Fujitsu recommends Windows 10 Pro.



# Data Sheet FUJITSU Desktop ESPRIMO P720 E90+ Desktop PC

Excellent Performance, Expandability and Efficiency

FUJITSU ESPRIMO P720 PCs bring you highly expandable technology for your challenging business applications. The use of identical components within the product family ensures perfect infrastructure compatibility and simplifies rollout. A 92%-efficient power supply will ensure environmental compliance for years to come. Intel® Standard Manageability Technology keeps administration costs to a minimum. Plus, EraseDisk ensures secure system retirement.

#### Microtower

Maximum performance and optimal extendability

■ High-quality, high-value microtower, 7 drive bays, 4 PCI express interfaces

## **Energy efficiency**

Reduce power consumption and costs - without any loss of performance

 Sophisticated technology, switched monitor outlet, low energy-consuming processors and enhanced power management settings

# Green technology

Fujitsu's contribution to environmental protection and sustainability

 Halogen-free printed circuit of mainboard and power supply, sophisticated product concept for the entire lifecycle

## Quiet

Pleasant working environment due to an extremely quiet system

■ Innovative hardware design, optimized cooling concept ensures silent operations

## Serviceability

Easy to extend and optimal user-friendliness without any additional tools

■ Easy access to all replaceable and expandable components









Page 1 / 9 www.fujitsu.com/fts/ESPRIMO

# Components

Processor	Intel® Core™ i7-4790 processor (4 Cores / 8 Threads, 3.60 GHz, up to 4.0 GHz, 8 MB, Intel® HD Graphics 4600) *
	Intel® Core™ i5-4690 processor (4 Cores / 4 Threads, 3.50 GHz, up to 3.9 GHz, 6 MB, Intel® HD Graphics 4600) *
	Intel® Core™ i5-4590 processor (4 Cores / 4 Threads, 3.30 GHz, up to 3.7 GHz, 6 MB, Intel® HD Graphics 4600) *
	Intel® Core™ i3-4170 processor (2 Cores / 4 Threads, 3.70 GHz, 3 MB, Intel® HD Graphics 4400)
	Intel® Pentium® processor G3460 (2 Cores / 2 Threads, 3.50 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G3260 (2 Cores / 2 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics)
	Intel® Celeron® processor G1840 (2 Cores / 2 Threads, 2.80 GHz, 2 MB, Intel® HD Graphics)
	*with Intel® Turbo Boost Technology (clock speed and performance will vary depending on workload and other variables)
perating systems	
Operating system pre-installed	Windows 8.1 Pro Windows 8.1 Windows 7 Professional 64-bit Windows 7 Professional 32-bit
Operating system compatible	Windows 10 Pro (license + recovery media only) openSUSE Linux
Memory modules	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
Hard disk drives (internal)	SSD SATA III Premium, 512 GB, 2.5-inch
	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 128 GB, 2.5-inch
	SSD SATA III, 128 GB, 2.5-inch, SED
	SSHD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	SSHD SATA III, 5,400 rpm, 500 GB, 2.5-inch
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	<u> </u>
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch
	HDD SATA II, 5,400 rpm, 320 GB, 2.5-inch
Hard disk notes	Up to 20 GB of HDD space is reserved for system recovery SED (Self-Encrypting Drive) SSD (Solid State Disk) SSHD (Solid State Hard Disk, Hybrid drive)
Graphics	NVIDIA® NVS™ 315, 1 GB
•	NVIDIA® GeForce® GTX 745 2 GB FH, 2 GB
	NVIDIA® GeForce® GT630 DisplayPort 2GB FH "0-Watt", 2 GB
	NVIDIA® GeForce® 605 DisplayPort 1GB FH, 1 GB
	LFH59/ 2x DVI-I adapter cable
	LFH59/ 2x DP adapter cable
	DVI-I to VGA Adapter
	DP to DVI-D (single link) Adapter Cable
	DP Extension Card AMD® Radeon R9 255 FH, 2 GB
Orives (optional)	BD Triple Writer SATA slim (tray)
mves (optional)	DVD-ROM
	DVD Super Multi
	MultiCard Reader 24in1 USB 2.0 3.5"

Page 2 / 9

Interface add on cards/components (optional)	
	Parallel Interface
	Gigabit Ethernet PCle x1, DS
	eSATA Interface
	Dual serial card PCle x1

# Base unit

Base unit	ESPRIMO P720 E90+
Mainboard	
Mainboard type	D3221
Formfactor	μΑΤΧ
Chipset	Intel® Q85
Processor socket	LGA 1150
Processor quantity maximum	1
Supported capacity RAM (max.)	32 GB
Memory slots	4 DIMM (DDR3)
Memory frequency	1,600 MHz
Memory notes	Dual channel support For dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same.
LAN	10/100/1,000 MBit/s Intel® I217LV
BIOS version	AMI Aptio 4.6
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)
Audio type	On board
Audio codec	Realtek ALC671
Audio features	Internal speaker supports audio playback, High Definition audio, 5.1 surround sound
I/O controller on board	
Serial ATA total	5
thereof SATA III	4
thereof eSATA	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	10
USB 3.1 Gen1 (USB 3.0) total	4
USB front	4x 2.0 or 2x 2.0/ 2x 3.0 (optional)
USB rear	4x 2.0 / 2x 3.0
USB internal	2
VGA	1
DisplayPort	1 (second DisplayPort optional)
USB internal VGA	2 1

Page 3 / 9

Interfaces	
DVI	1 (DVI-D)
Serial (RS-232)	1 (9pin, 16 byte FIFO, 16550 compatible)
Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	1
Parallel	1 (optional) (25pin with EPP and ECP)
eSATA	1 (optional)
Interface Module notes	Anytime USB charge functionality
Input device / components	
	Optical USB wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse
	KBPC PX ECO
	Mouse M440 ECO
Drive bays	
Drive bays total	7
2.5-inch internal bays	
3.5-inch internal bays	2
3.5-inch external bays	2
5.25-inch external bays	2
Slots	
PCI-Express 3.0 x16	1 x (312 mm / 12.29 inch) Full height
PCI-Express 2.0 x4 (mech. x16)	1 x (312 mm / 12.29 inch) Full height
PCI-Express x1	$2 \times (170 \text{ mm / } 6.7 \text{ inch})$ 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 1,782 MB
TFT resolution (VGA)	1,024 x 768 pixel
	1,280 x 1,024 pixel
	1,360 x 768 pixel 1,440 x 900 pixel
	1,600 x 900 pixel
	1,600 x 1,200 pixel
	1,680 x 1,050 pixel
	1,920 x 1,080 pixel
TFT resolution (DVI)	1,280 x 1,024 pixel
	1,360 x 768 pixel 1,440 x 900 pixel
	1,600 x 900 pixel
	1,680 x 1,050 pixel
	1,920 x 1,080 pixel
	1,920 x 1,200 pixel
TFT resolution (DisplayPort)	1,280 x 1,024 pixel 1,360 x 768 pixel
	1,440 x 900 pixel
	1,600 x 900 pixel
	1,680 x 1,050 pixel
	1,920 x 1,080 pixel
	1,920 x 1,200 pixel 2,560 x 1,440 pixel
	2,560 x 1,440 pixel 2,560 x 1,600 pixel
	3,840 x 2,160 pixel (requires Intel® Core™ i3, i5 or i7 processor)

Page 4 / 9 www.fujitsu.com/fts/ESPRIMO

Craphies on hoard	
Graphics on board Graphics features	Support for up to three independent displays
diapilics reacures	DirectX® 11.1
	HDCP support
	Open CL® 1.2
	OpenGL® 4.0
	One DisplayPort connector can be converted to DVI-D or HDMI with an optional external adapter
	For multi monitoring mode, graphics card and integrated graphics run in parallel (Microsoft® Windows® 7 or Windows® 7)
<u> </u>	8)
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) : 88% / 92% / 91%
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	Switched
	- Switched
Power consumption	
Power consumption note	See white paper Energy Consumption
Link to Energy White Paper	http://docs.ts.fujitsu.com/dl.aspx?id=65fe09d5-f0e5-41e9-9fa2-b001fb24906f
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
	According to ISO 7779:2010, ECMA-74
Standard noise operation mode: CPU	3.9B / 26 dB(A) Bystander; 31 dB(A) Operator position
50% load	
Standard noise operation mode: HDD	3.5 B / 21 dB(A) Bystander ; 26 dB(A) Operator position
load	250/24/0/4/0 - 1 - 25/0/4/0
Standard noise operation mode: Idle mode	3.5 B / 21 dB(A) Bystander ; 25 dB(A) Operator position
Standard noise operation mode: ODD	4.5 B / 31 dB(A) Bystander ; 36 dB(A) Operator position
load	אס איז פיזים איז מטנה) טאַגעמוועפו , אט מטנה) טאָפומנטו אָטאַנוטוו
Standard noise operation mode: Office	3.5 B / 21 dB(A) Bystander ; 25 dB(A) Operator position
applications 2.0	5.5 b / 2 / db (r) b / standar , 25 db (r) o perdatar position
Blue angel noise emission according	According to ISO 7779:2010, ECMA-74
certification	for max. possible configuration
Blue angel noise operation mode: HDD	3.6 B = 36 dB (A)
load	
Blue angel noise operation mode: Idle	3.6 B = 36 dB (A)
mode	
Blue angel noise operation mode: ODD	4.5 B = 45 dB (A)
load	
Dimensions / Weight / Environmental	
Dimensions (W x D x H)	175 x 419 x 395 mm
	6.89 x 16.5 x 15.56 inch
Operating position	Vertical
Weight	11 kg
	-

Page 5 / 9

Dimensions / Weight / Environments	
Dimensions / Weight / Environmental Weight (lbs)	24.25 lbs
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35 °C (50 - 95 °F)
Operating relative humidity	5 - 85 % (relative humidity)
, ,	5 05 % (iciative numbers)
Compliance	
Product	ESPRIMO P720
Model	MISW
Germany	TÜV GS Blauer Engel / Blue Angel
Europe	CE
USA/Canada	FCC Class B cCSAus
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) EPEAT® Gold (dedicated regions) ENERGY STAR® 6.0 (dedicated regions)
Compliance link	https://sp.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
Manageability	
Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) Intel® Standard Manageability WoL (Wake on LAN)
Manageability software	DeskView Client DeskView Instant BIOS Management
DeskView components	Inventory Management BIOS Management Driver Management Security Management Alarm Management
Supported standards	DMI (Desktop Management Interface) SMBIOS (System Management BIOS) PXE (Preboot Execution Environment) WMI (Windows Management Instrumentation) WBEM (Web Based Enterprise Management) CIM (Common Information Model)
Manageability link	http://www.fujitsu.com/fts/manageability
Security	
Physical Security	Kensington Lock support Eye for padlock Integrated cabinet lock (optional)

Page 6 / 9 www.fujitsu.com/fts/ESPRIMO

Security	
System and BIOS Security	EraseDisk (optional) Boot sector virus protection Write protect option for the Flash EPROM Embedded security (TPM 1.2) Control of all USB interfaces External USB ports can be disabled separately 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)
Miscellaneous	
	Keyboard on (Special Fujitsu keyboard required) Thermal management Extended lifetime
Serviceability	
	EasyFix EasyChange for HDD EasyChange for optical drives
Packaging information	
Packaging dimension (mm)	516 x 278 x 562 mm
Packaging dimension (inch)	20.31 x 10.94 x 22.13 inch
Max. quantity / pallet	24
Material - Weight (g) Carton	1280 g
Material - Weight (lbs) Carton	2.82 lbs
Material - Weight (g) EPS / PS	190 g
Material - Weight (lbs) EPS / PS	0.42 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	
Warranty period	1 year (for countries in EMEIA)
Warranty type	Bring-In / Onsite Service (for countries within region EMEIA, for all other countries depending on local regulations)
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty
Product Support Services - the perfec	
Recommended Service	9x5, Onsite 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 B23T-7 LED



The FUJITSU B23T-7 LED Display with excellent ergonomics makes intensive Order Code: office work extremely comfortable. S26361-K1496-V140

This highly reliable display offers superb usability and power-saving features to help reduce your labor as well as energy costs. With wide viewing angle technology, flexible connectivity, and easy manageability, the FUJITSU B23T-7 LED Display can help you improve productivity.

Page 7 / 9 www.fujitsu.com/fts/ESPRIMO

#### Display B24-8 TE Pro



The FUJITSU Display B24-8 TE Pro is made for intensive office work. With visual and mechanical ergonomics this marble-grey display enables fatigue-free working for hours in front of the screen. The large 60.5 cm (23.8-inch) screen allows you to keep always track of all open applications. This high-quality display works unfailingly around the clock. Easy connectivity, manageability and usability help you increase your productivity.

Order Code: S26361-K1577-V140

#### 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

# UC&C USB Headset Stereo H650e



The UC&C USB Headset Stereo H650e is the ultimate in style and functionality. Long, uncomfortable work calls are a thing of the past thanks to the cushioned ear pads and crystal clear sound. Adjustable headband and microphone provides the perfect fit for everyone. Optimized for Microsoft® Lync™ the headset displays a red 'in-call' LED to let your co-workers know when you're available, thus helping to boost office productivity.

Order Code: S26391-F7139-L10

# 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 country specific variation) 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\*\* (\*\*:

# More information

#### **Fujitsu OPTIMIZATION Services**

In addition to FUJITSU Desktop ESPRIMO P720 E90+, 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/products/computing/

#### Software

www.fujitsu.com/software/

## More information

Learn more about FUJITSU Desktop ESPRIMO P720 E90+, 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/qlobal/about/environment



# Copyrights

All rights reserved, including intellectual property rights. Changes to technical data reserved. Delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.

For further information see www.fujitsu.com/

© 2017 Fujitsu Technology Solutions GmbH

## Disclaimer

Technical data is subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.

#### Contact

FUJITSU Technology Solutions GmbH Website: www.fujitsu.com/fts 2017-05-01 CE-EN All rights reserved, including intellectual property rights. Changes to technical data reserved. Delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded.

Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.

For further information see www.fujitsu.com/terms

© 2017 Fujitsu Technology Solutions GmbH