Fujitsu recommends Windows.

# Data Sheet FUJITSU ESPRIMO E920 E85+ Desktop PC

# Combines High Efficiency with Manageability

FUJITSU ESPRIMO E920 PCs give you the absolute highest PC manageability, performance and expandability. With the 86% efficient power supply, you'll also save on energy costs. The use of identical components within the family ensures perfect infrastructure compatibility. At retirement, Fujitsu's distinctive EraseDisk function wipes your data securely.

### Small form factor PC

- Flexible desktop solution whatever the space required
- Less than 13 liters volume, can be positioned vertically and horizontally

## Green technology

- Fujitsu's contribution to environmental protection and sustainability
- Halogen-free printed circuit of mainboard, 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

### System management

- Simple system administration for complex IT infrastructures
- Intel® vPro<sup>™</sup> technology (depending on processor) and DeskView manageability suite

### **Energy efficiency**

- Low power consumption and low costs, without any loss in performance
- Low energy-consuming processors, 85% energy efficient power supply and enhanced power management settings













# 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™ i3-4160 processor (2 Cores / 4 Threads, 3.60 GHz, 3 MB, Intel® HD Graphics 4400)
	Intel® Core™ i3-4150 processor (2 Cores / 4 Threads, 3.50 GHz, 3 MB, Intel® HD Graphics 4400)
	Intel® Pentium® processor G3450 (2 Cores / 2 Threads, 3.40 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G3440 (2 Cores / 2 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G3250 (2 Cores / 2 Threads, 3.20 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G3240 (2 Cores / 2 Threads, 3.10 GHz, 3 MB, Intel® HD Graphics)
	Intel® Celeron® processor G1840 (2 Cores / 2 Threads, 2.80 GHz, 2 MB, Intel® HD Graphics)
	Intel® vPro™ Logo with Intel® Core i5 and Core i7 processors
	*with Intel® Turbo Boost Technology (clock speed and performance will vary depending on workload and other
	variables) Intel® Smart Response Technology supported by Intel® Core™ i3, i5 and i7 processors
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, 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 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)
Hard disk drives (internal)	SSHD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	SSHD SATA III, 5,400 rpm, 500 GB, 2.5-inch
	SSD SATA III Premium, 512 GB, 2.5-inch
	SSD SATA III Premium, 256 GB, 2.5-inch
	SSD SATA III Premium, 128 GB, 2.5-inch
	SSD SATA III, 256 GB, 2.5-inch, SED
	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, 7,200 rpm, 2,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 250 GB, 3.5-inch

Graphics	NVIDIA® NVS 300 LP, 512 MB
	NVIDIA® NVS 300, 1 GB
	NVIDIA® GeForce® GT630 DisplayPort 2GB LP "0-Watt", 2 GB
	NVIDIA® GeForce® 605 DisplayPort 1GB LP, 1 GB
	LFH59/ 2x DVI-I adapter cable
	LFH59/ 2x DP adapter cable
	DVI to VGA Adapter
	DP to DVI-D (single link) Adapter Cable
	DP Extension Card
	2nd NVIDIA® Quadro® NVS 300 LP, 512 MB
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)	
	WLAN 802.11 a/g/n (2x2), (dedicated regions only, not for Indonesia)
	Parallel Interface
	Gigabit Ethernet PCIe x1, DS
	eSATA Interface
	Dual serial card PCIe x1

# Base unit

Base unit	ESPRIMO E920 E85+
Mainboard	
Mainboard type	D3222
Formfactor	μΑΤΧ
Chipset	Intel® Q87
Processor socket	LGA 1150
Processor quantity maximum	1
Memory slots	4 DIMM (DDR3)
Supported capacity RAM (max.)	32 GB
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® I217LM
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	6
thereof SATA III	6
thereof eSATA	2

I/O controller on board	
Controller functions	Serial ATA II (3 Gbit)
	Serial ATA III (6 Gbit)
	NCQ
	AHCI
	RAID 0/1/5/10
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 3.0 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)
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	3
3.5-inch internal bays	1
3.5-inch external bays	1
5.25-inch external bays	1
Drive bay notes	3,5" bay can be used for 2,5" drives; optional external bay as internal 3,5";
Slots	
PCI-Express 3.0 x16	1 x (200 mm / 7.87 inch) Low profile
PCI-Express 2.0 x4 (mech. x16)	1 x (200 mm / 7.87 inch) Low profile
PCI-Express x1	2 x (174 mm / 6.85 inch) Low profile
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
	1,920 x 1,200 pixel

Graphics on board	
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 1,600 pixel
	3,840 x 2,160 pixel (requires Intel® Core™ i3, i5 or i7 processor)
Graphics features	Support for up to three independent displays DirectX® 11.1
	HDCP support
	Open CL <sup>®</sup> 1.2
	OpenGL <sup>®</sup> 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 <sup>®</sup> Windows <sup>®</sup> 7 or Windows
<u> </u>	
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
	0-Watt mode with hard-off switch
Link to Energy White Paper	http://docs.ts.fujitsu.com/dl.aspx?id=fbdb4dd1-b69c-4641-989e-50cabb71bc10
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 notes / description	A-weighted sound power level Lwad (in B) / Workplace related A-weighted sound pressure level LpAm (in dB(A))
Standard noise operation mode: CPU	3.5 B / 20 dB(A) Bystander; 24dB(A) Operator position
50% load	
Standard noise operation mode: HDD	3.4 B / 20 dB(A) Bystander; 24 dB(A) Operator position

Noise emission	
Standard noise operation mode: Idle mode	3.2 B / 19 dB(A) Bystander; 22 dB(A) Operator position
Standard noise operation mode: ODD load	4.4 B / 30 dB(A) Bystander; 36 dB(A) Operator position
Standard noise operation mode: Office applications 2.0	3.2 B / 19 dB(A) Bystander; 22 dB(A) Operator position
Blue angel noise emission according	According to ISO 7779:2010, ECMA-74
certification	for max. possible configuration
Blue angel noise notes / description	A-weighted sound power level Lwad (in B); 1B = 10dB
Blue angel noise operation mode: HDD load	3.8 B = 38 dB (A)
Blue angel noise operation mode: Idle mode	3.4 B = 34 dB (A)
Blue angel noise operation mode: ODD load	4.5 B = 45 dB (A)
Dimensions / Weight / Environmental	
Dimensions (W x D x H)	340 x 382 x 98 mm
	13.39 x 15.04 x 3.86 inch
Operating position	horizontal / vertical (optional, feet needed)
Weight	10 kg
Weight (lbs)	22.05 lbs
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35 ℃ (50 - 95 °F)
Operating relative humidity	5 - 85 % (relative humidity)
Compliance	
Product	ESPRIMO E920
Model	DT8
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	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

Managaahility	
Manageability Manageability technology	DeskUpdate Driver management
manageadinity technology	PXE 2.1 Boot code
	Wake up from S5 (off mode)
	Intrusion switch (optional)
	iAMT 9.0 (depending on CPU)
Managoahility coftware	WoL (Wake on LAN) DeskView Client
Manageability software	DeskView Instant BIOS Management
	DeskView Integration for Symantec Management Platform
DeskView components	Inventory Management
	BIOS Management
	Driver Management Security Management
	Alarm Management
Supported standards	DMI
	PXE
	WMI
Manageability link	http://www.fujitsu.com/fts/manageability
Security	
Physical Security	Kensington Lock support Eye for padlock
	Integrated cabinet lock (optional)
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	
miscentricous	Keyboard on (Special Fujitsu keyboard required)
	Thermal management
Serviceability	
	EasyFix
	EasyChange for 3.5" HDD
	EasyChange for optical drives
Packaging information	
Packaging dimension (mm)	467 x 265 x 540 mm
Packaging dimension (inch)	18.39 x 10.43 x 21.26 inch
Max. quantity / pallet	28
Material - Weight (g) Carton	1140 g
Material - Weight (lbs) Carton	2.51 lbs
Material - Weight (g) EPS / PS	180 g
Material - Weight (lbs) EPS / PS	0.4 lbs
Material - Weight (g) PE Material - Weight (lbs) PE	60 g 0.13 lbs
Packaging notes	printed user documentation is bleached in chlorine free process
Warranty	
Standard Warranty	3 years (depending on country)
Service level	Bring-In / Onsite Service (for countries within region FTS CEMEA&I, for all other countries depending on local
	regulations, minimum: 2 years material warranty)

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 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.
Display P24W-7 LED	If you're a pixel, color and performance-hungry professional usingOrder Code:demanding applications, the FUJITSU P24W-7 LED Display is the perfectS26361-K1498-V140choice. The display provides outstanding picture performance thanks to acutting-edge graphic panel. It also boasts unique and innovative featuressuch as our patent-applied Presence Sensor technology and the AlwaysAvailable Powered USB Hub.
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
UC&C USB Headset Stereo H650e	The UC&C USB Headset Stereo H650e is the ultimate in style and 0rder Code: functionality. Long, uncomfortable work calls are a thing of the past 526391-F7139-L10 thanks to the cushioned ear pads and crystal clear sound. Adjustable headband and microphone provides the perfect fit for everyone. Optimized for Microsoft <sup>®</sup> Lync <sup>™</sup> the headset displays a red 'in-call' LED to let your co-workers know when you're available, thus helping to boost office productivity.
Busylight UC Lync	Boost communication and productivity in the office with the Busylight. The genius of this device is that it both advertises your present working state and promotes the use of Lync, making your office more efficient. Perfect for the work environment in open-plan offices, the Busylight makes users feel comfortable with Lync's features and eases the transition from traditional office internal telephone systems.
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.

Keyboard KBPC PX ECO



Fujitsu's KBPC PX ECO keyboard is the perfect contribution to Green IT. The S26381-K341-L1\*\* (\*\*: 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.

# More information

### Fujitsu OPTIMIZATION Services

In addition to FUJITSU ESPRIMO E920 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 E920 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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