Fujitsu recommends Windows 8 Pro.

# Data Sheet Fujitsu ESPRIMO P420 E85+ Desktop PC

### Your Immediately Deliverable Office PC

The FUJITSU PC ESPRIMO P420 delivers high-quality computing for your office applications and projects at a very attractive price point. You can choose cost-optimized fixed configurations for immediate delivery. Alternatively, you can use configuration options to meet your specific hardware needs, while staying within your budget.

### High performance and best price/performance ratio

Cost-effective system for price-conscious customers

■ 4th generation Intel<sup>®</sup> Core<sup>™</sup> processor family

### Flexibility

- Freedom of choice with tailored systems, perfect fit for specific requirements
- Flexible logistic concept optional customizing program

### Reliability

High-quality and functional stability

Development and production in Europe

### Lifecycle

Hardware continuity for long-term projects Managed lifecycle up to 12 months

### Meets ENERGY STAR® requirements

Low power consumption and low costs, without any loss in performance

■ Power supply with 85% efficiency





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## Components

Processor	Intel® Core™ i7-4770 processor (4 Cores / 8 Threads, 3.40 GHz, up to 3.9 GHz, 8 MB, Intel® HD Graphics 4600) *
Plocessol	Intel® Core™ i5-4670 processor (4 Cores / 4 Threads, 3.40 GHz, up to 3.8 GHz, 6 MB, Intel® HD Graphics 4600) *
	Intel® Core™ i5-4570 processor (4 Cores / 4 Threads, 3.20 GHz, up to 3.6 GHz, 6 MB, Intel® HD Graphics 4600) *
	Intel <sup>®</sup> Core <sup>™</sup> i5-4440 processor (4 Cores / 4 Threads, 3.10 GHz, up to 3.3 GHz, 6 MB, Intel <sup>®</sup> HD Graphics 4600)
	Intel <sup>®</sup> Core <sup>™</sup> i3-4130 processor (2 Cores / 4 Threads, 3.40 GHz, 3 MB, Intel <sup>®</sup> HD Graphics 4400)
	Intel® Pentium® processor G3420 (2 Cores / 2 Threads, 3.20 GHz, 3 MB, Intel® HD Graphics)
	Intel <sup>®</sup> Pentium <sup>®</sup> processor G3220 (2 Cores / 2 Threads, 3.00 GHz, 3 MB, Intel <sup>®</sup> HD Graphics)
	*with Intel® Turbo Boost Technology (clock speed and performance will vary depending on workload and other variables)
Operating systems	
Operating system	Windows 8.1 Pro
	Windows 8.1
	Windows® 7 Professional 64-bit
	Windows® 7 Professional 32-bit
Operating system compatible	openSUSE Linux
Memory modules	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM
Hard disk drives (internal)	SSHD SATA III, 7200 rpm, 1000 GB, 3.5-inch
	SSHD SATA III, 5400 rpm, 500 GB, 2.5-inch
	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 128 GB, 2.5-inch, SED
	SSD SATA III, 128 GB, 2.5-inch
	HDD SATA III, 7200 rpm, 2000 GB, 3.5-inch
	HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch
	HDD SATA III, 7200 rpm, 500 GB, 3.5-inch
	HDD SATA III, 7200 rpm, 250 GB, 3.5-inch
	HDD SATA II, 5400 rpm, 320 GB, 2.5-inch
Hard disk notes	Up to 20 GB of HDD space is reserved for system recovery
	SSHD (Solid State Hard Disk, Hybrid drive)
	SSD (Solid State Disk)
	SED (Self-Encrypting Drive)
Graphics	NVIDIA® GeForce® GT630 DisplayPort 2GB FH, 2 GB
	NVIDIA® GeForce® 605 DisplayPort 1GB FH, 1 GB
	DP to DVI-D (single link) Adapter Cable
	ATI Radeon® HD7350 1GB FH, 1 GB
Drives (optional)	BD Triple Writer SATA slim (tray)
	DVD-ROM
	DVD Super Multi
	MultiCard Reader 24in1 USB 2.0 3.5"
Interface add on cards/components (optional)	
<u>x 1 = 7</u>	WLAN III, 802.11g/Draft-n (Windows only, dedicated regions only)
	USB 3.0 PCIe x1
	Gigabit Ethernet PCIe x1, DS
	Dual serial card PCIe x1
	5500110 0 / 00 505
Base unit	ESPRIMO P420 E85+

Majahaard			
Mainboard Mainboard type	D3230		
Formfactor	μΑΤΧ		
Chipset	Intel® H81		
Processor socket	LGA 1150		
Processor quantity maximum	1		
Memory slots	2 DIMM (DDR3)		
Supported capacity RAM (max.)	16 GB		
Memory frequency	1600 MHz		
Memory notes	Dual channel support.		
Memory notes	For dual channel performance, identical memory modules in each channel are necessary (minimum 2 modules).		
LAN	10/100/1000 MBit/s Realtek RTL8111G		
BIOS version	AMI Aptio 4.6		
BIOS features	BIOS Flash EPROM update by software		
	Recovery BIOS		
	Unified Extensible Firmware Interface (UEFI)		
Audio codec	Realtek ALC671		
Audio features	High Definition Audio, 5.1 surround sound		
I/O controller on board			
Serial ATA total	3		
thereof SATA III	2		
Controller functions	Serial ATA II (3 Gbit)		
	Serial ATA III (6 Gbit)		
	NCQ AHCI		
Interfaces			
Audio: line-in	1		
Audio: line-in / microphone	1		
Audio: line-out	1		
Front audio: microphone	1		
Front audio: headphone	1		
USB 2.0 total	6 2		
USB 3.0 total USB front	2 2x 2.0		
USB rear	2x 2.0 2x 2.0/ 2x 3.0		
USB internal	2x 2.0 2x 5.0		
VGA	2X 2.0 1		
DVI	1 (DVI-D)		
Mouse / Keyboard (PS/2)	1/1		
Ethernet (RJ-45)	1		
· · ·			
Input device / components	Optical USP wheel moure		
Input douises (optional)	Optical USB wheel mouse		
Input devices (optional)	Optical USB/PS2 tilt wheel mouse KBPC PX ECO		
	Mouse M440 ECO		
Drive bays Drive bays total	5		
3.5-inch internal bays	2		
3.5-inch external bays	1		
5.25-inch external bays	2		
Drive bay notes	3,5" bay can be used for 2,5" drives		
Slots	1 (210 mm / 0.27 in th) Full bringht		
PCI-Express 3.0 x16	1 x (210 mm / 8.27 inch) Full height		

Slots	
PCI-Express x1	2 x (190 mm / 7.48 inch) Full height
Graphics on board	
Graphics brand name	Intel® HD Graphics, HD Graphics 4400, HD Graphics 4600 (depending on processor)
Shared video memory	up to 1782 MB
TFT resolution (VGA)	1024 x 768 pixel
	1280 x 1024 pixel
	1360 x 768 pixel 1440 x 900 pixel
	1600 x 900 pixel
	1600 x 1200 pixel
	1680 x 1050 pixel
	1920 x 1080 pixel
TFT resolution (DVI)	1280 x 1024 pixel
	1360 x 768 pixel
	1440 x 900 pixel
	1600 x 900 pixel
	1680 x 1050 pixel
	1920 x 1080 pixel
	1920 x 1200 pixel
Graphics features	Dual display support
	DirectX <sup>®</sup> 11.1
	HDCP support
	Open GL® 3.3
	Open CL® 1.2
Graphics notes	up to 1 GB dedicated video memory (main memory owned and locked for graphics use)
	Tested resolutions, depending on display type additional resolutions and frequencies possible
	Shared memory depending on main memory size and operating system
	Resolution (color depth up to 32 Bit/pixel)
	For TFT we recommend using 60Hz
Electrical values	
Power efficiency note	power supply efficiency (at 230V; 20% / 50% / 100% load) : 83% / 86% / 85%
	0-Watt mode with hard-off switch
Rated voltage range	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz
Operating voltage range	90 V - 264 V
Operating line frequency range	47 Hz - 63 Hz
Max. output of single power supply	280 W
Power factor correction/active power	active
Monitor outlet	No
Power consumption	
Power consumption note	See white paper Energy Consumption
rower consumption note	0-Watt mode with hard-off switch
Heat dissipation	
Heat dissipation notes	See white paper Energy Consumption
Noise emission	
Related Processors for noise	Intel® Core™ i7 4770
Standard noise emission	2x2 GB, HDD, ODD, Windows
אמוומנות ווחוכ בווווזצוטוו	According to ISO 7779:2010, ECMA-74
Standard noise notes / description	A-weighted sound power level Lwad (in B) / Workplace related A-weighted sound pressure level LpAm (in dB(A))
	Bystander position
Standard noise operation mode: CPU	3.4 B / 21 dB(A) Bystander; 25 dB(A) Operator position
50% load	

Noise emission				
Standard noise operation mode: HDD load	3.4 B / 21 dB(A) Bystander; 26 dB(A) Operator position			
Standard noise operation mode: Idle mode	3.4 B / 20 dB(A) Bystander; 26 dB(A) Operator position			
Standard noise operation mode: ODD load	4.6 B / 32 dB(A) Bystander; 38 dB(A) Operator position			
Standard noise operation mode: Office applications 2.0	3.4 B / 20 dB(A) Bystander; 26 dB(A) Operator position			
Dimensions / Weight / Environmental				
Dimensions (W x D x H)	175 x 425 x 353 mm			
х <i>У</i>	6.89 x 16.74 x 13.9 inch			
Operating position	Vertical			
Weight	9 kg			
Weight (lbs)	20.22 lbs			
Weight notes	Actual weight may vary depending on configuration			
Operating ambient temperature	10 - 35 ℃ (50 - 95 °F)			
Compliance				
Product	ESPRIMO P420			
Model	MI4W			
Germany	TÜV GS			
Europe	CE			
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 5.0 (dedicated regions) EPEAT® Gold (dedicated regions)			
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates			
Additional Software				
Additional software (preinstalled)	Workplace Protect (secure authentication solution) Adobe® Reader® (pdf reader) McAfee Multi Access Security (anti-virus and internet security software; 60 days trial version) Win7: Fujitsu Recovery (hard disk based recovery) Win8: Microsoft Push Button Recovery (hard disk based recovery) Microsoft Office (buy license to activate the pre-installed Microsoft Office)			
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink PowerDVD BD (playback software for Blu-ray Disc™) CyberLink PowerDVD DVD (playback software for DVD) Nero Essentials XL			
Miscellaneous				
Compatibility (references)				
	DMI 2.0 PC 2001 WMI 1.5 USB 2.0 SMBIOS			
Manageability				
Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) WoL (Wake on LAN)			

Security			
Physical Security	Kensington Lock support		
	Eye for padlock		
System and BIOS Security	Boot sector virus protection		
	Write protect option for the Flash EPROM		
	Control of external interfaces		
User Security	User and supervisor BIOS password		
	Hard disk password		
	Access protection via external SmartCard reader (optional)		
	Access protection via internal SmartCard reader (optional)		
Packaging information			
Packaging dimension (mm)	500 x 290 x 540 mm		
Packaging dimension (inch)	19.69 x 11.42 x 21.26 inch		
Max. quantity / pallet	24		
Material - Weight (g) Carton	1270 g		
Material - Weight (lbs) Carton	2.8 lbs		
Material - Weight (g) EPS / PS	160 g		
Material - Weight (lbs) EPS / PS	0.35 lbs		
Material - Weight (g) PE	60 g		
Material - Weight (lbs) PE	0.13 lbs		
Packaging notes	printed user documentation is bleached in chlorine free process		
Warranty			
Standard Warranty	1 year		
Service level	Bring-In / Onsite Service (for countries within region FTS CEMEA&I, for all other countries depending on local		
	regulations, minimum: 1 year material warranty)		
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty		
Maintenance and Support Services -	the perfect extension		
Recommended Service	9x5, Response Time: Next Business Day		
Spare Parts availability	5 years after end of product life		
Service Weblink	http://www.fujitsu.com/fts/services/support		

### **Recommended Accessories**

Display E19-6 LED	The Fujitsu Display E19-6 LED combines comfortable ergonomics with best- in-class energy saving technology like ECO operation mode.	Order Code: S26361-K1376-V160
Mouse M440 ECO	Fujitsu Mouse M440 ECO is made from 100% bio material and has a completely PVC free cable. The elegant M440 ECO works on nearly every surface and follows all your hand movements smoothly and precisely. It features two main buttons and as well as a scroll wheel providing comfortable computing to both right and left-handed users.	Order Code: S26381-K450-L200
SOUNDSYSTEM DS E2000 Air	The new more powerful SOUNDSYSTEM DS E2000 Air gives you impressive, well-balanced sound throughout the frequency band. It is an unbeatable USB speaker set with a surprisingly small form factor. The robust satellite speakers are decorated with a deluxe piano finish and the base is adorned with warm ambient lighting.	Order Code: S26391-F7128-L600

WebCam 130 HD2	With the most advanced HD (High Definition / 720p) recording feature and widescreen video format (16:9 and 16:10), WebCam 130 HD2 can capture up to 30 frame rate per second, close up to HD/720p quality video. Even more: 1-Click-Upload makes the video uploading to YouTube in a snap! With smart clip for notebook & LCD display it is easy to install on any device you want.	Order Code: S26391-F7136-L5
HS E2000 Communicator Headset	The Fujitsu HS E2000 Communicator headset allows you to use your personal computer for Voice over IP (VoIP) in stereo audio quality. This premium headset is designed to provide superb audio quality and comfort for the telephony, internet chat, speech recognition, video conferencing and multimedia applications.	Order Code: S26391-F7139-L5
Keyboard KBPC PX ECO	Fujitsu's KBPC PX ECO keyboard is the perfect contribution to Green IT. The keyboard is made out of 45% renewable raw material and comes with a PVC free USB cable. In addition, the KBPC PX ECO offers first class comfort and ergonomics. It attracts attention with its impressive modern design and useful extras.	S26381-K341-L1** (**: country specific variation)
Keyboard KB900	The KB900 is a very flat keyboard with extra low keys and spill-resistant protection. The elegant design and top-quality construction makes the KB900 the ideal input device for any PC or Notebook user. If you accidently spill some water or coffee onto the keyboard, this special construction helps the liquid to flow away.	S26381-K560-L4** (**: Country specific variation)
Wireless Keyboard Set LX900	The Wireless Keyboard LX900 is a top of the line desktop solution for lifestyle orientated customers, who want only the best for their desk. This superb keyboard set with offers ambitious users more functions, security and better features than a conventional interface device. It even includes 2.4 GHz technology and 128 AES encryption for security.	S26381-K564-L4**(**: Country specific variation)

### More information

### Fujitsu OPTIMIZATION Services

In addition to Fujitsu ESPRIMO P420 E85+, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

#### Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

### **Computing Products**

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

#### More information

Learn more about Fujitsu ESPRIMO P420 E85+, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. www.fujitsu.com/fts/ESPRIMO

#### Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.

Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT. Please find further information at http://www. fujitsu.com/global/about/environment/



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