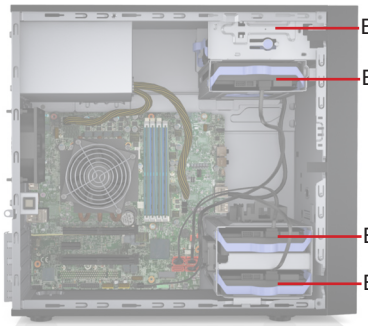
ThinkSystem ST50 Platform Specifications

Components	Specification
Form factor	Tower or 4U rack with optional rack mount kit
Dimensions	Height: 375 mm (14.76 in), width: 175 mm (6.89 in), depth: 431 mm (16.97 in)
Weight	Maximum configuration: 24.7 lb (11.2 kg)
Processor	Up to one Intel Xeon E family processor, up to 95W, up to 6 cores at 3.8GHz, up to 12MB cache, up to DDR4-2666 memory speed. Or up to one 8th Intel Core i3 processor, up to 91W, up to 4 cores at 4.0GHz, up to 8MB cache, up to DDR4-2400 memory speed. Or up to one Intel Pentium Gold processor, up to 54W, 2 cores at 3.9GHz, 4MB cache, DDR4-2400 memory speed Or up to one Intel Celeron processor, up to 54W, 2 cores at 3.2GHz, 2MB cache, DDR4-2400 memory speed
Chipset	Intel C246 Platform Controller Hub
Memory	4 DIMM sockets with 2 channels, 2 DIMMs per channel. UDIMM. DDR4-2666. Non-ECC UDIMM are supported in China only
Memory capacity	64GB with 4x 16GB UDIMMs, both ECC and Non-ECC
Memory protection	ECC
Storage controllers	Supports the following RAID/HBA adapters:
Disk drive bays	Up to 4x 3.5"/2.5" Non-hot swap SATA/SAS cabled drive, HDD, SSD, or mixing of HDD and SSD. 4th bay is optional with 5.25" to 3.5" conversion kit and occupies 5.25" bay
SD card reader	Up to two SD card with optional SD card module, 32GB or 64GB
Disk support	3.5" HDD, SATA6Gbps, 7.2K: 1TB/2TB/4TB/6TB/8TB 2.5" SSD, SATA6Gbps: 240GB/480GB/960GB SD card: 32GB/64GB
Optical	One 5.25" bays for half-height optical, LTO-7 SAS or RDX USB 3.0 tape drive, or 4th disk bay plus one slim optical
Network interfaces	One onboard GbE port via integrated gigabit ethernet Intel i219LM, supports Wake-on-LAN. Optional PCIe ethernet adapters are available
Security features	Power-on and admin password. Trusted Platform Module, TCG 1.2 or 2.0 compliant, Optional TCM in China only. Optional chassis intrusion switch, Kensington lock, and pad lock
Operating systems supported	Microsoft Windows Server 2019/2016. Red Hat Enterprise Linux 7.5. VMware vSphere (ESXi) 6.5 U2
Systems management	Intel Active Management Technology 12 on Xeon models, Intel Standard Manageability on other models
GPU support	Up to one optional NVIDIA Quadro P620
Base warranty	MT 7Y48: 3-year limited onsite service with 9x5/NBD MT 7Y49: 1-year limited onsite service with 9x5/NBD
Power supply	Supports one 250W or 400W power supply, 100V - 240V, 92% PSU. Climate Savers Computing Platinum and 80 PLUS Platinum qualified. 400W PSU supports one 6+2-pin aux power connector.
Video	Integrated Intel UHD Graphics P630 or P610 in -G suffix Xeon processors, or Core i3, Pentium, and Celeron processors.
Cooling	Two fixed system fans, CPU fan, PSU fan, and optional media bay fan
Front ports	2x USB 3.1 Gen 1 Type A
Rear ports	2x USB 3.1 Gen 1 Type A. 2x USB 2.0 Type-A. 1x RJ-45. 1x COM. 1x line-out. 2x DP (DP needs Core, Pentium, Celeron, or -G suffix Xeon processor)
Environmental specification	Supports ASHRAE A2
Environmental certification	Energy Star Server 2.1 certified. More environmental information please see: www.lenovo.com/social_responsibility/us/en/environment/

Storage controllers:

RAID adapter	Interface	Drive type	RAID levels	JBOD	Cache	Cache protection	FastPath
Onboard SATA	6Gbps SATA	SATA	0/1/10/5	Yes	None	None	No
530-8i	12Gbps SAS	SATA/SAS	0/1/10/5/50	Yes	None	None	Yes
730-8i	12Gbps SAS	SATA/SAS	0/1/10/5/50	Yes	1GB	None	No
930-8i	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	2GB	Flash backup	Yes
430-8i	12Gbps SAS	SATA/SAS	-	Yes	None	None	-
430-8e	12Gbps SAS	SATA/SAS	-	Yes	None	None	-
930-8e	12Gbps SAS	SATA/SAS	0/1/10/5/50/6/60	Yes	4GB	Flash backup	Yes



Disk bays

Bay 0	3.5" bay, HDD or SSD
Bay 1	3.5" bay, HDD or SSD
Bay 2	3.5" bay, HDD or SSD
Bay 3	One of the following: • half-height optical • tape drive • 3.5" bay + slim optical

Expansion slots

Supports three PCIe 3.0 slots as following:

Slot 1	PCIe 3.0 x16, full height, half length, links to CPU
Slot 2	PCIe 3.0 x1, full height, half length, links to PCH
Slot 3	PCIe 3.0 x16 (negotiable link width x4), full height, half length, links to PCH

Partial options for ThinkSystem ST50

ThinkSystem 8GB TruDDR4 (1Rx8, 1.2V) 2666 MHz UDIMM	4ZC7A08696
ThinkSystem 16GB TruDDR4 (2Rx8, 1.2V) 2666 MHz UDIMM	4ZC7A08699
ThinkSystem ST50 3.5" 1TB 7.2K SATA 6Gb Non-Hot Swap 512n HDD	4XB7A13554
ThinkSystem ST50 3.5" 2TB 7.2K SATA 6Gb Non-Hot Swap 512n HDD	4XB7A13555
ThinkSystem ST50 3.5" 4TB 7.2K SATA 6Gb Non-Hot Swap 512n HDD	4XB7A13556
ThinkSystem ST50 3.5" 6TB 7.2K SATA 6Gb Non-Hot Swap 512e HDD	4XB7A13557
ThinkSystem ST50 3.5" 8TB 7.2K SATA 6Gb Non-Hot Swap 512e HDD	4XB7A13558
ThinkSystem ST50 3.5" Intel S4510 240GB Entry SATA 6Gb Non Hot Swap SSD	4XB7A14914
ThinkSystem ST50 3.5" Intel S4510 480GB Entry SATA 6Gb Non Hot Swap SSD	4XB7A14915
ThinkSystem ST50 3.5" Intel S4510 960GB Entry SATA 6Gb Non Hot Swap SSD	4XB7A14916
ThinkSystem ST50 HH ODD / Tape Cable Kit	4Z57A13568
ST50 5.25 to 3.5 HDD kit W/ Slim ODD	4M17A12096
ST50 DP to HDMI Dongle Kit	4X97A12100
ST50 DP to VGA Dongle Kit	4X97A12099
ThinkSystem ST50 Super Cap Bracket & Cable Kit	4M17A12094
ST50 Dual SD Cards Adapter Kit	4M17A12095
ThinkSystem ST50/ST250 Rack Mount Kit	4M17A12785