

Windows®. Life without Walls™.
Fujitsu recommends Windows 7.

Data Sheet

Fujitsu ESPRIMO P7936 E85+ Desktop PC

The expandable business workhorse

ESPRIMO P7936 E85+

The ESPRIMO P7936 E85+ equipped with state-of-the-art Intel® chip and processor technology is the ideal partner for all your demanding business applications. Produced with specially selected material and equipped with comprehensive powersave options, such as up to 87% efficient power supply and energy-saving management, the ESPRIMO microtower PC today already meets the environment requirements of tomorrow and cuts your energy costs. With extended system management functions, intelligent hardware design, extensive tests and a lifecycle of up to 18 months, the high performance levels of this PC meet every requirement.

Microtower

Maximum performance and optimal extendability

- Top-quality, high-value microtower, 6 drive bays, 4 PCI/PCI express interfaces

Environmentally compatible product

Your contribution to environmental protection for the continued existence of our planet

- Halogen-free mainboard, sophisticated product concept for the entire lifecycle

Silent operation

Pleasant working environment due to an extremely quiet system

- Innovative hardware design, optimized fan concept

System management

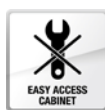
Easy system administration for complex IT infrastructure

- Intel® vPro™ technology

Energy saving

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

- Low energy-consuming processors, up to 87% efficient power supply and enhanced power management settings



Components

Processor	<p>Intel® Core™2 Quad processor Q9650 (4 Cores / 4 Threads, 3.0 GHz, 12 MB, 1333 MHz)</p> <p>Intel® Core™2 Quad processor Q9550 (4 Cores / 4 Threads, 2.83 GHz, 12 MB, 1333 MHz)</p> <p>Intel® Core™2 Quad processor Q9505 (4 Cores / 4 Threads, 2.83 GHz, 6 MB, 1333 MHz)</p> <p>Intel® Core™2 Quad processor Q8300 (4 Cores / 4 Threads, 2.5 GHz, 4 MB, 1333 MHz)</p> <p>Intel® Core™2 Duo processor E8600 (2 Cores / 2 Threads, 3.33 GHz, 6 MB, 1333 MHz)</p> <p>Intel® Core™2 Duo processor E8500 (2 Cores / 2 Threads, 3.16 GHz, 6 MB, 1333 MHz)</p> <p>Intel® Core™2 Duo processor E8400 (2 Cores / 2 Threads, 3.0 GHz, 6 MB, 1333 MHz)</p> <p>Intel® Core™2 Duo processor E7600 (2 Cores / 2 Threads, 3.06 GHz, 3 MB, 1066 MHz)</p> <p>Intel® Core™2 Duo processor E7500 (2 Cores / 2 Threads, 2.93 GHz, 3 MB, 1066 MHz)</p> <p>Intel® Pentium® processor E6600 (2 Cores / 2 Threads, 3.06 GHz, 2 MB, 1066 MHz)</p> <p>Intel® Pentium® processor E5800 (2 Cores / 2 Threads, 3.2 GHz, 2 MB, 800 MHz)</p> <p>Intel® Pentium® processor E5700 (2 Cores / 2 Threads, 3.0 GHz, 2 MB, 800 MHz)</p> <p>Intel® Pentium® processor E5400 (2 Cores / 2 Threads, 2.7 GHz, 2 MB, 800 MHz)</p> <p>Intel® Celeron® processor E3400 (2 Cores / 2 Threads, 2.6 GHz, 1 MB, 800 MHz)</p> <p>Intel® Celeron® processor E3200 (2 Cores / 2 Threads, 2.4 GHz, 1 MB, 800 MHz)</p> <p>Intel® Celeron® processor 450 (1 Core / 1 Threads, 2.2 GHz, 512 KB, 800 MHz)</p>
Operating system	<p>Genuine Windows® 7 Home Basic (EM) 32-bit</p> <p>Genuine Windows® 7 Home Premium 64-bit</p> <p>Genuine Windows® 7 Professional 32-bit</p> <p>Genuine Windows® 7 Professional 64-bit</p>
Operating system compatible	<p>openSUSE Linux</p> <p>Genuine Windows Vista®</p> <p>Genuine Windows® XP</p>
Operating system notes	<p>Microsoft Office 2010 preloaded. Purchase a Product Key to activate a full Microsoft Office 2010 suite.</p> <p>Limited Windows XP support. Microsoft discontinued Windows XP certification on system level.</p>
Memory modules	<p>1 GB (1 module(s) 1 GB) DDR3, unbuffered, non-ECC, 1066 MHz, PC3-8500, DIMM</p> <p>2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1066 MHz, PC3-8500, DIMM</p> <p>4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1066 MHz, PC3-8500, DIMM</p>
Hard disk drives (internal)	<p>SSD SATA, 128 GB, 2.5-inch</p> <p>SATA II, 7200 rpm, 1000 GB, 3.5-inch, S.M.A.R.T.</p> <p>SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T. business critical</p> <p>SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T.</p> <p>SATA II, 7200 rpm, 320 GB, 3.5-inch, S.M.A.R.T.</p> <p>SATA II, 7200 rpm, 250 GB, 3.5-inch, S.M.A.R.T.</p> <p>SATA II, 7200 rpm, 160 GB, 2.5-inch, S.M.A.R.T.</p> <p>Supporting NCQ and 3 GBit</p>
Graphics add on cards (optional)	<p>NVIDIA® Quadro® NVS 290, 256 MB</p> <p>NVIDIA® GeForce® GT 420</p> <p>NVIDIA® GeForce® 9500GS, 512 MB</p> <p>NVIDIA® GeForce® 9300GE display port low profile, 512 MB</p> <p>NVIDIA® GeForce® 9300GE, 512 MB</p> <p>NVIDIA® GeForce® 405 display port full height</p> <p>DVI Extension Adapter</p> <p>DVI-D + DisplayPort Extension Adapter</p> <p>DP to DVI-D (single link) Adapter Cable</p> <p>ATI Radeon® HD 5450, 512 MB</p>

Drives (optional)	1.44 MB Floppy
	Blu-ray Disc™ Triple Writer
	DVD-ROM
	DVD Super Multi
	MultiCard Reader 20in1, USB 2.0, 3.5-Inch
	MultiCard Reader 20in1 USB 3.0 front con., 3.5-Inch

Interface add on cards/components (optional)

	WLAN III, 802.11g/Draft-n (Windows only)
	USB 3.0 PCIe x1
	Parallel Interface
	Modem adapter kit (EU)
	Modem 56k incl. RJ11 modem cable
	Gigabit Ethernet PCIe x1
	FireWire PCI-Card IEEE1394
	eSATA Interface
	Dual serial card PCI

Base unit	ESPRIMO P7936 E85+
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Mainboard

Mainboard type	D3012
Formfactor	µBTX
Chipset	Intel® Q45
Processor socket	LGA 775
Processor quantity maximum	1
System bus (FSB / HT / QPI)	up to 1333 MHz
Memory slots	4 DIMM (DDR3)
Supported capacity RAM (max.)	16 GB
Memory frequency	1066 MHz
Memory notes	Dual channel support. For dual channel performance, identical memory modules in each channel are necessary (minimum 2 modules).
LAN	10/100/1000 MBit/s Intel® 82567 LM
BIOS version	Phoenix 6.0
BIOS features	BIOS Flash EPROM update by software Recovery BIOS
Audio codec	Realtek ALC663
Audio features	Internal speaker supports audio playback, High Definition audio, 5.1 surround sound

I/O controller on board

Serial ATA total	4
thereof eSATA	2 (optional)
Controller functions	Serial ATA II NCQ and 3 GBit AHCI Raid 1/0

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	12

Interfaces

USB front	2
USB rear	6
USB internal	4, thereof 2 optional rear
VGA	1
DisplayPort	1 (optional)
DVI	1 (optional)
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)
Interface Module notes	Anytime USB charge functionality

Input device / components

	Optical USB tilt wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse

Drive bays

Drive bays total	6
3.5-inch internal bays	2
3.5-inch external bays	2
5.25-inch external bays	2

Slots

PCI-Express 2.0 x16	1 x (230 mm) FlexySlot
PCI-Express x4 (mech. x8)	1 x (230 mm) full height
PCI (32-bit / 33 MHz)	2 x (170 / 315 mm) full height

Graphics on board

Graphics brand name	Intel® GMA 4500
Shared video memory	up to 1759 MB
Refresh rate 1024 x 768 (recommended / max.)	85 Hz / -
Refresh rate 1280 x 1024 (recommended / max.)	85 Hz / -
Refresh rate 1600 x 1200 (recommended / max.)	85 Hz / -
TFT resolution (VGA)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DVI)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DisplayPort)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel 2560 x 1440 pixel 2560 x 1600 pixel

Graphics on board

Graphics features	DirectX 10 HDCP support OpenGL® 2.0
Graphics notes	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) : 85% / 87% / 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	300 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=e3b5f294-967b-40cf-b3cd-b3e12d6c3a03

Heat dissipation

Heat dissipation notes	See white paper Energy Consumption
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Noise for standard configuration (HDD, ODD, FDD)

Noise emission	According to ISO9296
Related Processors for noise	Intel® Core™2 Duo E8600
Noise Operation mode 1: ODD load (Blue angel requirement)	4.3 B / 28 dB(A)
Noise Operation mode 2: HDD load (Blue angel requirement)	3.5 B / 18 dB(A)
Noise Operation mode 3: CPU 90% load (Blue angel requirement)	3.4 B / 17 dB(A)
Noise Operation mode 4: High load	3.5 B / 18 dB(A)
Noise Operation mode 5: Office applications	3.5 B / 18 dB(A)
Idle mode (Blue Angel requirement)	3.4 B / 17 dB(A)
Noise notes / description	A weighted sound power level L _{wad} (in B) / workplace related A-weighted sound pressure level L _{pAm} (in dB(A)), Bystander position

Dimensions / Weight / Environmental

Dimensions (W x D x H)	203 x 390 x 392 mm
Operating position	Vertical
Weight	approx. 12 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35°C

Compliance

Product	ESPRIMO P7936
Model	M13W-D3012
Germany	GS optional
Europe	CE Nordic Swan

Compliance

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)
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

Additional Software

Additional software (preinstalled)	Nero Essentials S (burning software)
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink Power2Go BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive / Blu-ray playback is not supported under Windows XP if the system runs on Intel onboard graphics) Nero 9 Essentials XL

Miscellaneous

	Thermal management Keyboard on (Special Fujitsu keyboard required) Extended lifetime
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Compatibility (references)

	DMI 2.0 PC 2001 WMI 1.5 USB 2.0 SMBIOS
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Manageability

Manageability features	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) iAMT 5.0
Manageability type	DeskView 10.x client management including:
DeskView features	On/Offline remote client management Detailed system inventory management and reports BIOS Management Remote power management System notifications Advanced alerts (ASF implementation) Security Remote Control DeskView Helpdesk Integration WoL (Wake on LAN)

Security

Physical security	Kensington Lock support Eye for padlock Optional: Integrated cabinet lock
System security	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 Boot protection for floppy disk / CD drive and write protection for floppy disk drive Control of external interfaces

Security	
User security	User and supervisor BIOS password SystemLock 2 BIOS SmartCard Security Hard disk password Optional: Access protection via external SmartCard reader Optional: Access protection via internal SmartCard reader
Serviceability	
	FlexySlot EasyFix EasyChange for HDD EasyChange for optical drives
Packaging information	
Packaging dimension	500x290x540 mm
Max. quantity / pallet	24
Material - Weight (g) Carton	1270 g
Material - Weight (g) EPS / PS	210 g
Material - Weight (g) PE	appr. 60 g
Packaging notes	printed user documentation is bleached in chlorine free process
Warranty	
Standard Warranty	3 years
Service level	Bring-In / On-Site Service (depending on country)
Maintenance and Support Services - the perfect extension	
Recommended Service	5x9, Response Time: Next Business Day
Spare Parts availability	5 years
Service Weblink	http://ts.fujitsu.com/Supportservice

More information

Fujitsu platform solutions

In addition to Fujitsu ESPRIMO P7936 E85+, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products

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

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu ESPRIMO P7936 E85+, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
<http://ts.fujitsu.com/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 resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>



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