Data Sheet
FUJITSU Desktop ESPRIMO P956/E90+

Excellent Performance, Expandability and Efficiency

The FUJITSU ESPRIMO P956/E90+ Desktop provides highest manageability, performance and expandability. Its low noise design supports a pleasant working environment, and the 90% efficient power supply will reduce your energy bills. With its innovative Low Power Active Mode feature you are ready for instant communication in the modern office. The use of a common software load within the product series ensures perfect infrastructure compatibility. On retirement, the Fujitsu distinctive EraseDisk function securely wipes your data.



Quiet
Pleasant working environment due to an extremely quiet system
- Innovative hardware design, optimized cooling concept ensures silent operations

Always Available Office PC - stay connected and save power
Be ready for instant communication and a significantly reduced energy bill
- Innovative Low Power Active Mode and highly-efficient integrated power-supply

Energy efficiency and high performance
Low power consumption combined with high levels of performance
- 6th generation Intel® Core™ processor family, a switched monitor outlet and a power supply with 90% efficiency

System management
Simple system administration for complex IT infrastructures
- Intel® vPro™ technology (depending on processor) and DeskView manageability suite

Green technology
Another example of the Fujitsu commitment to environmental protection and sustainability
- Halogen-free printed circuit board of mainboard, sophisticated product concept for the entire lifecycle

Components

Processor	Intel® Core™ i7-6700 processor (4 Cores / 8 Threads, 3.40 GHz, up to 4.0 GHz, 8 MB, Intel® HD Graphics 530) *
	Intel® Core™ i5-6600 processor (4 Cores / 4 Threads, 3.30 GHz, up to 3.9 GHz, 6 MB, Intel® HD Graphics 530) *
	Intel® Core™ i5-6500 processor (4 Cores / 4 Threads, 3.20 GHz, up to 3.6 GHz, 6 MB, Intel® HD Graphics 530) *
	Intel® Core™ i3-6100 processor (2 Cores / 4 Threads, 3.70 GHz, 3 MB, Intel® HD Graphics 530)
	Intel® Pentium® processor G4500 (2 Cores / 2 Threads, 3.50 GHz, 3 MB, Intel® HD Graphics 530)
	Intel® Pentium® processor G4400 (2 Cores / 2 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics 510)
	Intel® Celeron® processor G3900 (2 Cores / 2 Threads, 2.80 GHz, 2 MB, Intel® HD Graphics 510)
	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 10 Pro Windows 10 Home 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
Microsoft OS support information	This system receives full support from Microsoft with Windows 10/Windows 10 Pro only. For any other Microsoft OS installed, this device has limited support from Microsoft. For more information, please see Microsoft's Support Lifecycle FAQ.
Memory modules	4 GB (1 module(s) 4 GB) DDR4, unbuffered, non-ECC, 2,133 MHz, UDIMM
	8 GB (1 module(s) 8 GB) DDR4, unbuffered, non-ECC, 2,133 MHz, UDIMM
	16 GB (1 module(s) 16 GB) DDR4, unbuffered, non-ECC, 2,133 MHz, UDIMM
Hard disk drives (internal)	SSD PCIe 512 GB M.2 Highend
	SSD PCIe 256 GB M.2 Highend
	SSD PCIe 128 GB M.2 Highend
	SSD SATA III 256GB M.2 Mainstream
	SSD SATA III 128 GB M.2 Mainstream
	SSD SATA III, 512 GB Mainstream, 2.5-inch
	SSD SATA III, 256 GB Mainstream, 2.5-inch
	SSD SATA III, 128 GB Mainstream, 2.5-inch
	SSD SATA III, 512 GB Mainstream, 2.5-inch, SED
	SSD SATA III, 256 GB Mainstream, 2.5-inch, SED
	SSD SATA III, 128 GB Mainstream, 2.5-inch, SED
	SSD SATA III, 128 GB Entry, 2.5-inch
	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, 1,000 GB, 3.5-inch, business critical
	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
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch
	HDD SATA II, 5,400 rpm, 500 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	VGA Extension Card
	NVIDIA® NVS™ 315, 1 GB
	NVIDIA® GeForce® GTX 745 2 GB FH, 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
	AMD® Radeon R9 255 FH, 2 GB
Drives (optional)	BD Triple Writer SATA ultra slim (tray)
	DVD-ROM
	DVD Super Multi
	DVD Super Multi ultra slim (tray)
	MultiCard Reader 24in1 USB 2.0 3.5"
Interface add on cards/components (optional)	
	WLAN 802.11ac (2x2) PCIe x1 FH and BT 4.1 (dedicated regions only, up to BT 4.2 depending on OS version)
	WLAN 802.11ac (2x2) PCIe x1 FH (dedicated regions only)
	Parallel Interface
	Gigabit Ethernet PCIe x1, DS
	eSATA Interface
	Dual serial card PCIe x1

Base unit

Base unit	ESPRIMO P956/E90+
Mainboard	
Mainboard type	D3402
Formfactor	µATX
Chipset	Intel® Q170
Processor socket	LGA 1151
Processor quantity maximum	1
Supported capacity RAM (max.)	64 GB
Memory slots	4 DIMM (DDR4)
Memory frequency	2,133 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® I219LM
BIOS version	AMI Aptio V
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI) CSM (Compatibility Support Module)
Audio type	On board
Audio codec	Realtek ALC671
Audio features	Internal speaker supports audio playback (optional), High Definition audio, 5.1 surround sound
I/O controller on board	
Serial ATA total	5
thereof SATA III	5
thereof eSATA	2

I/O controller on board	
Controller functions	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	6
USB 3.0 total	6
USB front	2x USB 2.0; 2x USB 3.0
USB rear	2x USB 2.0; 4x USB 3.0
USB internal	2x USB 2.0
VGA	optional: via adapter card
DisplayPort	2
DVI	1 (DVI-D)
Serial (RS-232)	1 ; optional: 2nd serial port (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	
Input devices (optional)	Keyboard Mouse KBPC PX ECO Mouse M440 ECO
Drive bays	
Drive bays total	7
3.5-inch internal bays	2
3.5-inch external bays	2
5.25-inch external bays	2
M.2-2280	1 x on mainboard (for PCIe or SATA SSD modules)
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 x (170 mm / 6.7 inch) Full height
Graphics on board	
Graphics brand name	Intel® HD Graphics 510, Intel® HD Graphics 530
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

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 4,096 x 2,304 pixel
Graphics features	Support for up to three independent displays DirectX® 12 HDCP support OpenCL™ 2.0 (requires Intel® Core™ i3, i5 or i7 processors) OpenGL® 4.4 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 DisplayPort interface supports Ver. 1.2 incl. Multi-Stream DVI-D interface supports audio output for HDMI monitors
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; 10% / 20% / 50% / 100% load) : 84% / 90% / 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
Power consumption	
Power consumption note	See white paper Energy Consumption
Link to Energy White Paper	http://docs.ts.fujitsu.com/dl.aspx?id=bda9e2eb-1afd-4aab-85eb-32ff30feef77
Heat dissipation	
Heat dissipation notes	See white paper Energy Consumption
Noise emission	
Related Processors for noise	Intel® Core™ i7 6700
Standard noise emission	2x4 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 50% load	3.4 B / 21 dB(A) Bystander; 26 dB(A) Operator position
Standard noise operation mode: HDD load	3.3 B / 19 dB(A) Bystander; 21 dB(A) Operator position
Standard noise operation mode: Idle mode	3.3 B / 19 dB(A) Bystander; 21 dB(A) Operator position

Noise emission	
Standard noise operation mode: ODD load	4.4 B / 31 dB(A) Bystander; 34 dB(A) Operator position
Standard noise operation mode: Office applications 2.0	3.3 B / 19 dB(A) Bystander; 21 dB(A) Operator position
Blue angel noise emission according certification	According to ISO 7779:2010, ECMA-74 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	3.4 B = 34 dB (A)
Blue angel noise operation mode: Idle mode	3.4 B = 34 dB (A)
Blue angel noise operation mode: ODD load	4.4 B = 44 dB (A)
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
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)
Product	ESPRIMO P956/E90+
Model	MI5W
Germany	TÜV GS
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) ENERGY STAR® 6.1 (dedicated regions) EPEAT® Gold (dedicated regions)
China	CCC (planned) China RoHS
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates
Additional Software	
Additional software (preinstalled)	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) WoL (Wake on LAN) iAMT 11.0 (depending on processor)

Manageability	
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)
Security	
Physical Security	Kensington Lock support Eye for padlock Integrated cabinet lock (optional)
System and BIOS Security	Embedded security (TPM 2.0) EraseDisk (optional) Boot sector virus protection Write protect option for the Flash EPROM 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) Workplace Protect (secure authentication solution)
Workplace Embedded Tools	Auto BIOS Update via Fujitsu Server Auto BIOS Update via customer server (optional) Easy PC Protection (optional) Easy Restore (optional)
Miscellaneous	
	Keyboard on (Special Fujitsu keyboard required) Thermal management Low Power Active Mode 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	3 years (depending on country)
Warranty type	Bring-In / Onsite Service (for countries within region EMEIA, for all other countries depending on local regulations)

Warranty	
Warranty Terms & Conditions	http://support.ts.fujitsu.com/warranty
Product Support Services - the perfect extension	
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 office work extremely comfortable. 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.	Order Code: S26361-K1496-V140
Display P24W-7 LED	If you're a pixel, color and performance-hungry professional using demanding applications, the FUJITSU P24W-7 LED Display is the perfect choice. The display provides outstanding picture performance thanks to a cutting-edge graphic panel. It also boasts unique and innovative features such as our patent-applied Presence Sensor technology and the Always Available Powered USB Hub.	Order Code: S26361-K1498-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
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)

More information

Fujitsu OPTIMIZATION Services

In addition to FUJITSU Desktop ESPRIMO P956/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 P956/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/global/about/environment



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