8.1	10/28/14

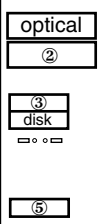
Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>										Preloaded operating system					
Processor	Intel® Core™ i5-4590 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4790 Processor (4 cores / 8 threads, 3.6GHz, 8MB cache), Turbo Boost 2.0 (4.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket										Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit					
Implementation	Processor in LGA1150 socket										Ready to install applications (only some listed)					
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets										<ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Preloaded applications (only some listed)					
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i> Some: NVIDIA® Geforce® GT 620 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; <i>Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz</i>										<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Intel Small Business Advantage Nitro Pro 					
DP dongle	None															
Disk	Some: SATA 6.0Gb/s 7200 rpm, 3.5" wide Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide															
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive															
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support															
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)															
eSATA port	None															
Media reader	None															
Chipset	Intel Q87 Express Chipset															
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models															
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)															
PCIe WLAN	Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + BT 4.0 combo, 2x2															
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter															
Audio	High Definition (HD) Audio, Realtek® ALC662 codec															
Speaker	Internal speaker for business audio (1 watt)															
IEEE 1394	None															
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®															
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)															
Modem	None															
Security chip	Trusted Platform Module (TPM1.2-compliant)															
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Floor Stand	System floor stand for vertical orientation															
Power supply	240 watts, autosensing, 85% PSU															
Machine	<ul style="list-style-type: none"> SFF Pro (12.9L), business black color; metal case (WxDxH) 13.31" X 14.76" X 4.02"; 338mm X 375mm X 102mm 17.20 lb (7.8 kg) in maximum configuration Toolless cover removal, adapter retention Toolless disk and optical drive removal 										<ul style="list-style-type: none"> Security chip (see information on left) One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Serial port I/O control Individual USB port disablement Chassis intrusion switch on selected model(s) 					
Bay	Bay 1: 5.25", 1.6" high, external, std optical Bay 2: 3.5", 1" high, internal, std disk Bay 3: 2.5", N/A, internal, opt, come with opt 2.5" 2nd disk Bay 4: 3.5", 0.5" high, external, opt reader															
Slot	Slot 1: Low Profile, PCI Express 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x16 (x4 elec, 40w max) Slot 4: Low Profile, 32-bit PCI 2.3															
											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant					
											Supports ThinkVantage Technologies					
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet					

See footnotes for important warranty information

ThinkCentre M93p Mini Tower (10A7) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Pro-processor	Memory ⁸	SATA disk GB rpm	SATA optical	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/dd/yy)
10A7000BUS	4x5	i5-4570	4Gx1	500G 7200	DVD±RW	None	HD 4600	None	None	None	None	vPro	None	Win7 Pro64 (DG)	06/18/13
10A7000CUS	4x5	i5-4670	4Gx1	500G Hybrid	DVD±RW	None	HD 4600	None	None	None	None	vPro	None	Win7 Pro64 (DG)	06/18/13
10A7000DUS	4x5	i7-4770	4Gx1	1TB 7200	DVD±RW	None	HD 8570	None	None	None	None	vPro	None	Win7 Pro64 (DG)	06/18/13
10A7000EUS	4x5	i7-4770	4Gx2	500G Hybrid	DVD±RW	Media	HD 8570	None	Serial	Parallel	None	vPro	None	Win7 Pro64 (DG)	06/18/13
10A7000FUS	4x5	i7-4770	4Gx1	500G 7200	DVD±RW	None	HD 4600	None	None	None	None	vPro	None	Win7 Pro64 (DG)	06/18/13
10A7000GUS	4x5	i5-4670	4Gx2	500G Hybrid	DVD±RW	None	GT 620	USB	Serial	None	None	vPro	None	Win7 Pro64 (DG)	06/18/13
10A7000QUS	4x5	i7-4770	8Gx1	1TB 7200	DVD±RW	None	GT 620	None	None	None	None	vPro	None	Win7 Pro64 (DG)	07/09/13
10A7000SUS	4x5	i7-4770	4Gx1	1TB 7200	DVD±RW	None	HD 4600	None	None	None	None	vPro	None	Win7 Pro64 (DG)	10/08/13
10A7000TUS	4x5	i5-4570	4Gx1	128G SSD	DVD±RW	None	HD 4600	None	None	None	None	vPro	None	Win7 Pro64 (DG)	10/08/13
10A7000UUS	4x5	i7-4770	8Gx1	180G SSD	DVD±RW	None	HD 4600	None	None	None	None	vPro	None	Win7 Pro64 (DG)	10/08/13

Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670 Processor (4 cores / 4 threads, 3.4GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed)			
Implementation	Processor in LGA1150 socket											<ul style="list-style-type: none"> Rescue and Recovery™ Password Manager 			
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											Preloaded applications (only some listed)			
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Maximum resolution: 2560x1600 (DisplayPort) @60Hz; 1920x1200 (VGA) @60Hz (Reduced Blanking)</i> <i>Some: AMD Radeon HD 8570, DirectX 11, 3D Hardware Acceleration, 2GB, PCI Express 3.0 x16 adapter (8x elec), one VGA, one HDMI, 40 watts; Max resolution: 4096x2160 (HDMI) @24Hz; 2048x1536 (VGA) @85Hz</i> <i>Some: NVIDIA® GeForce® GT 620, DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; Max resolution: 2560x1600 (DisplayPort) @60Hz; 2048x1536 (VGA) @85Hz</i>											<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Intel Small Business Advantage Nitro Pro 			
DP dongle	None														
Disk	<i>Some: SATA 6.0Gb/s 7200 rpm, 3.5" wide</i> <i>Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</i> <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</i>														
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive														
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support														
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)														
eSATA port	None														
Media reader	<i>Some: 29-in-1 media reader, internal USB 2.0</i>														
Chipset	Intel Q87 Express Chipset														
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)														
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models														
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)														
PCIe WLAN	None														
Bluetooth	None														
Audio	High Definition (HD) Audio, Realtek® ALC662 codec														
Speaker	Internal speaker for business audio (1.5 watt)														
IEEE 1394	None														
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®														
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)														
Modem	None														
Security chip	Trusted Platform Module (TPM1.2-compliant)											Security <ul style="list-style-type: none"> Security chip (see information on left) One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Serial port I/O control Individual USB port disablement Chassis intrusion switch on selected model(s) 			
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	280 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> Mini Tower (25L), business black color, metal case (WxDxH) 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm 24.69 lb (11.20 kg) in maximum configuration Toolless cover removal, adapter retention Toolless disk, optical drive removal 														
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max) Slot 4: half-length, full-height, 32-bit PCI 2.3											Supports ThinkVantage Technologies			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information

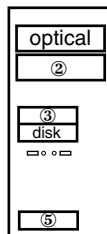
US model(s) announced June 18, 2013, July 9, 2013, or October 8, 2013

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(MSS1T-3) October 2013

ThinkCentre M93p Mini Tower (10A7) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ⁸	SATA disk GB rpm	SATA optical	WLAN	Media reader	Graphics	Additional Front USB 2.0	2nd serial port	Parallel port	Chassis intrusion switch	Intel vPro	Global (G) GMP (P)	Preload	Ann date (mm/yy)
10A70028US	4x5	i5-4570	4Gx1	500G 7200	DVD±RW	None	None	HD 7450	USB	None	None	None	vPro	None	Win7 P64 DG	Win8.1 02/14
10A70029US	4x5	i7-4770	8Gx1	500G 7200	DVD±RW	None	None	HD 7450	USB	None	None	None	vPro	None	Win7 P64 DG	Win8.1 02/14
10A7002AUS	4x5	i7-4770	8Gx1	1TB 7200	DVD±RW	None	None	HD 7450	USB	None	None	None	vPro	None	Win7 P64 DG	Win8.1 02/14
10A7003CUS	4x5	i7-4770	8Gx1	256G SSD OPAL	DVD±RW	None	None	HD 7450	USB	None	None	None	vPro	None	Win7 P64 DG	Win8.1 06/14
10A7003UUS	4x5	i7-4790	8Gx1	1TB 7200	DVD±RW	None	None	GT 620	None	None	None	None	vPro	None	Win7 P64 DG	Win8.1 10/14
10A7003RUS	4x5	i5-4590	8Gx1	256G SSD	DVD±RW	7260 b/g/n	None	HD 4600	None	None	None	None	vPro	None	Win7 P64 DG	Win8.1 10/14
10A7003PUS	4x5	i5-4590	4Gx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	None	vPro	None	Win7 P64 DG	Win8.1 10/14
10A7003QUS	4x5	i5-4590	4Gx1	500G 7200	DVD±RW	7260 b/g/n	None	HD 4600	None	None	None	None	vPro	None	Win7 P64 DG	Win8.1 10/14
10A7003SUS	4x5	i7-4790	8Gx1	1TB 7200	DVD±RW	None	None	HD 4600	None	None	None	None	vPro	None	Win7 P64 DG	Win8.1 10/14
10A7003TUS	4x5	i7-4790	8Gx1	256G SSD	DVD±RW	7260 b/g/n	None	HD 4600	None	None	None	None	vPro	None	Win7 P64 DG	Win8.1 10/14
Positioning	<i>Ultimate security, stability, and manageability for the enterprise</i>											Preloaded operating system				
Processor	Intel® Core™ i5-4570 Processor (4 cores / 4 threads, 3.2GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4590 Processor (4 cores / 4 threads, 3.3GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770 Processor (4 cores / 8 threads, 3.4GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4790 Processor (4 cores / 8 threads, 3.6GHz, 8MB cache), Turbo Boost 2.0 (4.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit				
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)				
Memory	32GB max, UDIMM, PC3-12800 1600MHz DDR3 , four 240-pin DIMM sockets											<ul style="list-style-type: none"> Rescue and Recovery™ Password Manager 				
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, one VGA, two DisplayPort™, supports three independent displays, works along with discrete graphics to support up to five independent monitors; <i>Max resolution: 2560x1600 (DP)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)</i> Some: AMD Radeon™ HD 7450 , DirectX 11, 1GB, PCI Express 2.0 x16 adapter, one DVI-I (includes DVI-to-VGA dongle), one DisplayPort, 25 watts; <i>Max resolution: 2560x1600 (DisplayPort, DVI-I)@60Hz</i> Some: NVIDIA® GeForce® GT 620 , DirectX 11, 3D Hardware Acceleration, 1GB, PCI Express 2.0 x16 adapter, one VGA, one DisplayPort, 30 watts; <i>Max resolution: 2560x1600 (DisplayPort)@60Hz; 2048x1536 (VGA)@85Hz</i>											Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Intel Small Business Advantage Nitro Pro 				
DP dongle	None															
Disk	Some: SATA 6.0Gb/s 7200 rpm, 3.5" wide Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide															
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive															
SATA controller	Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0/1 support															
Onboard SATA	Two SATA cables (each 1-drop to device), three SATA 6.0Gb/s connectors, one eSATA connector (SATA 6.0Gb/s)															
eSATA port	None															
Media reader	Some: 29-in-1 media reader, internal USB 2.0															
Chipset	Intel Q87 Express Chipset															
Front ports	Two USB 3.0, two optional USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)															
Rear ports	Four USB 3.0, two USB 2.0, serial (9-pin), optional 2nd serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), one VGA, two DisplayPort, additional VGA, DisplayPort, or HDMI ports on optional graphic card on some models															
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)															
PCIe WLAN	Some: 11b/g/n, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + BT 4.0 combo, 2x2															
Bluetooth	Some: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter															
Audio	High Definition (HD) Audio, Realtek® ALC662 codec															
Speaker	Internal speaker for business audio (1.5 watt)															
IEEE 1394	None															
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®															
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)															
Modem	None															
Security chip	Trusted Platform Module (TPM1.2-compliant)											Security <ul style="list-style-type: none"> Security chip (see information on left) One lock to secure both cover and entire system to fixed object: <ul style="list-style-type: none"> -Padlock loop (in rear for opt padlock) -Security slot (in rear for optional Kensington® MicroSaver® cable) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse Serial port I/O control Individual USB port disablement Chassis intrusion switch on selected mode(s) 				
Keyboard	Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo															
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo															
Power supply	280 watts, autosensing, 85% PSU															
Machine	<ul style="list-style-type: none"> Mini Tower (25L), business black color, metal case (WxDxH) 6.89" X 17.41" X 16.32"; 175mm X 442.3mm X 414.5mm 24.69 lb (11.20 kg) in maximum configuration Toolless cover removal, adapter retention Toolless disk, optical drive removal 															
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 5.25", 1.6" high, access, open Bay 3: 3.5", 1" high, access, opt reader Bay 4: 3.5", 1" high, no access, std disk Bay 5: 3.5", 1" high, no access, opt disk											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant ULE Gold Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant				
Slot	Slot 1: half-length, full-height, PCIe 3.0 x16 (75w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x16 (x4 elec, 75w max) Slot 4: half-length, full-height, 32-bit PCI 2.3											Supports ThinkVantage Technologies				
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet				

See footnotes for important warranty information



ThinkCentre M93z (Multi-touch) with Frame Stand and optional wireless keyboard and mouse



ThinkCentre M93z (Non-touch) with Monitor Stand and optional wireless keyboard and mouse



ThinkCentre M93z with Monitor Stand with optional PS/2 and Serial ports



ThinkCentre M93z with Frame Stand with optional PS/2 and Serial ports



Frame Stand
(Adjustable between 10° and 45°)



Monitor Stand
(Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45°)

ThinkCentre M93z (10AF) - TopSeller (1-year onsite)

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/dd/yy)
10AF000JUS	G3220	4GBx1	2.0M	500G 7200	Intel HD	N105	None	None	None	None	Frame	USB	None	Win7 Pro64	DG 08/20/13

● Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system
Processor	Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3* , two 204-pin SODIMM sockets (notebook) *System automatically clocks down for processors with 1333MHz memory controller											<ul style="list-style-type: none"> ● Rescue and Recovery™ ● Password Manager
Graphics	Intel HD Graphics in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 2560x1600 (DisplayPort)@60Hz</i>											Preloaded applications (only some listed)
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector											<ul style="list-style-type: none"> ● ThinkVantage® Product Recovery ● ThinkVantage System Update ● ThinkVantage Communication Utility ● ThinkVantage Device Experience ● ThinkVantage AutoLock ● Desktop Power Manager ● View Management Utility ● Lenovo Cloud Storage by SugarSync ● Lenovo Solution Center ● Lenovo Message Center Plus ● Norton™ Internet Security (30 days of virus definitions) ● Adobe® Reader® ● Skype™ ● Microsoft Office preloaded; purchase a product key to activate ● Cyberlink PowerDVD (DVD±RW, DVD) ● Cyberlink Power2Go (DVD±RW) ● Cyberlink PowerProducer (DVD±RW) ● Evernote ● Intel AppUp ● Lenovo Solutions for Small Business ● Nitro Pro
Light sensor	Optional ambient light sensor											Security <ul style="list-style-type: none"> ● Security chip (see information on left) ● Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) ● Power-on password ● Administrator password ● Hard disk password ● Boot sequence control ● Boot without keyboard and mouse ● USB port disablement ● Chassis intrusion switch on selected model(s)
Multi-touch	None											
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off											
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button											
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm											
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar											
Media reader	Optional 11-in-1 media card reader											
Chipset	Intel Q87 Express Chipset											
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)											
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)											
ExpressCard	None											
mSATA	One mSATA slot											
PCIe Mini Card	One PCI Express® Mini Card slot											
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1											
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter											
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®											
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified											
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	150 watts, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> ● Business black color ● Toolless back cover, stand removal ● Toolless disk, optical drive, memory removal ● Support VESA mount (100mm) <p><i>Non-touch model(s) with frame stand:</i></p> <ul style="list-style-type: none"> ● (WxDxH) 22.4" X 3.6" X 17.6"; 568mm X 92.5mm X 447.3 mm ● 21.3 lb (9.68 kg) in maximum configuration ● Adjustable stand (between 10° and 45°) <p><i>Non-touch model(s) with monitor stand:</i></p> <ul style="list-style-type: none"> ● (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm ● 25.5 lb (11.58 kg) in maximum configuration ● Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US model(s) announced August 20, 2013

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ThinkCentre M93z (10AF) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial PS/2 port	Chassis intrusion switch	Stand type	Keyboard/Mouse	Intel vPro	Global	Preload	Ann date (mm/dd/yy)	
10AF0003US	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	DG 07/09/13	
10AF0004US	i5-4430S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Frame	USB	None	None	Win7 Pro64	DG 07/09/13	
10AF0005US	i7-4770S	4GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	DG 07/09/13	
10AF0006US	i5-4670S	4GBx1	2.0M	500G Hybrid	HD 4600	N6235	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	DG 07/09/13	
10AF0007US	i5-4570S	4GBx1	2.0M	180G SSD	HD 4600	N2230	None	None	None	None	Frame	USB	vPro	None	Win7 Pro64	DG 07/09/13	
10AF0008US	i7-4770S	8GBx1	2.0M	500G Hybrid	HD 4600	N6235	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	DG 07/09/13	
10AF000KUS	i5-4570S	4GBx1	2.0M	128G SSD	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	DG 09/10/13	
10AF000LUS	i7-4770S	8GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64	DG 09/10/13	
Positioning Processor	<i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager					
Implementation	Processor in LGA1150 socket											Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Device Experience • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Lenovo Solutions for Small Business • Nitro Pro					
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)																
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort) @60Hz</i>																
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector																
Light sensor	Optional ambient light sensor																
Multi-touch	None																
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off																
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button																
Disk	<i>Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm</i> <i>Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</i> <i>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</i>																
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable																
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar																
Media reader	Optional 11-in-1 media card reader																
Chipset	Intel Q87 Express Chipset																
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)																
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)																
ExpressCard	None																
mSATA	One mSATA slot																
PCIe Mini Card	One PCI Express® Mini Card slot																
PCIe WLAN	<i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2</i> <i>Some: 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2</i>																
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter																
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®																
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified																
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)																
Security chip	Trusted Platform Module (TPM 1.2-compliant)																
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo																
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo																
Power supply	150 watts, autosensing, 85% PSU																
Machine	<ul style="list-style-type: none"> • Business black color • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) <i>Non-touch model(s) with frame stand:</i> <ul style="list-style-type: none"> • (WxDxH) 22.4" X 3.6" X 17.6"; 568mm X 92.5mm X 447.3 mm • 21.3 lb (9.68 kg) in maximum configuration • Adjustable stand (between 10° and 45°) <i>Non-touch model(s) with monitor stand:</i> <ul style="list-style-type: none"> • (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm • 25.5 lb (11.58 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant					
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet					

See footnotes for important warranty information
US model(s) announced July 9, 2013 or September 10, 2013

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ThinkCentre M93z (10AF) - TopSeller - II

Product Specifications Reference (PSREF)

Type-model	Processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/dd/yy)	
10AF000FUS	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	None	None	None	None	Monitor	USB	None	None	Win7 Pro64 DG	08/20/13
10AF000GUS	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	None	None	None	None	Frame	USB	None	None	Win7 Pro64 DG	08/20/13
10AF000HUS	i3-4130	4GBx1	2.0M	500G Hybrid	HD 4400	N2230	Media	None	None	None	Monitor	USB	None	None	Win7 Pro64 DG	08/20/13
10AF000VUS	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	None	USB	vPro	None	Win7 Pro64 DG	11/12/13
10AF000WUS	i7-4770S	8GBx1	2.0M	256G SSD	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	11/12/13
10AF0010US	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N7260	None	None	None	None	Monitor	USB	None	None	Win7 P64 DG	Win8.1 01/21/14
10AF0011US	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N7260	None	None	None	None	Monitor	USB	vPro	None	Win7 P64 DG	Win8.1 01/21/14
10AF001HUS	i5-4590S	4GBx1	2.0M	500G 7200	HD 4600	N7260	None	None	None	None	Monitor	USB	vPro	None	Win7 P64 DG	Win8.1 12/09/14

Positioning	<i>Premium All-In-One PC for the enterprise</i>	Preloaded operating system
Processor	<p>Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller</p> <p>Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller</p> <p>Intel Core i5-4590S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller</p> <p>Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller</p>	<p>Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit</p> <p>Some: Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit</p>
Implementation	Processor in LGA1150 socket	Ready to install applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	<ul style="list-style-type: none"> Rescue and Recovery™ Password Manager
Graphics	Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort)@60Hz</i>	Preloaded applications (only some listed)
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector	<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Device Experience ThinkVantage AutoLock Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Lenovo Solutions for Small Business Nitro Pro
Light sensor	Optional ambient light sensor	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off	
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button	
Disk	<p><i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm</p> <p><i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</p> <p><i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</p>	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar	
Media reader	Optional 11-in-1 media card reader	
Chipset	Intel Q87 Express Chipset	
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	<p><i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2</p> <p><i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2</p>	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<ul style="list-style-type: none"> Business black color Toolless back cover, stand removal Toolless disk, optical drive, memory removal Support VESA mount (100mm) <p><i>Non-touch model(s) with frame stand:</i></p> <ul style="list-style-type: none"> (WxDxH) 22.4" X 3.6" X 17.6"; 568mm X 92.5mm X 447.3 mm 21.3 lb (9.68 kg) in maximum configuration Adjustable stand (between 10° and 45°) <p><i>Non-touch model(s) with monitor stand:</i></p> <ul style="list-style-type: none"> (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm 25.5 lb (11.58 kg) in maximum configuration Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 	<p>EPEAT™ Gold rating</p> <p>ENERGY STAR® 6.0-compliant</p> <p>TCO Certified Edge</p> <p>TUV Green Mark</p> <p>ULE Gold</p> <p>EuP 2013</p> <p>Cisco EnergyWise compatible</p> <p>GREENGUARD® certified</p> <p>RoHS-compliant</p> <p>Supports ThinkVantage Technologies</p>
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	<p>For compatible accessories, please go to TC-AQP sheet;</p> <p>For Lenovo service upgrade options, please go to S-TC sheet</p>

See footnotes for important warranty information

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(MPHS1-15) December 2014

ThinkCentre M93z (10AD) - Multi-touch (TopSeller) - 1-year onsite

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/dd/yy)	
10AD001HUS	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Frame	USB	vPro	None	Win7 Pro64 DG	08/13/13
10AD001MUS	G3220	4GBx1	2.0M	500G 7200	Intel HD	N105	None	None	None	None	Frame	USB	None	None	Win7 Pro64 DG	08/20/13

• Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system			
Processor	Intel® Pentium® G3220 Processor (2 cores / 2 threads, 3.0GHz, 3MB cache), Intel HD Graphics, 1333MHz DDR3 memory controller Intel Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit			
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3* , two 204-pin SODIMM sockets (notebook) *System automatically clocks down for processors with 1333MHz memory controller											<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 			
Graphics	Intel HD Graphics or HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Max resolution:</i> 3840x2160 (DP)@60Hz [HD 4x00]; 2560x1600 (DP)@60Hz [Intel HD]											Preloaded applications (only some listed)			
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Device Experience • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Lenovo Solutions for Small Business • Nitro Pro 			
Light sensor	Optional ambient light sensor														
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off														
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button														
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar														
Media reader	Optional 11-in-1 media card reader														
Chipset	Intel Q87 Express Chipset														
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 105, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2														
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter											Security			
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®											<ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) 			
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified Intel Active Management Technology 9.0 (Intel AMT 9.0)											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
Intel AMT	Trusted Platform Module (TPM 1.2-compliant)											Supports ThinkVantage Technologies			
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo											For compatible accessories, please go to TC-AQP sheet;			
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											For Lenovo service upgrade options, please go to S-TC sheet			
Power supply	150 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) Multi-touch model(s) with frame stand: <ul style="list-style-type: none"> • (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm • 24.7 lb (11.22 kg) in maximum configuration • Adjustable stand (between 10° and 45°) Multi-touch model(s) with monitor stand: <ul style="list-style-type: none"> • (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm • 28.9 lb (13.12 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 														
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available														

See footnotes for important warranty information
US model(s) announced August 13, 2013 or August 20, 2013

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(MPHS1-13) September 2013

ThinkCentre M93z (10AD) - Multi-touch (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/dd/yy)	
10AD0001US	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AD0003US	i5-4430S	4GBx1	2.0M	500G 7200	HD 4600	N2230	None	None	None	None	Frame	USB	None	None	Win7 Pro64 DG	07/09/13
10AD0004US	i7-4770S	4GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AD0005US	i5-4570S	4GBx1	2.0M	500G Hybrid	HD 4600	N2230	None	None	None	None	Frame	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AD0008US	i7-4770S	8GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	None	None	None	Monitor	2.4G	vPro	None	Win7 Pro64 DG	07/09/13
10AD0009US	i5-4570S	4GBx1	2.0M	180G SSD	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	07/09/13
10AD001GUS	i5-4570S	4GBx1	2.0M	128G SSD	HD 4600	N2230	None	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG	08/13/13

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed)			
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											Preloaded applications (only some listed)			
Graphics	Intel HD Graphics 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort)@60Hz</i>											<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Device Experience ThinkVantage AutoLock Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Lenovo Solutions for Small Business Nitro Pro 			
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector														
Light sensor	Optional ambient light sensor														
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off														
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button														
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar														
Media reader	Optional 11-in-1 media card reader														
Chipset	Intel Q87 Express Chipset														
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2											Security <ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse USB port disablement Chassis intrusion switch on selected model(s) 			
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black														
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> Business black color Toolless back cover, stand removal Toolless disk, optical drive, memory removal Support VESA mount (100mm) <i>Multi-touch model(s) with frame stand:</i> <ul style="list-style-type: none"> (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm 24.7 lb (11.22 kg) in maximum configuration Adjustable stand (between 10° and 45°) <i>Multi-touch model(s) with monitor stand:</i> <ul style="list-style-type: none"> (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm 28.9 lb (13.12 kg) in maximum configuration Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant TCO Certified Edge TÜV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
 US model(s) announced July 9, 2013 or August 13, 2013

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ThinkCentre M93z (10AD) - Multi-touch (TopSeller) - II

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory ^a	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/dd/yy)
10AD001JUS	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	None	None	None	None	Monitor	USB	None	None	Win7 Pro64 DG 08/20/13
10AD001KUS	i3-4130	4GBx1	2.0M	500G Hybrid	HD 4400	N2230	Media	None	None	None	Monitor	USB	None	None	Win7 Pro64 DG 08/20/13
10AD001LUS	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	None	None	None	None	Frame	USB	None	None	Win7 Pro64 DG 08/20/13
10AD0020US	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N6235	Media	None	None	None	None	USB	vPro	None	Win7 Pro64 DG 11/12/13
10AD0021US	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	None	None	None	None	None	USB	None	None	Win7 Pro64 DG 11/12/13
10AD0022US	i5-4570S	4GBx1	2.0M	256G SSD	HD 4600	N2230	Media	None	None	None	Monitor	USB	vPro	None	Win7 Pro64 DG 11/12/13

• Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system			
Processor	Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit			
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)			
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager 			
Graphics	Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort)@60Hz</i>											Preloaded applications (only some listed)			
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Device Experience • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Lenovo Solutions for Small Business • Nitro Pro 			
Light sensor	Optional ambient light sensor														
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off														
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button														
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar														
Media reader	Optional 11-in-1 media card reader														
Chipset	Intel Q87 Express Chipset														
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2											Security			
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter											<ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s) 			
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®														
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified														
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)														
Security chip	Trusted Platform Module (TPM 1.2-compliant)														
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo														
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) Multi-touch model(s) with frame stand: <ul style="list-style-type: none"> • (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm • 24.7 lb (11.22 kg) in maximum configuration • Adjustable stand (between 10° and 45°) Multi-touch model(s) with monitor stand: <ul style="list-style-type: none"> • (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm • 28.9 lb (13.12 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant			
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet			

See footnotes for important warranty information
 US model(s) announced August 20, 2013 or November 12, 2013

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 (MPHS1-12) November 2013

ThinkCentre M93z (10AD) - Multi-touch (TopSeller) - III

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/dd/yy)
10AD0024US	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N7260	Media	None	None	None	Monitor	USB	vPro	None	Win7 P64 DG Win8.1 01/21/14
10AD0025US	i7-4770S	4GBx1	2.0M	500G Hybrid	HD 4600	N7260	Media	None	None	None	Monitor	USB	vPro	None	Win7 P64 DG Win8.1 01/21/14
10AD0026US	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N7260	None	None	None	None	Monitor	USB	None	None	Win7 P64 DG Win8.1 01/21/14
10AD0027US	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N7260	None	None	None	None	Frame	USB	None	None	Win7 P64 DG Win8.1 01/21/14

• Small and medium business (SMB) model(s), part of the US TopSeller™ Program

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system
Processor	Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager
Graphics	Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort)@60Hz</i>											Preloaded applications (only some listed)
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Device Experience • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Intel AppUp • Lenovo Solutions for Small Business • Nitro Pro
Light sensor	Optional ambient light sensor											
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch											
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off											
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button											
Disk	<i>Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm</i> <i>Some: 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</i>											
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar											
Media reader	Optional 11-in-1 media card reader											
Chipset	Intel Q87 Express Chipset											
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)											
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)											
ExpressCard	None											
mSATA	One mSATA slot											
PCIe Mini Card	One PCI Express® Mini Card slot											
PCIe WLAN	<i>Some: 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2</i>											
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter											
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®											
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified											
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	150 watts, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> • Business black color • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) Multi-touch model(s) with frame stand: <ul style="list-style-type: none"> • (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm • 24.7 lb (11.22 kg) in maximum configuration • Adjustable stand (between 10° and 45°) Multi-touch model(s) with monitor stand: <ul style="list-style-type: none"> • (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm • 28.9 lb (13.12 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US model(s) announced January 21, 2014

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ThinkCentre M93z (10AD) - Multi-touch (TopSeller) - IV

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/yy)
10AD002LUS	i3-4150	4GBx1	2.0M	500G 7200	HD 4400	N7260	Media	None	None	None	Monitor	USB	None	Win7 P64 DG	Win8.1 10/14
10AD002GUS	i5-4590S	4GBx1	2.0M	1TB 7200	HD 4600	N7260	None	None	None	None	Monitor	USB vPro	None	Win7 P64 DG	Win8.1 10/14
10AD002RUS	i7-4790S	8GBx1	2.0M	1TB 7200	HD 4600	N7260	None	None	None	None	Monitor	USB vPro	None	Win7 P64 DG	Win8.1 10/14
10AD002PUS	i7-4790S	4GBx1	2.0M	500G 7200	HD 4600	N7260	None	None	None	None	Monitor	USB vPro	None	Win7 P64 DG	Win8.1 10/14
10AD002NUS	i3-4150	4GBx1	2.0M	180G SSD	HD 4400	N7260	Media	None	None	None	Frame	USB	None	Win7 P64 DG	Win8.1 10/14
10AD002MUS	i3-4150	4GBx1	2.0M	500G 7200	HD 4400	N7260	Media	None	None	None	Frame	USB	None	Win7 P64 DG	Win8.1 10/14
10AD002SUS	i7-4790S	4GBx1	2.0M	180G SSD	HD 4600	N7260	None	None	None	None	Monitor	USB vPro	None	Win7 P64 DG	Win8.1 10/14
10AD002QUS	i7-4790S	8GBx1	2.0M	256G SSD	HD 4600	N7260	None	None	None	None	Monitor	USB vPro	None	Win7 P64 DG	Win8.1 10/14
10AD002KUS	i5-4590S	4GBx1	2.0M	500G 7200	HD 4600	N7260	None	Sensor	None	None	Frame	USB vPro	None	Win7 P64 DG	Win8.1 10/14
10AD002HUS	i5-4590S	8GBx1	2.0M	256G SSD	HD 4600	N7260	None	None	None	None	Monitor	USB vPro	None	Win7 P64 DG	Win8.1 10/14

Positioning	<i>Premium All-In-One PC for the enterprise</i>	Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Ready to install applications (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Device Experience ThinkVantage AutoLock Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Lenovo Solutions for Small Business Nitro Pro
Processor	Intel® Core™ i3-4150 Processor (2 cores / 4 threads, 3.5GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4590S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4790S Processor (4 cores / 8 threads, 3.2GHz, 8MB cache), Turbo Boost 2.0 (4.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller	
Implementation	Processor in LGA1150 socket	
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort)@60Hz</i>	
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector	
Light sensor	Optional ambient light sensor	
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off	
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button	
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar	
Media reader	Optional 11-in-1 media card reader	
Chipset	Intel Q87 Express Chipset	
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)	
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)	
ExpressCard	None	
mSATA	One mSATA slot	
PCIe Mini Card	One PCI Express® Mini Card slot	
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)	
Security chip	Trusted Platform Module (TPM 1.2-compliant)	
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Machine	<ul style="list-style-type: none"> Business black color Toolless back cover, stand removal Toolless disk, optical drive, memory removal Support VESA mount (100mm) Multi-touch model(s) with frame stand: <ul style="list-style-type: none"> (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm 24.7 lb (11.22 kg) in maximum configuration Adjustable stand (between 10° and 45°) Multi-touch model(s) with monitor stand: <ul style="list-style-type: none"> (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm 28.9 lb (13.12 kg) in maximum configuration Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 	
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	
	Security <ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse USB port disablement Chassis intrusion switch on selected model(s) EPEAT™ Gold rating ENERGY STAR® 6.0-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet	

See footnotes for important warranty information

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ThinkCentre M93z (10AD) - Multi-touch (TopSeller) - V

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCle Mini Card WLAN	Media reader	Light sensor	Serial & PS/2 port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/yy)
10AD002FUS	i5-4590S	4GBx1	2.0M	500G 7200	HD 4600	N7260	None	None	None	None	Monitor	USB	vPro	None	Win7 P64 DG Win8.1 10/14
10AD002JUS	i5-4590S	4GBx1	2.0M	180G SSD	HD 4600	N7260	None	Sensor	None	None	Monitor	USB	vPro	None	Win7 P64 DG Win8.1 10/14

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system
Processor	Intel® Core™ i3-4150 Processor (2 cores / 4 threads, 3.5GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4590S Processor (4 cores / 4 threads, 3.0GHz, 6MB cache), Turbo Boost 2.0 (3.7GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4790S Processor (4 cores / 8 threads, 3.2GHz, 8MB cache), Turbo Boost 2.0 (4.0GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> Rescue and Recovery™ Password Manager
Graphics	Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort)@60Hz</i>											Preloaded applications (only some listed)
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector											<ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Device Experience ThinkVantage AutoLock Desktop Power Manager View Management Utility Lenovo Cloud Storage by SugarSync Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote Intel AppUp Lenovo Solutions for Small Business Nitro Pro
Light sensor	Optional ambient light sensor											
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch											
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off											
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button											
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" wide											
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar											
Media reader	Optional 11-in-1 media card reader											
Chipset	Intel Q87 Express Chipset											
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)											
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)											
ExpressCard	None											
mSATA	One mSATA slot											
PCle Mini Card	One PCI Express® Mini Card slot											
PCle WLAN	<i>Some:</i> 11b/g/n wireless, PCle Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2											
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter											
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®											
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified Intel Active Management Technology 9.0 (Intel AMT 9.0)											
Intel AMT	Trusted Platform Module (TPM 1.2-compliant)											
Security chip												Security
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo											<ul style="list-style-type: none"> Security chip (see information on left) Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse USB port disablement Chassis intrusion switch on selected model(s)
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	150 watts, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> Business black color Toolless back cover, stand removal Toolless disk, optical drive, memory removal Support VESA mount (100mm) Multi-touch model(s) with frame stand: <ul style="list-style-type: none"> (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm 24.7 lb (11.22 kg) in maximum configuration Adjustable stand (between 10° and 45°) Multi-touch model(s) with monitor stand: <ul style="list-style-type: none"> (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm 28.9 lb (13.12 kg) in maximum configuration Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

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ThinkCentre M93z (10AD) - Multi-touch (TopSeller) - Windows 8

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/dd/yy)
10AD0002US	i5-4670S	4GBx1	2.0M	500G 7200	HD 4600	N2230	Media	None	None	None	Monitor	2.4G vPro	None	Win8 Pro64	07/09/13
10AD0006US	i7-4770S	8GBx1	2.0M	500G Hybrid	HD 4600	N2230	Media	None	None	None	Frame	2.4G vPro	None	Win8 Pro64	07/09/13
10AD0007US	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N6235	Media	None	None	None	Monitor	2.4G vPro	None	Win8 Pro64	07/09/13
10AD001DUS	i5-4670S	4GBx1	2.0M	500G 7200	HD 4600	N2230	Media	Sensor	None	None	Monitor	USB vPro	None	Win8 Pro64	07/23/13
10AD001EUS	i5-4670S	4GBx1	2.0M	1TB 7200	HD 4600	N2230	Media	None	None	None	Monitor	USB vPro	None	Win8 Pro64	07/23/13
10AD001FUS	i7-4770S	8GBx1	2.0M	1TB 7200	HD 4600	N6235	Media	Sensor	None	None	Monitor	USB vPro	None	Win8 Pro64	07/23/13
10AD001NUS	i3-4130	4GBx1	2.0M	500G 7200	HD 4400	N2230	Media	None	None	None	Monitor	USB	None	Win8 Pro64	08/20/13
Positioning Processor	<p><i>Premium All-In-One PC for the enterprise</i> Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket</p>											<p>Preloaded operating system Windows® 8 Pro 64-bit Web install applications (only some listed) • Password Manager Preloaded applications (only some listed) • ThinkVantage System Update • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Support • Lenovo Companion • Norton Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote® • Intel AppUp • Lenovo Solutions for Small Business • Nitro Pro • AccuWeather • Norton™ Studio</p>			
Implementation															
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)														
Graphics	<p>Intel HD Graphics 4400 or 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort) @60Hz</i> 23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color, IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector</p>														
Display															
Light sensor	Optional ambient light sensor														
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch														
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off														
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button														
Disk	<p><i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</p>														
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable														
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar														
Media reader	Optional 11-in-1 media card reader														
Chipset	Intel Q87 Express Chipset														
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)														
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)														
ExpressCard	None														
mSATA	One mSATA slot														
PCIe Mini Card	One PCI Express® Mini Card slot														
PCIe WLAN	<p><i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11a/b/g/n wireless, PCIe Half Mini Card, Intel Centrino Advanced-N 6235, Wi-Fi + Bluetooth combo adapter, 2x2</p>											<p>Security • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • <i>Chassis intrusion switch on selected model(s)</i></p>			
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter														
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®														
Audio support	<p>High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified Intel Active Management Technology 9.0 (Intel AMT 9.0) Trusted Platform Module (TPM 1.2-compliant)</p>														
Intel AMT															
Security chip															
Keyboard	<p><i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black</p>														
Mouse	<p><i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black</p>														
Power supply	150 watts, autosensing, 85% PSU														
Machine	<ul style="list-style-type: none"> • Business black color • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) <p><i>Multi-touch model(s) with frame stand:</i></p> <ul style="list-style-type: none"> • (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm • 24.7 lb (11.22 kg) in maximum configuration • Adjustable stand (between 10° and 45°) <p><i>Multi-touch model(s) with monitor stand:</i></p> <ul style="list-style-type: none"> • (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm • 28.9 lb (13.12 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 											<p>EPEAT™ Gold rating ENERGY STAR® 6.0-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant</p>			
Limited Warranty	<p>3-years, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available</p>											<p>Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet</p>			

See footnotes for important warranty information
 US model(s) announced July 9, 2013, July 23, 2013, August 20, 2013

ThinkCentre M93z (10AD) - Multi-touch (TopSeller) - Windows 8.1

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory	Camera (mega-pixel)	Disk SATA GB rpm	Graphics	PCIe Mini Card WLAN	Media reader	Light sensor	Serial port	Chassis intrusion switch	Stand type	Key-board/ Mouse	Intel vPro Global	Preload	Ann date (mm/dd/yy)	
10AD0028US	i5-4570S	4GBx1	2.0M	500G 7200	HD 4600	N7260	Media	Sensor	None	None	Frame	USB	vPro	None	Win8.1 Pro64	01/21/14
10AD0029US	i5-4670S	4GBx1	2.0M	500G 7200	HD 4600	N7260	Media	Sensor	None	None	Monitor	USB	vPro	None	Win8.1 Pro64	01/21/14

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system
Processor	Intel® Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows® 8.1 Pro 64-bit
Implementation	Processor in LGA1150 socket											Web install applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> • Password Manager
Graphics	Intel HD Graphics 4400 or 4600 in processor, uses main memory, DirectX® 11, external digital monitor support via DisplayPort™, supports dual independent display; <i>Maximum resolution: 3840x2160 (DisplayPort)@60Hz</i>											Preloaded applications (only some listed)
Display	23.0" (584.2mm) Full HD 1080p (1920x1080) TFT color , IPS panel, wide viewing angle (+/- 89°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, anti-glare, work as standalone monitor via VGA-in connector											<ul style="list-style-type: none"> • ThinkVantage System Update • ThinkVantage AutoLock • Desktop Power Manager • Lenovo Solution Center • Lenovo Support • Lenovo Companion • Norton Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote® • Intel AppUp • Lenovo Solutions for Small Business • Nitro Pro • AccuWeather • Norton™ Studio • Pokki • Hightail
Light sensor	Optional ambient light sensor											
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch											
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off											
Controls	Microphone mute (OSD exit), monitor mode switch (OSD enter), volume up/down buttons (OSD left/right buttons), and power button											
Disk	<i>Some:</i> SATA 6.0Gb/s, 3.5" Wide, 7200 rpm											
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											
Onboard SATA	Two SATA cables (each 1-drop to device), two SATA 6.0Gb/s connectors on planar											
Media reader	Optional 11-in-1 media card reader											
Chipset	Intel Q87 Express Chipset											
Rear ports	Four USB 3.0, ethernet (RJ-45), DisplayPort-out, VGA-in, optional serial (9-pin), optional keyboard (PS/2), optional mouse (PS/2)											
Side ports	Two USB 3.0 (one Always On / Powered), one microphone (stereo, 3.5mm), one headphone / microphone combo jack (stereo, 3.5mm)											
ExpressCard	None											
mSATA	One mSATA slot											
PCIe Mini Card	One PCI Express® Mini Card slot											
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2											
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter											
Ethernet	One gigabit ethernet port, Intel I217-LM (Clarkville), Wake on LAN®											
Audio support	High Definition (HD) Audio, Realtek ALC283 / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified											
Intel AMT	Intel Active Management Technology 9.0 (Intel AMT 9.0)											
Security chip	Trusted Platform Module (TPM 1.2-compliant)											Security
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo® logo <i>Some:</i> Ultraslim Plus Wireless Keyboard (2.4GHz via USB receiver), black											<ul style="list-style-type: none"> • Security chip (see information on left) • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement • Chassis intrusion switch on selected model(s)
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultraslim Plus Wireless Mouse (2.4GHz via USB receiver), black											
Power supply	150 watts, autosensing, 85% PSU											
Machine	<ul style="list-style-type: none"> • Business black color • Toolless back cover, stand removal • Toolless disk, optical drive, memory removal • Support VESA mount (100mm) Multi-touch model(s) with frame stand: <ul style="list-style-type: none"> • (WxDxH) 22.4" X 3.7" X 17.6"; 568mm X 93.1mm X 447.3 mm • 24.7 lb (11.22 kg) in maximum configuration • Adjustable stand (between 10° and 45°) Multi-touch model(s) with monitor stand: <ul style="list-style-type: none"> • (WxDxH) 22.4" X 9.7" X 17.4" to 21.7"; 568mm X 247mm X 441.2mm to 551.2mm • 28.9 lb (13.12 kg) in maximum configuration • Tilt: 45° back, -5° forward; Lift: 110mm; Swivel: +/-45° 											EPEAT™ Gold rating ENERGY STAR® 6.0-compliant TCO Certified Edge TUV Green Mark ULE Gold EuP 2013 Cisco EnergyWise compatible GREENGUARD® certified RoHS-compliant
Limited Warranty	3-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

ThinkCentre Edge 62z



Lenovo ThinkCentre Edge 62z with Frame Stand



Lenovo ThinkCentre Edge 62z with Frame Stand



Lenovo ThinkCentre Edge 62z with Frame Stand



Handle



Lenovo ThinkCentre Edge 62z with Frame Stand



Lenovo ThinkCentre Edge 62z with Frame Stand

ThinkCentre Edge 62z (2117) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Camera	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Stand type	Global	Preload	Ann date (mm/dd/yy)
2117-BBU	i3-3220	4GBx1 1600MHz	720p	500G 7200	DVD±RW	HD 2500	Intel 105	Frame	None	Win7 Pro64	03/26/13
2117-EKU	G2020	2GBx1 1600MHz	720p	500G 7200	DVD±RW	Intel HD	Intel 105	Frame	None	Win7 Pro64	03/26/13
2117-ELU	G2020	2GBx1 1600MHz	720p	500G 7200	None	Intel HD	Intel 105	Frame	None	Win7 Pro64	03/26/13
2117-EWU	i3-3240	2GBx1 1600MHz	720p	320G 5400	DVD±RW	HD 2500	Intel 105	Frame	None	Win7 Pro64	05/14/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Essential All-In-One PC for small/medium businesses</i>						Preloaded operating system²⁰					
Processor	Intel® Pentium® G2020 Processor (2 cores / 2 threads, 2.9GHz, 3MB cache), integrated Intel HD Graphics, integrated 1333MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core™ i3-3220 Processor (2 cores / 4 threads, 3.3GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller, Virtualization Technology Intel Core i3-3240 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), integrated Intel HD Graphics 2500, integrated 1600MHz dual-channel DDR3 memory controller						Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager • Lenovo® Message Center Plus 					
Implementation	Processor in LGA1155 socket						Preloaded applications (only some listed)					
Memory	8GB max, PC3-12800 1600MHz DDR3 , one 204-pin SODIMM sockets (notebook) <i>System automatically clocks down for processors with 1333MHz DDR3 memory controller</i>						<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Automatic Lock Utility • ThinkVantage Power Manager • View Management Utility • Lenovo Solution Center • RapidBoot HDD Accelerator • Lenovo SimpleTap • Lenovo Cloud Storage by SugarSync • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Evernote® • Symantec™ VIP • Intel AppUp® • Nitro PDF Pro • Skype™ for Windows • Windows Live™ Essentials • Microsoft® Office preloaded; purchase a product key to activate • Corel® Burn.Now™ (DVD±RW) • Corel DVD MovieFactory® (DVD±RW) 					
Graphics Display	Intel HD Graphics or Intel HD Graphics 2500 in processor, uses system memory 18.5" (470mm) HD (1366x768) TFT color , CCFL backlight, 200 nits, 16:9 aspect ratio, 600:1 dynamic contrast ratio											
Multi-touch	None											
Camera	HD720p Camera on top of screen, 1.0-megapixel, fixed focus											
Controls	Front facing button for power on/off, side buttons for brightness up and brightness down											
Disk	Hard Disk Drive / SATA 3.0Gb/s, 2.5" Wide											
Optical	<i>Some:</i> DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											
Media reader	None											
Chipset	Intel H61 Express Chipset											
Rear ports	Four USB 2.0, ethernet (RJ-45), serial (9-pin)											
Side ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)											
PCIe Mini Card	One PCI Express® Mini Card slot											
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® wireless-N 105, 1x1											
Bluetooth	None											
Ethernet	One gigabit ethernet port, Realtek® RTL8111E-VC											
Audio	High Definition (HD) Audio, Realtek ALC269Q											
Speaker	Two internal stereo speakers (2watt x 2)											
Intel AMT	None											
Security chip	None											
Keyboard	Lenovo® Slim New F5 USB Keyboard (USB connector), black											
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	120 watts, autosensing, 87% PSU											
Machine	<i>Model(s) with Frame stand:</i> <ul style="list-style-type: none"> • Business black color • 18.5" W X 2.3" D X 14.5" H • 469.7mm W X 59.5mm D X 368.4mm H (including stand) • 11 lb (5 kg) in maximum configuration • Tilt: 10°-20° back; no lift; no swivel; adjustable stand • Supports VESA mount (100mm) 						Security <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement 					
							ENERGY STAR® 5.2-compliant EuP 2013 RoHS-compliant					
							Supports ThinkVantage Technologies					
							For compatible accessories, please go to O-Edge62Z sheet; For Lenovo service upgrade options, please go to S-TC sheet					
Limited Warranty	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											



ThinkCentre E63z (touch)
with USB mouse/keyboard



ThinkCentre E63z (touch)
with USB mouse/keyboard



ThinkCentre E63z (non-touch)
with USB mouse/keyboard



ThinkCentre E63z
(right view)



ThinkCentre E63z
(left view)



ThinkCentre E63z
(back view)

ThinkCentre E63z Platform Specifications

Product Specifications Reference (PSREF)

Processor	Intel® Pentium® or 4th Generation Intel Core™ i3 Processor	Keyboard	Some: Preferred Pro USB Keyboard (USB connector), Lenovo logo Some: Lenovo Slim USB Keyboard (USB connector), black, Lenovo logo																					
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Processor	Cores / Threads	Clock Speed	Max Burst Frequency	Cache	Memory Types	Integrated Graphics																		
Pentium J2900	4 / 4	2.41 GHz	2.66 GHz	2MB	DDR3L-1333	Intel HD																		
Core i3-4005U	2 / 4	1.7 Ghz	-	3MB	DDR3L-1600	Intel HD 4400																		
	* System-on-Chip (SoC) solution, integrates Intel processor core, Graphics, Memory Controller, and I/O interfaces	Mechanical	<ul style="list-style-type: none"> Business black color Support VESA mount (100mm) <table border="1"> <thead> <tr> <th>Dimensions (WxDxH)</th> <th>Weight (Maximum)</th> <th>Adjustments</th> </tr> </thead> <tbody> <tr> <td colspan="3">E63z non-touch with frame stand</td> </tr> <tr> <td>19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm</td> <td>8.82 lb (4 kg)</td> <td>Tilt: 10° to 60° back</td> </tr> <tr> <td colspan="3">E63z touch with frame stand</td> </tr> <tr> <td>19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm</td> <td>10.58 lb (4.8 kg)</td> <td>Tilt: 10° to 60° back</td> </tr> </tbody> </table>	Dimensions (WxDxH)	Weight (Maximum)	Adjustments	E63z non-touch with frame stand			19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm	8.82 lb (4 kg)	Tilt: 10° to 60° back	E63z touch with frame stand			19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm	10.58 lb (4.8 kg)	Tilt: 10° to 60° back						
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Memory	<i>Pentium models:</i> 8GB max ⁷ / DDR3 Low Voltage, DDR3L-1600*, non-parity, one 204-pin SO-DIMM socket <i>Core i3 models:</i> 16GB max ⁷ / DDR3 Low Voltage, DDR3L-1600, non-parity, two 204-pin SO-DIMM sockets *System automatically clocks down for 1333MHz DDR3 memory controller	Power supply	65 watts external adapter, autosensing, 88% PSU, 100-240V (50-60Hz)																					
Disk	<i>Some:</i> SATA 6.0Gb/s, 2.5" Wide, 5400 rpm or 7200 rpm <i>Some:</i> 500GB (5400 rpm) or 1TB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide <i>Some:</i> Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide	Limited warranty ³	<i>Some:</i> 1-year or 3-years, limited onsite service / service upgrades available <i>Some:</i> 1-year or 3-years, Depot or Carry-in / service upgrades available For Lenovo service upgrade options, please go to S-TC sheet																					
Optical	None	Preload	Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Ready to install applications (only some listed) <ul style="list-style-type: none"> Rescue and Recovery™ Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage® Product Recovery ThinkVantage System Update ThinkVantage Communication Utility ThinkVantage Device Experience ThinkVantage AutoLock Lenovo SHAREit BlueTooth Security Lock Desktop Power Manager View Management Utility Lenovo Solution Center Lenovo Message Center Plus Norton™ Internet Security (30 days of virus definitions) Adobe® Reader® Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote® Nitro Pro 																					
SATA controller	<i>Pentium models:</i> Serial ATA, SATA 3.0Gb/s support, integrated in processor <i>Core i3 models:</i> Serial ATA, SATA 6.0Gb/s support, integrated in processor Optional 7-in-1 media card reader (Core i3 models only)	Display	<i>Some:</i> Windows 8.1 64-bit <i>Some:</i> Windows 8.1 Pro 64-bit <i>Some:</i> Windows 8.1 with Bing 64-bit Web install applications (only some listed) <ul style="list-style-type: none"> Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> ThinkVantage System Update ThinkVantage AutoLock Lenovo SHAREit BlueTooth Security Lock Desktop Power Manager Lenovo Solution Center Lenovo Support Lenovo Companion Norton Internet Security (30 days of virus definitions) Skype™ Microsoft Office preloaded; purchase a product key to activate Cyberlink PowerDVD (DVD±RW, DVD) Cyberlink Power2Go (DVD±RW) Cyberlink PowerProducer (DVD±RW) Evernote® Nitro Pro AccuWeather Norton™ Studio Pokki Hightail 																					
Media reader	Optional 7-in-1 media card reader (Core i3 models only)	Multi-touch	Optional Projected Capacitive Touch (PCT) technology, supports 10-point touch																					
Graphics	Intel HD Graphics or Intel HD Graphics 4400 in processor, uses main memory, <i>Maximum resolution:</i> 1600x900@60Hz (panel); 2560x1600@60Hz (HDMI-out)	Camera	Some: 720p camera, 1.0-megapixel, fixed focus, digital microphone, LED indicator																					
Chipset	Intel System-on-Chip (SoC) platform	Controls	Power button on right side																					
Rear ports	<i>Pentium models:</i> Two USB 2.0, ethernet (RJ-45), DC-IN <i>Core i3 models:</i> Two USB 2.0, ethernet (RJ-45), HDMI-out, DC-IN	Chipset																						
Side ports	<i>Pentium models:</i> One USB 3.0, one microphone / headphone combo jack (3.5mm) <i>Core i3 models:</i> One USB 3.0 (charging port), one microphone / headphone combo jack (3.5mm), 7-in-1 card reader	ExpressCard	None																					
ExpressCard	None	PCIe Mini Card	One PCI Express Mini Card slot (half size, for WLAN)																					
Audio support	High Definition (HD) Audio, Realtek ALC233 (Pentium models) or Conexant CX20751 (Core i3 models) / internal speakers (3watt x 2)	WLAN ¹³	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Realtek RTL8723BE, Wi-Fi + Bluetooth combo adapter, 1x1 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Realtek RTL8192EE, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11ac/a/b/g/n wireless, PCIe Half Mini Card, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo adapter, 2x2																					
Bluetooth™	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	Bluetooth™ Ethernet	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter																					
Ethernet	One gigabit ethernet port, Realtek RTL8111G, Wake on LAN®	vPro & iAMT	None																					
Security chip	None	Security features	<ul style="list-style-type: none"> Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse USB port disablement 																					
Environment	EPEAT™ Gold (For Windows models only); ENERGY STAR® 6.0 (For Windows models only); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3																							

See footnotes for more detailed information

ThinkCentre E63z (10D4) - TopSeller

Product Specifications Reference (PSREF)

Model	Display	Multi-Touch	Processor	Graphics	Media Reader	Camera	Memory	Storage	Optical	WLAN	Floor Stand	Keyboard / Mouse	Preload	Base Warranty (year)	Global	Ann Date (mm/yy)
10D40004US	19.5" HD+	None	Pentium J2900	Intel HD	None	720p	4GBx1	500GB 7200	None	RTL8723BE	Frame	USB (slim)	Win7 P64 DG Win8.1	1-onsite	No	08/14
10D40005US	19.5" HD+	None	Pentium J2900	Intel HD	None	None	2GBx1	500GB 7200	None	RTL8723BE	Frame	USB (slim)	Win7 P64 DG Win8.1	1-onsite	No	08/14

• For detailed platform specifications, please see [ThinkCentre E63z Platform Specifications sheet](#)

Processor	<p>Intel® Pentium® or 4th Generation Intel Core™ i3 Processor</p> <table border="1"> <thead> <tr> <th>Processor</th> <th>Cores / Threads</th> <th>Clock Speed</th> <th>Max Burst Frequency</th> <th>Cache</th> <th>Memory Types</th> <th>Integrated Graphics</th> </tr> </thead> <tbody> <tr> <td>Pentium J2900</td> <td>4 / 4</td> <td>2.41 GHz</td> <td>2.66 GHz</td> <td>2MB</td> <td>DDR3L-1333</td> <td>Intel HD</td> </tr> <tr> <td>Core i3-4005U</td> <td>2 / 4</td> <td>1.7 Ghz</td> <td>-</td> <td>3MB</td> <td>DDR3L-1600</td> <td>Intel HD 4400</td> </tr> </tbody> </table> <p>* System-on-Chip (SoC) solution, integrates Intel processor core, Graphics, Memory Controller, and I/O interfaces</p>	Processor	Cores / Threads	Clock Speed	Max Burst Frequency	Cache	Memory Types	Integrated Graphics	Pentium J2900	4 / 4	2.41 GHz	2.66 GHz	2MB	DDR3L-1333	Intel HD	Core i3-4005U	2 / 4	1.7 Ghz	-	3MB	DDR3L-1600	Intel HD 4400	<p>Some: 11b/g/n, Intel Centrino® Wireless-N 7260, Wi-Fi + BT combo Some: 11ac/a/b/g/n, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo</p> <p>Bluetooth™ Ethernet: Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter One gigabit ethernet port, Realtek RTL8111G, Wake on LAN®</p> <p>vPro & iAMT Security chip: None</p> <p>Security features: <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement </p>
Processor	Cores / Threads	Clock Speed	Max Burst Frequency	Cache	Memory Types	Integrated Graphics																	
Pentium J2900	4 / 4	2.41 GHz	2.66 GHz	2MB	DDR3L-1333	Intel HD																	
Core i3-4005U	2 / 4	1.7 Ghz	-	3MB	DDR3L-1600	Intel HD 4400																	
Memory	<p><i>Pentium models:</i> 8GB max⁷ / DDR3 Low Voltage, DDR3L-1600*, non-parity, one 204-pin SO-DIMM socket</p> <p><i>Core i3 models:</i> 16GB max⁷ / DDR3 Low Voltage, DDR3L-1600, non-parity, two 204-pin SO-DIMM sockets</p> <p>*System automatically clocks down for 1333MHz DDR3 memory controller</p>																						
Disk	<p>Some: SATA 6.0Gb/s, 2.5" Wide, 5400 rpm or 7200 rpm</p> <p>Some: 500GB (5400 rpm) or 1TB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</p> <p>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</p>	<p>Keyboard: Some: Preferred Pro USB Keyboard (USB connector), Lenovo logo Some: Lenovo Slim USB Keyboard (USB connector), black, Lenovo logo</p> <p>Mouse: Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black Some: Enhanced Optical USB Mouse, black, Lenovo logo Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black</p>																					
Optical	None																						
SATA controller	<i>Pentium models:</i> Serial ATA, SATA 3.0Gb/s support, integrated in processor																						
Media reader	<i>Core i3 models:</i> Serial ATA, SATA 6.0Gb/s support, integrated in processor Optional 7-in-1 media card reader (Core i3 models only)																						
Graphics	Intel HD Graphics or Intel HD Graphics 4400 in processor, uses main memory, Maximum resolution: 1600x900@60Hz (panel); 2560x1600@60Hz (HDMI-out)																						
Display	19.5" (495.3mm) HD+ (1600x900) TFT color, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, wide viewing angle (horizontal: +/- 85°; vertical: +/- 80°), frameless for touch models, frame for non-touch models	<p>Mechanical: <ul style="list-style-type: none"> • Business black color • Support VESA mount (100mm) <table border="1"> <thead> <tr> <th>Dimensions (WxDxH)</th> <th>Weight (Maximum)</th> <th>Adjustments</th> </tr> </thead> <tbody> <tr> <td colspan="3">E63z non-touch with frame stand</td> </tr> <tr> <td>19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm</td> <td>8.82 lb (4 kg)</td> <td>Tilt: 10° to 60° back</td> </tr> <tr> <td colspan="3">E63z touch with frame stand</td> </tr> <tr> <td>19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm</td> <td>10.58 lb (4.8 kg)</td> <td>Tilt: 10° to 60° back</td> </tr> </tbody> </table> </p>	Dimensions (WxDxH)	Weight (Maximum)	Adjustments	E63z non-touch with frame stand			19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm	8.82 lb (4 kg)	Tilt: 10° to 60° back	E63z touch with frame stand			19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm	10.58 lb (4.8 kg)	Tilt: 10° to 60° back						
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19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm	10.58 lb (4.8 kg)	Tilt: 10° to 60° back																					
Multi-touch	Optional Projected Capacitive Touch (PCT) technology, supports 10-point touch																						
Camera	Some: 720p camera, 1.0-megapixel, fixed focus, digital microphone, LED indicator																						
Controls	Power button on right side																						
Chipset	Intel System-on-Chip (SoC) platform	Power supply: 65 watts external adapter, autosensing, 88% PSU, 100-240V (50-60Hz)																					
Rear ports	<i>Pentium models:</i> Two USB 2.0, ethernet (RJ-45), DC-IN <i>Core i3 models:</i> Two USB 2.0, ethernet (RJ-45), HDMI-out, DC-IN	Limited warranty ³ Some: 1-year or 3-years, limited onsite service / service upgrades available Some: 1-year or 3-years, Depot or Carry-in / service upgrades available For Lenovo service upgrade options, please go to S-TC sheet																					
Side ports	<i>Pentium models:</i> One USB 3.0, one microphone / headphone combo jack (3.5mm) <i>Core i3 models:</i> One USB 3.0 (charging port), one microphone / headphone combo jack (3.5mm), 7-in-1 card reader	Preload: Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit Some: Windows 8.1 with Bing 64-bit																					
PCIe Mini Card	One PCI Express Mini Card slot (half size, for WLAN)																						
Audio support	High Definition (HD) Audio, Realtek ALC233 (Pentium models) or Conexant CX20751 (Core i3 models) / internal speakers (3watt x 2)																						
WLAN ¹³	Some: 11b/g/n wireless, Realtek RTL8723BE, Wi-Fi + BT 4.0 combo, 1x1 Some: 11b/g/n wireless, Realtek RTL8192EE, Wi-Fi + BT 4.0 combo, 2x2	Environment: ENERGY STAR® 6.0 (For Windows models only); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3																					

See footnotes for more detailed information

ThinkCentre E63z (10D6) - Multi-touch (TopSeller)

Product Specifications Reference (PSREF)

Model	Display	Multi-Touch	Processor	Graphics	Media Reader	Camera	Memory	Storage	Optical	WLAN	Floor Stand	Keyboard / Mouse	Preload	Base Warranty (year)	Gobal	Ann Date (mm/yy)
10D60005US	19.5" HD+	Touch	Pentium J2900	Intel HD	None	720p	4GBx1	500GB 7200	None	RTL8723BE	Frame	USB (slim)	Win7 P64 DG Win8.1	1-onsite	No	08/14
10D60006US	19.5" HD+	Touch	Pentium J2900	Intel HD	None	720p	4GBx1	500GB 7200	None	7260 b/g/n	Frame	USB (slim)	Win7 P64 DG Win8.1	1-onsite	No	08/14
10D60007US	19.5" HD+	Touch	Pentium J2900	Intel HD	None	None	2GBx1	500GB 7200	None	RTL8723BE	Frame	USB (slim)	Win7 P64 DG Win8.1	1-onsite	No	08/14

• For detailed platform specifications, please see [ThinkCentre E63z Platform Specifications sheet](#)

Processor	<p>Intel® Pentium® or 4th Generation Intel Core™ i3 Processor</p> <table border="1"> <thead> <tr> <th>Processor</th> <th>Cores / Threads</th> <th>Clock Speed</th> <th>Max Burst Frequency</th> <th>Cache</th> <th>Memory Types</th> <th>Integrated Graphics</th> </tr> </thead> <tbody> <tr> <td>Pentium J2900</td> <td>4 / 4</td> <td>2.41 GHz</td> <td>2.66 GHz</td> <td>2MB</td> <td>DDR3L-1333</td> <td>Intel HD</td> </tr> <tr> <td>Core i3-4005U</td> <td>2 / 4</td> <td>1.7 Ghz</td> <td>-</td> <td>3MB</td> <td>DDR3L-1600</td> <td>Intel HD 4400</td> </tr> </tbody> </table> <p>* System-on-Chip (SoC) solution, integrates Intel processor core, Graphics, Memory Controller, and I/O interfaces</p>	Processor	Cores / Threads	Clock Speed	Max Burst Frequency	Cache	Memory Types	Integrated Graphics	Pentium J2900	4 / 4	2.41 GHz	2.66 GHz	2MB	DDR3L-1333	Intel HD	Core i3-4005U	2 / 4	1.7 Ghz	-	3MB	DDR3L-1600	Intel HD 4400	<p>Some: 11b/g/n, Intel Centrino® Wireless-N 7260, Wi-Fi + BT combo Some: 11ac/a/b/g/n, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo</p> <p>Bluetooth™ Ethernet</p> <p>Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter One gigabit ethernet port, Realtek RTL8111G, Wake on LAN®</p> <p>vPro & iAMT Security chip</p> <p>None None</p> <p>Security features</p> <ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement
Processor	Cores / Threads	Clock Speed	Max Burst Frequency	Cache	Memory Types	Integrated Graphics																	
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Core i3-4005U	2 / 4	1.7 Ghz	-	3MB	DDR3L-1600	Intel HD 4400																	
Memory	<p><i>Pentium models:</i> 8GB max⁷ / DDR3 Low Voltage, DDR3L-1600*, non-parity, one 204-pin SO-DIMM socket</p> <p><i>Core i3 models:</i> 16GB max⁷ / DDR3 Low Voltage, DDR3L-1600, non-parity, two 204-pin SO-DIMM sockets</p> <p>*System automatically clocks down for 1333MHz DDR3 memory controller</p>																						
Disk	<p>Some: SATA 6.0Gb/s, 2.5" Wide, 5400 rpm or 7200 rpm</p> <p>Some: 500GB (5400 rpm) or 1TB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</p> <p>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</p>	<p>Keyboard</p> <p>Some: Preferred Pro USB Keyboard (USB connector), Lenovo logo</p> <p>Some: Lenovo Slim USB Keyboard (USB connector), black, Lenovo logo</p> <p>Mouse</p> <p>Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black</p> <p>Some: Enhanced Optical USB Mouse, black, Lenovo logo</p> <p>Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black</p>																					
Optical	None																						
SATA controller	<i>Pentium models:</i> Serial ATA, SATA 3.0Gb/s support, integrated in processor																						
Media reader	<i>Core i3 models:</i> Serial ATA, SATA 6.0Gb/s support, integrated in processor Optional 7-in-1 media card reader (Core i3 models only)																						
Graphics	<p>Intel HD Graphics or Intel HD Graphics 4400 in processor, uses main memory, Maximum resolution: 1600x900@60Hz (panel); 2560x1600@60Hz (HDMI-out)</p> <p>19.5" (495.3mm) HD+ (1600x900) TFT color, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, wide viewing angle (horizontal: +/- 85°; vertical: +/- 80°), frameless for touch models, frame for non-touch models</p> <p>Optional Projected Capacitive Touch (PCT) technology, supports 10-point touch</p> <p>Some: 720p camera, 1.0-megapixel, fixed focus, digital microphone, LED indicator</p> <p>Power button on right side</p>	<p>Mechanical</p> <ul style="list-style-type: none"> • Business black color • Support VESA mount (100mm) <table border="1"> <thead> <tr> <th>Dimensions (WxDxH)</th> <th>Weight (Maximum)</th> <th>Adjustments</th> </tr> </thead> <tbody> <tr> <td colspan="3">E63z non-touch with frame stand</td> </tr> <tr> <td>19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm</td> <td>8.82 lb (4 kg)</td> <td>Tilt: 10° to 60° back</td> </tr> <tr> <td colspan="3">E63z touch with frame stand</td> </tr> <tr> <td>19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm</td> <td>10.58 lb (4.8 kg)</td> <td>Tilt: 10° to 60° back</td> </tr> </tbody> </table>	Dimensions (WxDxH)	Weight (Maximum)	Adjustments	E63z non-touch with frame stand			19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm	8.82 lb (4 kg)	Tilt: 10° to 60° back	E63z touch with frame stand			19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm	10.58 lb (4.8 kg)	Tilt: 10° to 60° back						
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Display																							
Multi-touch																							
Camera																							
Controls																							
Chipset	Intel System-on-Chip (SoC) platform																						
Rear ports	<i>Pentium models:</i> Two USB 2.0, ethernet (RJ-45), DC-IN <i>Core i3 models:</i> Two USB 2.0, ethernet (RJ-45), HDMI-out, DC-IN	<p>Power supply</p> <p>65 watts external adapter, autosensing, 88% PSU, 100-240V (50-60Hz)</p>																					
Side ports	<i>Pentium models:</i> One USB 3.0, one microphone / headphone combo jack (3.5mm) <i>Core i3 models:</i> One USB 3.0 (charging port), one microphone / headphone combo jack (3.5mm), 7-in-1 card reader	<p>Limited warranty³</p> <p>Some: 1-year or 3-years, limited onsite service / service upgrades available Some: 1-year or 3-years, Depot or Carry-in / service upgrades available For Lenovo service upgrade options, please go to S-TC sheet</p>																					
PCIe Mini Card	One PCI Express Mini Card slot (half size, for WLAN)	<p>Preload</p> <p>Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit Some: Windows 8.1 with Bing 64-bit</p>																					
Audio support	High Definition (HD) Audio, Realtek ALC233 (Pentium models) or Conexant CX20751 (Core i3 models) / internal speakers (3watt x 2)																						
WLAN ¹³	Some: 11b/g/n wireless, Realtek RTL8723BE, Wi-Fi + BT 4.0 combo, 1x1 Some: 11b/g/n wireless, Realtek RTL8192EE, Wi-Fi + BT 4.0 combo, 2x2	<p>Environment</p> <p>ENERGY STAR® 6.0 (For Windows models only); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3</p>																					

See footnotes for more detailed information

ThinkCentre E63z (10E0) - TopSeller

Product Specifications Reference (PSREF)

Model	Display	Multi-Touch	Processor	Graphics	Media Reader	Camera	Memory	Storage	Optical	WLAN	Floor Stand	Keyboard / Mouse	Preload	Base Warranty (year)	Gobal	Ann Date (mm/yy)
10E00027US	19.5" HD+	None	i3-4005U	HD 4400	7-in-1	720p	4GBx1	500GB 7200	None	7260 b/g/n	Frame	USB	Win7 P64 DG Win8.1	1-onsite	No	11/14
10E00028US	19.5" HD+	None	i3-4005U	HD 4400	7-in-1	720p	8GBx1	500GB 7200	None	7260 b/g/n	Frame	USB	Win7 P64 DG Win8.1	1-onsite	No	11/14
10E00029US	19.5" HD+	None	i3-4005U	HD 4400	7-in-1	720p	2GBx1	500GB 7200	None	7260 b/g/n	Frame	USB	Win7 P64 DG Win8.1	1-onsite	No	11/14
10E0002AUS	19.5" HD+	None	i3-4005U	HD 4400	7-in-1	720p	4GBx1	64GB SSD	None	7260 b/g/n	Frame	USB	Win7 P64 DG Win8.1	1-onsite	No	11/14
10E0002BUS	19.5" HD+	None	i3-4005U	HD 4400	7-in-1	720p	4GBx1	180GB SSD	None	7260 b/g/n	Frame	USB	Win7 P64 DG Win8.1	1-onsite	No	11/14

• For detailed platform specifications, please see [ThinkCentre E63z Platform Specifications sheet](#)

Processor	Intel® Pentium® or 4th Generation Intel Core™ i3 Processor	Some: 11b/g/n, Intel Centrino® Wireless-N 7260, Wi-Fi + BT combo Some: 11ac/a/b/g/n, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo																					
	<table border="1"> <thead> <tr> <th>Processor</th> <th>Cores / Threads</th> <th>Clock Speed</th> <th>Max Burst Frequency</th> <th>Cache</th> <th>Memory Types</th> <th>Integrated Graphics</th> </tr> </thead> <tbody> <tr> <td>Pentium J2900</td> <td>4 / 4</td> <td>2.41 GHz</td> <td>2.66 GHz</td> <td>2MB</td> <td>DDR3L-1333</td> <td>Intel HD</td> </tr> <tr> <td>Core i3-4005U</td> <td>2 / 4</td> <td>1.7 Ghz</td> <td>-</td> <td>3MB</td> <td>DDR3L-1600</td> <td>Intel HD 4400</td> </tr> </tbody> </table>	Processor	Cores / Threads	Clock Speed	Max Burst Frequency	Cache	Memory Types	Integrated Graphics	Pentium J2900	4 / 4	2.41 GHz	2.66 GHz	2MB	DDR3L-1333	Intel HD	Core i3-4005U	2 / 4	1.7 Ghz	-	3MB	DDR3L-1600	Intel HD 4400	Bluetooth™ Ethernet
Processor	Cores / Threads	Clock Speed	Max Burst Frequency	Cache	Memory Types	Integrated Graphics																	
Pentium J2900	4 / 4	2.41 GHz	2.66 GHz	2MB	DDR3L-1333	Intel HD																	
Core i3-4005U	2 / 4	1.7 Ghz	-	3MB	DDR3L-1600	Intel HD 4400																	
		Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter One gigabit ethernet port, Realtek RTL8111G, Wake on LAN®																					
		vPro & iAMT Security chip																					
		None None																					
Memory	<p><i>Pentium models:</i> 8GB max⁷ / DDR3 Low Voltage, DDR3L-1600*, non-parity, one 204-pin SO-DIMM socket</p> <p><i>Core i3 models:</i> 16GB max⁷ / DDR3 Low Voltage, DDR3L-1600, non-parity, two 204-pin SO-DIMM sockets</p> <p>*System automatically clocks down for 1333MHz DDR3 memory controller</p>	Security features																					
		<ul style="list-style-type: none"> Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) Power-on password Administrator password Hard disk password Boot sequence control Boot without keyboard and mouse USB port disablement 																					
Disk	<p>Some: SATA 6.0Gb/s, 2.5" Wide, 5400 rpm or 7200 rpm</p> <p>Some: 500GB (5400 rpm) or 1TB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</p> <p>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</p>	Keyboard																					
		Some: Preferred Pro USB Keyboard (USB connector), Lenovo logo Some: Lenovo Slim USB Keyboard (USB connector), black, Lenovo logo Some: Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black Some: Enhanced Optical USB Mouse, black, Lenovo logo Some: Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black																					
Optical	None	Mouse																					
SATA controller	<i>Pentium models:</i> Serial ATA, SATA 3.0Gb/s support, integrated in processor	Mechanical																					
Media reader	<i>Core i3 models:</i> Serial ATA, SATA 6.0Gb/s support, integrated in processor Optional 7-in-1 media card reader (Core i3 models only)	<ul style="list-style-type: none"> Business black color Support VESA mount (100mm) <table border="1"> <thead> <tr> <th>Dimensions (WxDxH)</th> <th>Weight (Maximum)</th> <th>Adjustments</th> </tr> </thead> <tbody> <tr> <td colspan="3">E63z non-touch with frame stand</td> </tr> <tr> <td>19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm</td> <td>8.82 lb (4 kg)</td> <td>Tilt: 10° to 60° back</td> </tr> <tr> <td colspan="3">E63z touch with frame stand</td> </tr> <tr> <td>19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm</td> <td>10.58 lb (4.8 kg)</td> <td>Tilt: 10° to 60° back</td> </tr> </tbody> </table>	Dimensions (WxDxH)	Weight (Maximum)	Adjustments	E63z non-touch with frame stand			19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm	8.82 lb (4 kg)	Tilt: 10° to 60° back	E63z touch with frame stand			19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm	10.58 lb (4.8 kg)	Tilt: 10° to 60° back						
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19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm	10.58 lb (4.8 kg)	Tilt: 10° to 60° back																					
Graphics	Intel HD Graphics or Intel HD Graphics 4400 in processor, uses main memory, Maximum resolution: 1600x900@60Hz (panel); 2560x1600@60Hz (HDMI-out)	Power supply																					
Display	19.5" (495.3mm) HD+ (1600x900) TFT color, LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, wide viewing angle (horizontal: +/- 85°; vertical: +/- 80°), frameless for touch models, frame for non-touch models	65 watts external adapter, autosensing, 88% PSU, 100-240V (50-60Hz)																					
Multi-touch	Optional Projected Capacitive Touch (PCT) technology, supports 10-point touch	Limited warranty ³																					
Camera	Some: 720p camera, 1.0-megapixel, fixed focus, digital microphone, LED indicator	Some: 1-year or 3-years, limited onsite service / service upgrades available Some: 1-year or 3-years, Depot or Carry-in / service upgrades available For Lenovo service upgrade options, please go to S-TC sheet																					
Controls	Power button on right side	Preload																					
Chipset	Intel System-on-Chip (SoC) platform	Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit Some: Windows 8.1 with Bing 64-bit																					
Rear ports	<i>Pentium models:</i> Two USB 2.0, ethernet (RJ-45), DC-IN <i>Core i3 models:</i> Two USB 2.0, ethernet (RJ-45), HDMI-out, DC-IN	Environment																					
Side ports	<i>Pentium models:</i> One USB 3.0, one microphone / headphone combo jack (3.5mm) <i>Core i3 models:</i> One USB 3.0 (charging port), one microphone / headphone combo jack (3.5mm), 7-in-1 card reader	ENERGY STAR® 6.0 (For Windows models only); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3																					
PCIe Mini Card	One PCI Express Mini Card slot (half size, for WLAN)																						
Audio support	High Definition (HD) Audio, Realtek ALC233 (Pentium models) or Conexant CX20751 (Core i3 models) / internal speakers (3watt x 2)																						
WLAN ¹³	Some: 11b/g/n wireless, Realtek RTL8723BE, Wi-Fi + BT 4.0 combo, 1x1 Some: 11b/g/n wireless, Realtek RTL8192EE, Wi-Fi + BT 4.0 combo, 2x2																						

See footnotes for more detailed information

ThinkCentre E63z (10E2) - Multi-touch (TopSeller)

Product Specifications Reference (PSREF)

Model	Display	Multi-Touch	Processor	Graphics	Media Reader	Camera	Memory	Storage	Optical	WLAN	Floor Stand	Keyboard / Mouse	Preload	Base Warranty (year)	Global	Ann Date (mm/yy)
10E2001QUS	19.5" HD+	Touch	i3-4005U	HD 4400	7-in-1	720p	4GBx1	500GB 7200	None	7260 b/g/n	Frame	USB	Win7 P64 DG Win8.1	1-onsite	No	11/14
10E2001RUS	19.5" HD+	Touch	i3-4005U	HD 4400	7-in-1	720p	4GBx1	180GB SSD	None	7260 b/g/n	Frame	USB	Win7 P64 DG Win8.1	1-onsite	No	11/14
10E2001SUS	19.5" HD+	Touch	i3-4005U	HD 4400	7-in-1	720p	8GBx1	500GB 7200	None	7260 b/g/n	Frame	USB	Win7 P64 DG Win8.1	1-onsite	No	11/14
10E2001TUS	19.5" HD+	Touch	i3-4005U	HD 4400	7-in-1	720p	4GBx1	128GB SSD	None	7260 b/g/n	Frame	USB	Win7 P64 DG Win8.1	1-onsite	No	11/14
10E2001UUS	19.5" HD+	Touch	i3-4005U	HD 4400	7-in-1	720p	8GBx1	256GB SSD OPAL	None	7260 b/g/n	Frame	USB	Win7 P64 DG Win8.1	1-onsite	No	11/14

• For detailed platform specifications, please see [ThinkCentre E63z Platform Specifications sheet](#)

Processor	Intel® Pentium® or 4th Generation Intel Core™ i3 Processor	Some: 11b/g/n, Intel Centrino® Wireless-N 7260, Wi-Fi + BT combo Some: 11ac/a/b/g/n, Intel Dual Band Wireless-AC 7260, Wi-Fi + BT combo																					
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		None None																					
Memory	<p><i>Pentium models:</i> 8GB max⁷ / DDR3 Low Voltage, DDR3L-1600*, non-parity, one 204-pin SO-DIMM socket</p> <p><i>Core i3 models:</i> 16GB max⁷ / DDR3 Low Voltage, DDR3L-1600, non-parity, two 204-pin SO-DIMM sockets</p> <p>*System automatically clocks down for 1333MHz DDR3 memory controller</p>	<ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • USB port disablement 																					
Disk	<p>Some: SATA 6.0Gb/s, 2.5" Wide, 5400 rpm or 7200 rpm</p> <p>Some: 500GB (5400 rpm) or 1TB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide</p> <p>Some: Solid State Drive (SSD) / SATA 6.0Gb/s, 2.5" Wide</p>	Keyboard																					
Optical	None	Some: Preferred Pro USB Keyboard (USB connector), Lenovo logo																					
SATA controller	<i>Pentium models:</i> Serial ATA, SATA 3.0Gb/s support, integrated in processor	Some: Lenovo Slim USB Keyboard (USB connector), black, Lenovo logo																					
Media reader	<i>Core i3 models:</i> Serial ATA, SATA 6.0Gb/s support, integrated in processor Optional 7-in-1 media card reader (Core i3 models only)	Some: UltraSlim Plus Wireless Keyboard (2.4GHz via USB receiver), black Some: Enhanced Optical USB Mouse, black, Lenovo logo Some: UltraSlim Plus Wireless Mouse (2.4GHz via USB receiver), black																					
Graphics	Intel HD Graphics or Intel HD Graphics 4400 in processor, uses main memory, <i>Maximum resolution:</i> 1600x900@60Hz (panel); 2560x1600@60Hz (HDMI-out)	Mechanical																					
Display	19.5" (495.3mm) HD+ (1600x900) TFT color , LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, wide viewing angle (horizontal: +/- 85°; vertical: +/- 80°), frameless for touch models, frame for non-touch models	<ul style="list-style-type: none"> • Business black color • Support VESA mount (100mm) <table border="1"> <thead> <tr> <th>Dimensions (WxDxH)</th> <th>Weight (Maximum)</th> <th>Adjustments</th> </tr> </thead> <tbody> <tr> <td colspan="3">E63z non-touch with frame stand</td> </tr> <tr> <td>19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm</td> <td>8.82 lb (4 kg)</td> <td>Tilt: 10° to 60° back</td> </tr> <tr> <td colspan="3">E63z touch with frame stand</td> </tr> <tr> <td>19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm</td> <td>10.58 lb (4.8 kg)</td> <td>Tilt: 10° to 60° back</td> </tr> </tbody> </table>	Dimensions (WxDxH)	Weight (Maximum)	Adjustments	E63z non-touch with frame stand			19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm	8.82 lb (4 kg)	Tilt: 10° to 60° back	E63z touch with frame stand			19.21" X 2.44" X 13.62" 488mm X 62mm X 346mm	10.58 lb (4.8 kg)	Tilt: 10° to 60° back						
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Multi-touch	Optional Projected Capacitive Touch (PCT) technology, supports 10-point touch	Power supply																					
Camera	Some: 720p camera, 1.0-megapixel, fixed focus, digital microphone, LED indicator	65 watts external adapter, autosensing, 88% PSU, 100-240V (50-60Hz)																					
Controls	Power button on right side	Limited warranty ³																					
Chipset	Intel System-on-Chip (SoC) platform	Some: 1-year or 3-years, limited onsite service / service upgrades available Some: 1-year or 3-years, Depot or Carry-in / service upgrades available For Lenovo service upgrade options, please go to S-TC sheet																					
Rear ports	<i>Pentium models:</i> Two USB 2.0, ethernet (RJ-45), DC-IN <i>Core i3 models:</i> Two USB 2.0, ethernet (RJ-45), HDMI-out, DC-IN	Preload																					
Side ports	<i>Pentium models:</i> One USB 3.0, one microphone / headphone combo jack (3.5mm) <i>Core i3 models:</i> One USB 3.0 (charging port), one microphone / headphone combo jack (3.5mm), 7-in-1 card reader	Some: Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit Some: Windows 8.1 64-bit Some: Windows 8.1 Pro 64-bit Some: Windows 8.1 with Bing 64-bit																					
PCIe Mini Card	One PCI Express Mini Card slot (half size, for WLAN)	Environment																					
Audio support	High Definition (HD) Audio, Realtek ALC233 (Pentium models) or Conexant CX20751 (Core i3 models) / internal speakers (3watt x 2)	ENERGY STAR® 6.0 (For Windows models only); GREENGUARD®; RoHS-compliant; Cisco EnergyWise compatible; ErP Lot 3																					
WLAN ¹³	Some: 11b/g/n wireless, Realtek RTL8723BE, Wi-Fi + BT 4.0 combo, 1x1 Some: 11b/g/n wireless, Realtek RTL8192EE, Wi-Fi + BT 4.0 combo, 2x2																						

See footnotes for more detailed information



ThinkCentre E73 SFF and Tower



ThinkCentre E73 Tower with Dual Lenovo ThinkVision Monitors



ThinkCentre E73 SFF



ThinkCentre E73 SFF



ThinkCentre E73 Tower

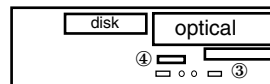


ThinkCentre E73 SFF with HDD and optional SSD

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Parallel port	Serial port	Floor stand	Keyboard / mouse	Global	Preload	Ann date (mm/dd/yy)
10AU002MUS	3x4	i5-4430S	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	Serial	None	USB	None	Win7 Pro64 (DG)	10/22/13
10AU002PUS	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	Parallel	Serial	Stand	USB(slim)	None	Win7 Pro64 (DG)	10/22/13
10AU002QUS	3x4	G3220	2GBx1	500G 7200	DVD±RW	None	None	Intel HD	Parallel	Serial	Stand	USB(slim)	None	Win7 Pro64 (DG)	10/22/13
10AU002RUS	3x4	i5-4570S	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	Parallel	Serial	Stand	USB(slim)	None	Win7 Pro64 (DG)	10/22/13
10AU00EUUS	3x4	i5-4460S	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	USB	None	Win7 P64 DG Win8.1	11/18/14
10AU00ETUS	3x4	i7-4790S	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	None	USB	None	Win7 P64 DG Win8.1	11/18/14
10AU00ERUS	3x4	G3240	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	None	USB	None	Win7 P64 DG Win8.1	11/18/14
10AU00ESUS	3x4	i3-4150	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	None	USB	None	Win7 P64 DG Win8.1	11/18/14

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Stylish design, reliability, and productivity for small/medium businesses		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8/8.1 Pro 64-bit Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • ThinkVantage Device Experience • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro
Processor	Intel® Pentium® or 4th Generation Intel Core™ i3 / i5 / i7 Processors		
	Processor	Cores / Threads	
	Pentium G3240	2 / 2	
	Pentium G3220	2 / 2	
	Core i3-4150	2 / 4	
	Core i3-4130	2 / 4	
	Core i5-4570S	4 / 4	
	Core i5-4460S	4 / 4	
	Core i5-4430S	4 / 4	
	Core i7-4790S	4 / 8	
Implementation	Processor in LGA1150 socket		
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3* , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller		
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort)@60Hz; 1920x1200 (VGA)@60Hz (Reduced Blanking)		
DP dongle	None		
Disk	Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm		
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset		
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar		
eSATA port	None		
Media reader	Optional 9-in-1 media reader, internal USB 2.0		
Chipset	Intel H81 Express Chipset		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Two USB 3.0, two USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DisplayPort		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)		
PCIe WLAN	None		
Bluetooth	None		
Audio	High Definition (HD) Audio, Realtek® ALC662 codec		
Speaker	Internal speaker for business audio		
IEEE 1394	None		
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN		
Manageability	None		
Modem	None		
Security chip	None		
Keyboard	Some: Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo Some: Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo		
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo		
Floor Stand	Optional system floor stand for vertical orientation		
Power supply	180 watts, universal, autosensing		
Machine	<ul style="list-style-type: none"> • Glossy black bezel; metal case • 13.2" W X 15.0" D X 3.98" H • 336mm W X 382mm D X 101mm H • 13.2 lb (6.0 kg) in maximum configuration • Highlighted optical drive button for easy access 		
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 2.5", N/A, no access, opt 2nd SSD* Bay 4: 1.5", .35" high, access, optnl reader* *bay only available on models with SSD/reader installed		
Slot	Slot 1: Low Profile, PCI Express® 3.0 x16 (40w max) Slot 2: Low Profile, PCIe 2.0 x1 Slot 3: Low Profile, PCIe 2.0 x1		
Limited Warranty ¹	1-year, limited onsite service, 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available		



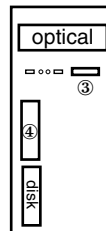
ThinkCentre E73 Tower (10AS) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Slot x bay	Processor	Memory ^a	SATA disk GB rpm	SATA optical	PCIe WLAN	Media reader	Graphics	Parallel port	Serial port	Keyboard / mouse	Global	Preload	Ann date (mm/dd/yy)
10AS002JUS	3x4	i3-4130	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	Parallel	Serial	USB(slim)	None	Win7 Pro64 (DG)	10/22/13
10AS002KUS	3x4	i5-4570S	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	Parallel	Serial	USB(slim)	None	Win7 Pro64 (DG)	10/22/13
10AS005LUS	3x4	G3220	2GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	USB	None	Win7 Pro64 (DG)	12/10/13
10AS00DEUS	3x4	G3240	4GBx1	500G 7200	DVD±RW	None	None	Intel HD	None	None	USB	None	Win7 P64 DG Win8.1	11/18/14
10AS00DFUS	3x4	i5-4460S	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	USB	None	Win7 P64 DG Win8.1	11/18/14
10AS00DGUS	3x4	i7-4790S	4GBx1	500G 7200	DVD±RW	None	None	HD 4600	None	None	USB	None	Win7 P64 DG Win8.1	11/18/14
10AS00DDUS	3x4	i3-4150	4GBx1	500G 7200	DVD±RW	None	None	HD 4400	None	None	USB	None	Win7 P64 DG Win8.1	11/18/14

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	Stylish design, reliability, and productivity for small/medium businesses		Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8/8.1 Pro 64-bit Ready to install applications (only some listed) <ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) <ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Power Manager • ThinkVantage Device Experience • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Evernote® • Microsoft® Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Nitro Pro 				
Processor	Intel® Pentium® or 4th Generation Intel Core™ i3 / i5 / i7 Processors						
	Processor	Cores / Threads		Frequency (Base/Max)	Cache	Memory Types	Integrated Graphics
	Pentium G3240	2 / 2		3.1 GHz	3 MB	DDR3-1333	Intel HD
	Pentium G3220	2 / 2		3 GHz	3 MB	DDR3-1333	Intel HD
	Core i3-4150	2 / 4		3.5 GHz	3 MB	DDR3-1600	HD 4400
	Core i3-4130	2 / 4		3.4 GHz	3 MB	DDR3-1600	HD 4400
	Core i5-4570S	4 / 4		2.9 GHz / 3.6 GHz	6 MB	DDR3-1600	HD 4600
	Core i5-4460S	4 / 4		2.9 GHz / 3.4 GHz	6 MB	DDR3-1600	HD 4600
	Core i5-4430S	4 / 4		2.7 GHz / 3.2 GHz	6 MB	DDR3-1600	HD 4600
	Core i7-4790S	4 / 8	3.2 GHz / 4 GHz	8 MB	DDR3-1600	HD 4600	
Implementation	Processor in LGA1150 socket						
Memory	16GB max, UDIMM, PC3-12800 1600MHz DDR3* , two 240-pin DIMM sockets *System automatically clocks down for processors with 1333MHz memory controller						
Graphics	Intel HD Graphics or Intel HD Graphics 4400/4600 in processor, uses main memory, one VGA, one DisplayPort™, supports dual independent display; Maximum resolution: 2560x1600 (DisplayPort) @60Hz; 1920x1200 (VGA) @60Hz (Reduced Blanking)						
DP dongle	None						
Disk	Some: SATA 6.0Gb/s, 3.5" Wide, 7200 rpm						
Optical	Super Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive						
SATA controller	Serial ATA, SATA 3.0Gb/s and SATA 6.0Gb/s, integrated in chipset						
Onboard SATA	SATA cables match SATA devices (each 1-drop to device), one SATA 3.0Gb/s connector (for optical) and two SATA 6.0Gb/s connectors (for HDD/SSD) on planar						
eSATA port	None						
Media reader	Optional 9-in-1 media reader, internal USB 2.0						
Chipset	Intel H81 Express Chipset						
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)						
Rear ports	Two USB 3.0, two USB 2.0, optional serial (9-pin), optional parallel (25-pin), ethernet (RJ-45), VGA DB-15, DisplayPort						
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone (stereo, 3.5mm)						
PCIe WLAN	None						
Bluetooth	None						
Audio	High Definition (HD) Audio, Realtek® ALC662 codec						
Speaker	Internal speaker for business audio						
IEEE 1394	None						
Ethernet	Gigabit ethernet port, Realtek RTL8111GN, Wake on LAN						
Manageability	None						
Modem	None						
Security chip	None						
Keyboard	Some: Preferred Pro USB Keyboard (USB connector), black, Lenovo® logo Some: Lenovo® Slim USB Keyboard (USB connector), black, Lenovo logo						
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo						
Power supply	180 watts, universal, autosensing						
Machine	<ul style="list-style-type: none"> • Glossy black bezel; metal case • 6.3" W X 15.7" D X 15.6" H (with handle) • 160mm W X 400mm D X 397mm H • 16.5 lb (7.5 kg) in maximum configuration • Ergonomic rubberized handle • Highlighted optical drive button for easy access 						
Bay	Bay 1: 5.25", 1.6" high, access, std optical Bay 2: 3.5", 1" high, no access, std disk Bay 3: 1.5", .35" high, access, optnl reader* Bay 4: 3.5", 1" high, no access, opt 2nd 2.5" disk** *bay only available on models with media reader installed **3.5" to 2.5" bracket comes with optional 2nd 2.5" disk						
Slot	Slot 1: half-length, full-height, PCI Express® 3.0 x16 (60w max) Slot 2: half-length, full-height, PCIe 2.0 x1 Slot 3: half-length, full-height, PCIe 2.0 x1						
Limited Warranty ¹	1-year, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available						





ThinkCentre E93z with Frame Stand



ThinkCentre E93z with Monitor Stand



ThinkCentre E93z with Frame Stand



ThinkCentre E93z with Monitor Stand



ThinkCentre E93z with Frame Stand



ThinkCentre E93z with Monitor Stand

ThinkCentre E93z All-In-One - II

ThinkCentre®



ThinkCentre E93z with UltraFlex Stand



ThinkCentre E93z with UltraFlex Stand



ThinkCentre E93z with UltraFlex Stand



ThinkCentre E93z with UltraFlex Stand with optional wireless mouse / keyboard and Lenovo ThinkVision Monitor



ThinkCentre E93z with UltraFlex Stand



ThinkCentre E93z (handle)

ThinkCentre E93z (10B8) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory ⁸	Wide-screen display	Multi-Touch	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card WLAN	Media reader	Stand type	Key-board/Mouse	Preload	Ann date (mm/dd/yy)
10B80007US	i5-4430S	4GBx1	21.5" FHD	None	2.0M	500G 7200	DVD±RW	HD 4600	N2230	Media	Frame	USB	Win7 P64 DG Win8	08/27/13
10B80058US	i3-4130	4GBx1	21.5" FHD	None	2.0M	500G 7200	DVD±RW	HD 4400	N2230	Media	Frame	USB(slim)	Win7 P64 DG Win8	10/22/13
10B8007CUS	i5-4430S	4GBx1	21.5" FHD	None	2.0M	500G 7200	DVD±RW	HD 4600	N7260	Media	UltraFlex	USB	Win7 P64 DG Win8.1	04/08/14
10B8008KUS	i3-4130	4GBx1	21.5" FHD	None	2.0M	500G 7200	DVD±RW	HD 4400	N7260	Media	Monitor	USB	Win7 P64 DG Win8.1	12/16/14
10B8008LUS	i5-4430S	4GBx1	21.5" FHD	None	2.0M	500G 7200	DVD±RW	HD 4600	N7260	Media	Monitor	USB	Win7 P64 DG Win8.1	12/16/14

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Premium All-In-One PC for the enterprise</i>	Preloaded operating system <i>Some:</i> Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit <i>Some:</i> Windows 7 Professional 64 preinstalled through downgrade rights in Windows 8.1 Pro 64-bit
Processor	Intel® Core™ i3-4130 Processor (2 cores / 4 threads, 3.4GHz, 3MB cache), Intel HD Graphics 4400, 1600MHz DDR3 memory controller Intel Core i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket	
Implementation		Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Device Experience • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Lenovo Solutions for Small Business • Nitro Pro
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)	
Graphics	Intel HD Graphics 4400/4600 in processor, uses main memory, DirectX® 11.1, external digital monitor support via HDMI, supports dual independent display; <i>Max resolution:</i> 1920x1080 (panel)@60Hz; 1920x1080 (HDMI)@60Hz	
Display	21.5" (546.1mm) Full HD 1080p (1920x1080) TFT color , wide viewing angle (+/- 85°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, infinity display, work as standalone monitor via HDMI-in connector	
Light sensor	None	
Multi-touch	None	
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off	
Controls	Monitor mode / computer mode button, volume up/down buttons, and power button	
Disk	SATA 3.0Gb/s, 2.5" Wide, 7200 rpm	
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable	
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector and one SATA 3.0Gb/s connector on planar	
Media reader	Optional 11-in-1 media card reader	
Chipset	Intel B85 Express Chipset	
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in	
Side ports	Two USB 3.0 (one Always On USB 3.0), one headphone / microphone combo jack (stereo, 3.5mm), one optional media card reader	
PCIe Mini Card	Two PCI Express® Mini Card slots	
PCIe WLAN	<i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Wireless-N 7260, Wi-Fi + Bluetooth combo adapter, 2x2 <i>Some:</i> 11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2	
Bluetooth	Bluetooth 4.0 wireless, integrated in Wi-Fi + Bluetooth combo adapter	
Ethernet	One gigabit ethernet port, Intel I217-V, Wake on LAN®	
Audio support	High Definition (HD) Audio, Realtek ALC283CG / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified	
Intel AMT	None	
Security chip	None	
Keyboard	<i>Some:</i> Lenovo® Slim New F5 USB Keyboard (USB connector), black <i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo logo	
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo	
Power supply	150 watts, autosensing, 85% PSU	
Color	Business black color	
VESA mount	Support VESA mount (100mm)	
Dimensions and weight (without stand)	<i>Non-touch models (WxDxH):</i> 21.02" X 1.91" X 15.20"; 534mm X 48.5mm X 386 mm 14.55 lb (6.6 kg) in maximum configuration <i>Touch models (WxDxH):</i> 21.02" X 1.95" X 15.20"; 534mm X 49.6mm X 386 mm 16.31 lb (7.4 kg) in maximum configuration	
Stand	<i>Optional Frame Stand:</i> Adjustable between 10° and 65° (Tilt) <i>Optional Monitor Stand:</i> Adjustable between -5° and 45° (Tilt) <i>Optional UltraFlex Stand:</i> Tilt: 65° back, 0° forward; Lift: 110mm; Swivel: +/-90°; supports recline mode (from an upright position to an angled plane) and cable management	
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available	
		Security • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement ENERGY STAR® 6.0-compliant EuP 2013 GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information

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(TRPL1-1) December 2014

ThinkCentre E93z (10B9) - NVIDIA (TopSeller)

Product Specifications Reference (PSREF)

Type-model	Pro-processor	Memory ⁸	Wide-screen display	Multi-Touch	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card	Media reader	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
10B9000SUS	i5-4430S	4GBx1	21.5" FHD	None	2.0M	500G 7200	DVD±RW	GT 720A	N2230	Media	Frame	USB None	Win7 Pro64	DG 08/27/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Premium All-In-One PC for the enterprise</i>										
Processor	Intel® Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket										
Implementation	Processor in LGA1150 socket										
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)										
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4400/4600 in processor, and NVIDIA GeForce® GT 720A , PCI Express® x16, 1GB memory, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Max resolution: 1920x1080 (panel)@60Hz; 1920x1080 (HDMI)@60Hz</i>										
Display	21.5" (546.1mm) Full HD 1080p (1920x1080) TFT color , wide viewing angle (+/- 85°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, infinity display, work as standalone monitor via HDMI-in connector										
Light sensor	None										
Multi-touch	None										
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off										
Controls	Monitor mode / computer mode button, volume up/down buttons, and power button										
Disk	SATA 3.0Gb/s, 2.5" Wide, 7200 rpm										
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable										
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector and one SATA 3.0Gb/s connector on planar										
Media reader	Optional 11-in-1 media card reader										
Chipset	Intel B85 Express Chipset										
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in										
Side ports	Two USB 3.0 (one Always On USB 3.0), one headphone / microphone combo jack (stereo, 3.5mm), one optional media card reader										
PCIe Mini Card	Two PCI Express® Mini Card slots										
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2										
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter										
Ethernet	One gigabit ethernet port, Intel I217-V, Wake on LAN®										
Audio support	High Definition (HD) Audio, Realtek ALC283CG / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified										
Intel AMT Security chip	None										
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo										
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo										
Power supply	180 watts, autosensing, 92% PSU										
Color	Business black color										
VESA mount	Support VESA mount (100mm)										
Dimensions and weight (without stand)	<i>Non-touch models (WxDxH):</i> 21.02" X 1.91" X 15.20"; 534mm X 48.5mm X 386 mm 14.55 lb (6.6 kg) in maximum configuration										
	<i>Touch models (WxDxH):</i> 21.02" X 1.95" X 15.20"; 534mm X 49.6mm X 386 mm 16.31 lb (7.4 kg) in maximum configuration										
Stand	<i>Optional Frame Stand:</i> Adjustable between 10° and 65° (Tilt)										
	<i>Optional Monitor Stand:</i> Adjustable between -5° and 45° (Tilt)										
	<i>Optional UltraFlex Stand:</i> Tilt: 65° back, 0° forward; Lift: 110mm; Swivel: +/-90°; supports recline mode (from an upright position to an angled plane) and cable management										
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available										
Preloaded operating system Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit Ready to install applications (only some listed) • Rescue and Recovery™ • Password Manager Preloaded applications (only some listed) • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Device Experience • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Lenovo Solutions for Small Business • Nitro Pro Security • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement ENERGY STAR® 6.0-compliant EuP 2013 GREENGUARD® certified RoHS-compliant Supports ThinkVantage Technologies For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet											

See footnotes for important warranty information
US model(s) announced August 27, 2013

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(TRPL1-2) September 2013

ThinkCentre E93z (10BA) - Multi-touch (NVIDIA) - TopSeller

Product Specifications Reference (PSREF)

Type-model	Processor	Memory ⁸	Wide-screen display	Multi-Touch	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card	Media reader	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
10BA000EUS	i7-4770S	4GBx1	21.5" FHD	Touch	2.0M	500G Hybrid	DVD±RW	GT 720A	N2230	Media	Frame	2.4G	None	Win7 Pro64 DG 08/27/13
10BA000FUS	i7-4770S	4GBx1	21.5" FHD	Touch	2.0M	500G Hybrid	DVD±RW	GT 720A	N2230	Media	UltraFlex	2.4G	None	Win7 Pro64 DG 08/27/13
10BA000GUS	i5-4430S	4GBx1	21.5" FHD	Touch	2.0M	500G 7200	DVD±RW	GT 720A	N2230	Media	Frame	USB	None	Win7 Pro64 DG 08/27/13
10BA000HUS	i5-4430S	8GBx1	21.5" FHD	Touch	2.0M	500G 7200	DVD±RW	GT 720A	N2230	Media	Frame	USB	None	Win7 Pro64 DG 08/27/13
10BA001LUS	i7-4770S	8GBx1	21.5" FHD	Touch	2.0M	500G Hybrid	DVD±RW	GT 720A	N2230	Media	UltraFlex	USB	None	Win7 Pro64 DG 08/27/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system
Processor	Intel® Core™ i5-4430S Processor (4 cores / 4 threads, 2.7GHz, 6MB cache), Turbo Boost 2.0 (3.2GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i7-4770S Processor (4 cores / 8 threads, 3.1GHz, 8MB cache), Turbo Boost 2.0 (3.9GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows® 7 Professional 64 preinstalled through downgrade rights in Windows 8 Pro 64-bit
Implementation	Processor in LGA1150 socket											Ready to install applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> • Rescue and Recovery™ • Password Manager
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4400/4600 in processor, and NVIDIA GeForce® GT 720A , PCI Express® x16, 1GB memory, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Max resolution:</i> 1920x1080 (panel)@60Hz; 1920x1080 (HDMI)@60Hz											Preloaded applications (only some listed)
Display	21.5" (546.1mm) Full HD 1080p (1920x1080) TFT color , wide viewing angle (+/- 85°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, infinity display, work as standalone monitor via HDMI-in connector											<ul style="list-style-type: none"> • ThinkVantage® Product Recovery • ThinkVantage System Update • ThinkVantage Communication Utility • ThinkVantage Device Experience • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Message Center Plus • Norton™ Internet Security (30 days of virus definitions) • Adobe® Reader® • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink Power2Go (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote • Lenovo Solutions for Small Business • Nitro Pro
Light sensor	None											
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch											
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off											
Controls	Monitor mode / computer mode button, volume up/down buttons, and power button											
Disk	<i>Some:</i> SATA 3.0Gb/s, 2.5" Wide, 7200 rpm <i>Some:</i> 500GB (5400 rpm) hybrid hard disk / with 8GB MLC NAND flash memory, SATA 6.0Gb/s, 2.5" wide											
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector and one SATA 3.0Gb/s connector on planar											
Media reader	Optional 11-in-1 media card reader											
Chipset	Intel B85 Express Chipset											
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in											
Side ports	Two USB 3.0 (one Always On USB 3.0), one headphone / microphone combo jack (stereo, 3.5mm), one optional media card reader											
PCIe Mini Card	Two PCI Express® Mini Card slots											
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter											
Ethernet	One gigabit ethernet port, Intel I217-V, Wake on LAN®											
Audio support	High Definition (HD) Audio, Realtek ALC283CG / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified											
Intel AMT	None											
Security chip	None											
Keyboard	<i>Some:</i> Preferred Pro USB Keyboard (USB connector), Lenovo® logo <i>Some:</i> Ultralim Plus Wireless Keyboard (2.4GHz via USB receiver), black											Security
Mouse	<i>Some:</i> Enhanced Optical USB Mouse, black, Lenovo logo <i>Some:</i> Ultralim Plus Wireless Mouse (2.4GHz via USB receiver), black											<ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement
Power supply	180 watts, autosensing, 92% PSU											ENERGY STAR® 6.0-compliant
Color	Business black color											EuP 2013
VESA mount	Support VESA mount (100mm)											GREENGUARD® certified
Dimensions and weight (without stand)	<i>Non-touch models (WxDxH):</i> 21.02" X 1.91" X 15.20"; 534mm X 48.5mm X 386 mm 14.55 lb (6.6 kg) in maximum configuration <i>Touch models (WxDxH):</i> 21.02" X 1.95" X 15.20"; 534mm X 49.6mm X 386 mm 16.31 lb (7.4 kg) in maximum configuration											RoHS-compliant
Stand	<i>Optional Frame Stand:</i> Adjustable between 10° and 65° (Tilt) <i>Optional Monitor Stand:</i> Adjustable between -5° and 45° (Tilt) <i>Optional UltraFlex Stand:</i> Tilt: 65° back, 0° forward; Lift: 110mm; Swivel: +/-90°; supports recline mode (from an upright position to an angled plane) and cable management											Supports ThinkVantage Technologies
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											For compatible accessories, please go to TC-AQP sheet; For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US model(s) announced August 27, 2013

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ThinkCentre E93z (10BA) - Multi-touch (NVIDIA) - TopSeller (Win8)

Product Specifications Reference (PSREF)

Type-model	Pro-cessor	Memory ⁸	Wide-screen display	Multi-Touch	Camera (mega-pixel)	Disk SATA GB rpm	SATA optical	Graphics	PCIe Mini Card	Media reader	Stand type	Key-board/Mouse Global	Preload	Ann date (mm/dd/yy)
10BA000MUS	i5-4670S	4GBx1	21.5" FHD	Touch	2.0M	500G 7200	DVD±RW	GT 720A	N2230	Media	Frame	USB None	Win8 Pro64	08/27/13
10BA001MUS	i5-4570S	4GBx1	21.5" FHD	Touch	2.0M	500G 7200	DVD±RW	GT 720A	N2230	Media	UltraFlex	USB None	Win8 Pro64	08/27/13

- Small and medium business (SMB) model(s), part of the US TopSeller™ Program
- 1-year limited warranty

Positioning	<i>Premium All-In-One PC for the enterprise</i>											Preloaded operating system
Processor	Intel® Core™ i5-4570S Processor (4 cores / 4 threads, 2.9GHz, 6MB cache), Turbo Boost 2.0 (3.6GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Intel Core i5-4670S Processor (4 cores / 4 threads, 3.1GHz, 6MB cache), Turbo Boost 2.0 (3.8GHz), Intel HD Graphics 4600, 1600MHz DDR3 memory controller Processor in LGA1150 socket											Windows® 8 Pro 64-bit
Implementation												Web install applications (only some listed)
Memory	16GB max, PC3-12800 1600MHz DDR3 , two 204-pin SODIMM sockets (notebook)											<ul style="list-style-type: none"> • Password Manager
Graphics	NVIDIA® Optimus™ technology, auto-switch between discrete and integrated graphics, Intel HD Graphics 4400/4600 in processor, and NVIDIA GeForce® GT 720A , PCI Express® x16, 1GB memory, DirectX® 11, external digital monitor support via HDMI, supports dual independent display; <i>Max resolution: 1920x1080 (panel)@60Hz; 1920x1080 (HDMI)@60Hz</i>											Preloaded applications (only some listed)
Display	21.5" (546.1mm) Full HD 1080p (1920x1080) TFT color , wide viewing angle (+/- 85°), LED backlight, 250 nits, 16:9 aspect ratio, 1000:1 contrast ratio, infinity display, work as standalone monitor via HDMI-in connector											<ul style="list-style-type: none"> • ThinkVantage System Update • ThinkVantage AutoLock • Desktop Power Manager • View Management Utility • Lenovo Cloud Storage by SugarSync • Lenovo Solution Center • Lenovo Support • Lenovo Companion • Norton Internet Security (30 days of virus definitions) • Skype™ • Microsoft Office preloaded; purchase a product key to activate • Cyberlink PowerDVD (DVD±RW, DVD) • Cyberlink Power2Go (DVD±RW) • Cyberlink PowerProducer (DVD±RW) • Evernote® • Lenovo Solutions for Small Business • Nitro Pro • AccuWeather • Norton™ Studio
Light sensor	None											
Multi-touch	Projected Capacitive Touch (PCT) technology, supports 10-point multi-touch											
Camera	Camera on top of screen, 2.0-megapixel, fixed focus, supports 1080p, with dual array digital microphone, LED indicator, physical switch on/off											
Controls	Monitor mode / computer mode button, volume up/down buttons, and power button											
Disk	SATA 3.0Gb/s, 2.5" Wide, 7200 rpm											
Optical	DVD burner, SATA 1.5Gb/s, 12.7mm high, fixed, not removable											
Onboard SATA	Two SATA cables (each 1-drop to device), one SATA 6.0Gb/s connector and one SATA 3.0Gb/s connector on planar											
Media reader	Optional 11-in-1 media card reader											
Chipset	Intel B85 Express Chipset											
Rear ports	Four USB 2.0, ethernet (RJ-45), HDMI-out, HDMI-in											
Side ports	Two USB 3.0 (one Always On USB 3.0), one headphone / microphone combo jack (stereo, 3.5mm), one optional media card reader											
PCIe Mini Card	Two PCI Express® Mini Card slots											
PCIe WLAN	11b/g/n wireless, PCIe Half Mini Card, Intel Centrino® Wireless-N 2230, Wi-Fi + Bluetooth combo adapter, 2x2											
Bluetooth	Bluetooth 4.0 wireless, integrated in Intel Wi-Fi + Bluetooth combo adapter											
Ethernet	One gigabit ethernet port, Intel I217-V, Wake on LAN®											
Audio support	High Definition (HD) Audio, Realtek ALC283CG / two internal stereo speakers (3watt x 2), Dolby® Advanced Audio™ v2 certified, Microsoft Lync™ certified											
Intel AMT	None											
Security chip	None											Security
Keyboard	Preferred Pro USB Keyboard (USB connector), Lenovo® logo											<ul style="list-style-type: none"> • Security slot (in rear for attachment of optional Kensington® MicroSaver® cable; Kensington lock also locks chassis) • Power-on password • Administrator password • Hard disk password • Boot sequence control • Boot without keyboard and mouse • Individual USB port disablement
Mouse	Enhanced Optical USB Mouse, black, Lenovo logo											
Power supply	180 watts, autosensing, 92% PSU											
Color	Business black color											
VESA mount	Support VESA mount (100mm)											
Dimensions and weight (without stand)	<i>Non-touch models (WxDxH):</i> 21.02" X 1.91" X 15.20"; 534mm X 48.5mm X 386 mm 14.55 lb (6.6 kg) in maximum configuration <i>Touch models (WxDxH):</i> 21.02" X 1.95" X 15.20"; 534mm X 49.6mm X 386 mm 16.31 lb (7.4 kg) in maximum configuration											ENERGY STAR® 6.0-compliant
Stand	<i>Optional Frame Stand:</i> Adjustable between 10° and 65° (Tilt) <i>Optional Monitor Stand:</i> Adjustable between -5° and 45° (Tilt) <i>Optional UltraFlex Stand:</i> Tilt: 65° back, 0° forward; Lift: 110mm; Swivel: +/-90°; supports recline mode (from an upright position to an angled plane) and cable management											EuP 2013 GREENGUARD® certified RoHS-compliant
Limited Warranty	1-years, limited onsite service , 8 am-5 pm, Mon - Fri coverage excluding holidays, next business day response time / service upgrades available											Supports ThinkVantage Technologies
												For compatible accessories, please go to TC-AQP sheet;
												For Lenovo service upgrade options, please go to S-TC sheet

See footnotes for important warranty information
US model(s) announced August 27, 2013

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The TopSeller™ services are designed to make selling the popular services with TopSeller systems faster and easier. Channel partners should always use TopSeller services with TopSeller systems. TopSeller services part numbers typically provide enhanced discounts and incentives for channel partners. The TopSeller service delivered to the customer is identical to the service delivered using a standard service part number. In situations where a desired service is not offered under a TopSeller service part number or the sale requires a special bid process, use available standard service part numbers.

TopSeller services should always be offered by channel business partners with TopSeller hardware, unless the sale requires special bid pricing or the desired service is not offered as a TopSeller service part.

For more information see:

<http://www2.partnerinfo.lenovo.com/partners/us/resources/salestoolkit.shtml>

<p><u>TopSeller service upgrade options for ThinkCentre M series</u></p> <p>ThinkCentre desktop with 1-year Onsite warranty <i>LOR = Lenovo Onsite Repair</i></p> <table border="0"> <tr> <td>3-year LOR 9x5 Next Business Day</td> <td>04W8710</td> </tr> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>04W8711</td> </tr> </table> <p>ThinkCentre desktop with 3-year Onsite warranty <i>LOR = Lenovo Onsite Repair</i></p> <table border="0"> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>04W8712</td> </tr> </table>	3-year LOR 9x5 Next Business Day	04W8710	4-year LOR 9x5 Next Business Day	04W8711	4-year LOR 9x5 Next Business Day	04W8712	<p>TopSeller Priority Support</p> <ul style="list-style-type: none"> • 24x7 support with priority routing and advanced level technicians <p>ThinkCentre desktop with 1-year Onsite warranty Add to 3-year warranty coverage - 3-year Priority Support* 04W8721 Add to 4-year warranty coverage - 4-year Priority Support* 04W8722</p> <p>ThinkCentre desktop with 3-year Onsite warranty Add to 3-year warranty coverage - 3-year Priority Support* 04W8721 Add to 4-year warranty coverage - 4-year Priority Support* 04W8722</p> <p>* Covered machine must have concurrent warranty coverage.</p>
3-year LOR 9x5 Next Business Day	04W8710						
4-year LOR 9x5 Next Business Day	04W8711						
4-year LOR 9x5 Next Business Day	04W8712						
<p><u>TopSeller service upgrade options for ThinkCentre A series and Edge series</u></p> <p>ThinkCentre desktop with 1-year Onsite warranty <i>LOR = Lenovo Onsite Repair</i></p> <table border="0"> <tr> <td>3-year LOR 9x5 Next Business Day</td> <td>04W8710</td> </tr> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>04W8711</td> </tr> </table> <p>ThinkCentre desktop with 3-year Onsite warranty</p> <table border="0"> <tr> <td>4-year LOR 9x5 Next Business Day</td> <td>04W8712</td> </tr> </table>	3-year LOR 9x5 Next Business Day	04W8710	4-year LOR 9x5 Next Business Day	04W8711	4-year LOR 9x5 Next Business Day	04W8712	
3-year LOR 9x5 Next Business Day	04W8710						
4-year LOR 9x5 Next Business Day	04W8711						
4-year LOR 9x5 Next Business Day	04W8712						

**Partial list of Lenovo Services⁷
for ThinkCentre desktops**

For more information see:

http://www.lenovo.com/services_warranty/us/en/index.html

<p><u>Lenovo service upgrade options for ThinkCentre M series</u></p> <p>ThinkCentre desktop with 1-year Onsite warranty <i>Models with 7-digit MTM</i> 2-year Onsite 9x5 Next Business Day 41C9187 3-year Onsite 9x5 Next Business Day 41C9188 <i>Models with 10-digit MTM</i> 2-year Onsite 9x5 Next Business Day 5WS0D80992 3-year Onsite 9x5 Next Business Day 5WS0D80967</p> <p>ThinkCentre desktop with 3-year Onsite warranty <i>Models with 7-digit MTM</i> 4-year Onsite 9x5 Next Business Day 41C9194 <i>Models with 10-digit MTM</i> 4-year Onsite 9x5 Next Business Day 5WS0D81063</p>	<p><u>Lenovo service upgrade options for ThinkCentre A series and Edge series</u></p> <p>ThinkCentre desktop with 1-year Onsite warranty <i>LOR = Lenovo Onsite Repair</i> 2-year Onsite 9x5 Next Business Day 45K5949 3-year Onsite 9x5 Next Business Day 45K5950</p> <p>ThinkCentre desktop with 3-year Onsite warranty <i>LOR = Lenovo Onsite Repair</i> 4-year Onsite 9x5 Next Business Day 45K5957 5-year Onsite 9x5 Next Business Day 45K5963</p>
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<p><u>Lenovo Priority Support for enterprise customers</u></p> <ul style="list-style-type: none"> • 24x7 support with priority routing and advanced level technicians <p>ThinkCentre desktop with 1-year Onsite warranty Add to 3-year warranty coverage - 3-year Priority Support* 45J9087</p> <p>ThinkCentre desktop with 3-year Onsite warranty Add to 3-year warranty coverage - 3-year Priority Support* 45J9088 Add to 4-year warranty coverage - 4-year Priority Support* 45J9089 Add to 5-year warranty coverage - 5-year Priority Support* 45J9090</p> <p>* Covered machine must have concurrent warranty coverage.</p>	
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Disclaimer

Lenovo provides the information in the Product Specifications Reference (PSREF) withdrawn product books on an "AS-IS" basis. Because the actual products have been withdrawn from marketing, the information in these withdrawn product books is no longer maintained or updated. The referenced footnote numbering may not correspond with the listed footnotes.

PSREF books for the withdrawn systems:

http://www.lenovo.com/psref/psrefs_withdrawn.html

- Availability:** All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.
- Warranty:** For a copy of applicable product warranties, go to http://support.lenovo.com/en_US/product-service/warranty-status/WarrantyPolicies.page. Lenovo makes no representation or warranty regarding third party products or services.
- ¹ **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.
 - ² **Hard drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.
 - ³ **Limited onsite service systems** are designed to be repaired during the applicable warranty period primarily with customer-replaceable parts provided by Lenovo. Lenovo will only send a technician onsite to perform a repair if (a) remote telephone diagnosis and/or customer part replacement are unable to resolve the problem, or (b) the part is one of the few designated by Lenovo for onsite replacement. For a list of onsite replaceable parts, contact Lenovo. Support unrelated to a warranty issue may be subject to additional charges. Lenovo onsite repair (LOR), 8 am to 5 pm, Monday through Friday coverage excluding holidays, next business day (NBD) response time.
 - ⁴ **CD and DVD list** maximum rates; rates are variable and are often less than the maximum.
 - ⁵ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. License agreements may apply.
 - ⁷ **Lenovo Services:** These services are available for machines normally used for business, professional, or trade purposes, rather than personal, family, or household purposes. Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part will be express shipped to you for quick replacement. Onsite 24x7x2-hour service is not available in all locations. P&L means parts and labor. P/U means pick-up. See Lenovo terms and conditions for complete details and restrictions.
 - ⁸ **Memory:** For PCs without a separate graphics card, memory supports both system and video. Accessible system memory may be up to 384MB less than the amount stated, depending on video mode.
 - ⁹ **International Warranty Service** is available in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.
 - ¹⁰ **Modem speeds:** Public network download speeds are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.
 - ¹¹ **For combination drives**, maximum speeds only are given in the following order: CD read, CD write, CD re-write, DVD read.
 - ¹² **The IEEE 802.11n specification (MIMO)** has been finalized and is currently in IEEE 802.11n-2009 release. The maximum speed depends on the access point device and the number of integrated antenna used for connection. An adapter with 11a/b, 11a/b/g, 11b/g/n, or 11a/b/g/n can communicate on any of its supported formats.
 - ¹³ **Wireless capability:** Requires compatible wireless-enabled options sold separately.
 - ¹⁴ **Response times may vary.** May exclude some holidays. Telephone support may be subject to additional charges.
 - ¹⁵ **Update Connector** is available at no charge to registered customers during the limited warranty period. Line charges may apply.
 - ¹⁶ **Embedded Security Subsystem** works with optional VPN software.

- ¹⁸ **Embedded Security Subsystem** may require download of client security software from the Web.
- ¹⁹ **Asset ID** allows system-specific information to be stored in a chip inside the system; it does not have any radio frequency support.
- ²⁰ **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.

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