Fujitsu recommends Windows 10 Pro.



# Data Sheet FUJITSU Desktop ESPRIMO P957/E90+

### Excellent Performance, Expandability and Efficiency

The FUJITSU ESPRIMO P957/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

■ 7th 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









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# Components

Processor	Intel® Core™ i7-7700 processor (4 Cores / 8 Threads, 3.60 GHz, up to 4.2 GHz, 8 MB, Intel® HD Graphics 630) *
	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™ i5-7600 processor (4 Cores / 4 Threads, 3.50 GHz, up to 4.1 GHz, 6 MB, Intel® HD Graphics 630) *
	Intel® Core™ i5-7500 processor (4 Cores / 4 Threads, 3.40 GHz, up to 3.8 GHz, 6 MB, Intel® HD Graphics 630) *
	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™ i3-7100 processor (2 Cores / 4 Threads, 3.90 GHz, 3 MB, Intel® HD Graphics 630)
	Intel® Core™ i3-6100 processor (2 Cores / 4 Threads, 3.70 GHz, 3 MB, Intel® HD Graphics 530) **
	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) **6th generation Intel® processor
Operating systems	
Operating system pre-installed	Windows 10 Pro. Fujitsu recommends Windows 10 Pro. Windows 10 Home
0 11 1 111	Windows 7 Professional (available through downgrade rights from Windows 10 Pro)
Operating system compatible	Windows 7 Professional 32-bit (available through downgrade rights from Windows 10 Pro) (with 6th generation Intel® processors)
Operating system notes	Systems with 7th generation Intel® processor receive support from Microsoft with Windows 10 Home / Windows 10 Pro only. For more information, please see Microsoft Support Lifecycle. Downgrade to Microsoft Windows 7 Professional only available with 6th generation Intel® processor
Memory modules	4 GB (1 module(s) 4 GB) DDR4, unbuffered, non-ECC, 2,400 MHz, UDIMM
•	8 GB (1 module(s) 8 GB) DDR4, unbuffered, non-ECC, 2,133 MHz, UDIMM
	8 GB (1 module(s) 8 GB) DDR4, unbuffered, non-ECC, 2,400 MHz, UDIMM
	16 GB (1 module(s) 16 GB) DDR4, unbuffered, non-ECC, 2,400 MHz, UDIMM
Hard disk drives (internal)	PCIe-SSD, 1024 GB M.2 NVMe Highend module
	PCIe-SSD, 512 GB M.2 NVMe Highend module
	PCIe-SSD, 256 GB M.2 NVMe Highend module
	PCIe-SSD, 1024 GB M.2 NVMe module
	PCIe-SSD, 512 GB M.2 NVMe module
	PCIe-SSD, 256 GB M.2 NVMe module
	PCIe-SSD, 128 GB M.2 NVMe module
	SSD SATA, 512 GB, M.2 module
	SSD SATA, 256 GB, M.2 module
	SSD SATA, 128 GB, M.2 module
	SSD SATA III, 512 GB, 2.5-inch
	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 512 GB, 2.5-inch, SED
	SSD SATA III, 256 GB, 2.5-inch, SED
	SSHD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 1,000 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

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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
	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 RX 460, 4 GB
	AMD® Radeon R7 340, 2 GB
Orives (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"
nterface 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 PCle x1, DS
	eSATA Interface
	Dual serial card PCIe x1

## Base unit

Base unit	ESPRIMO P957/E90+
Mainboard	
Mainboard type	D3502
Formfactor	proprietary
Chipset	Intel® Q270
Processor socket	LGA 1151
Processor quantity maximum	1
Supported capacity RAM (max.)	64 GB
Memory slots	4 DIMM (DDR4)-duplicate
Memory frequency	2,400 MHz
Memory notes	Dual channel support  For dual channel performance, 2 memory modules have to be ordered. Capacity per channel has to be the same.  DDR4 2,400 MHz will be clocked with 2,133 MHz in combination with 6th generation Intel® processor
LAN	10/100/1,000 MBit/s Intel® I219LM
BIOS version	AMI Aptio V UEFI Specification 2.5
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI) CSM (Compatibility Support Module)
Audio type	On board

Mainboard	
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	г
	5
thereof SATA III thereof eSATA	5
Controller functions	2 Serial ATA III (6 Gbit)
Controller functions	NCQ
	AHCI
	RAID 0/1/5/10
Interfaces	
Audio: line-in	1
Audio: line-out	1
Front audio: microphone	1
Front audio: headphone	1
USB 2.0 total	5
USB 3.1 Gen1 (USB 3.0) total	7
USB 3.1 Gen2 total	optional via add on card
USB front	2x USB 2.0; 2x USB 3.0; 1x USB 3.1 Type C (Gen1); optional: 1x USB 3.1 Type-C (Gen2) via add on card and front adapter bay
USB rear	2x USB 2.0; 4x USB 3.0; optional: 1x USB 3.1 Type C (Gen2) via add on card
USB internal	1x USB 2.0
VGA	optional: via adapter card
DisplayPort	2
DVI	1 (DVI-D)
Serial (RS-232)	optional: first and 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, USB Typ C connector supports up to 15W
Input device / components	
Input devices (optional)	Keyboard
	Mouse
	KBPC PX ECO Mouse M440 ECO
Drive have total	
Drive bays total	6
2.5-inch internal bays 3.5-inch internal bays	<u>1</u> 2
3.5-inch external bays	
5.25-inch external bays	2
Drive bay notes	5,25" bays: one bay in HH format, one bay for slim optical disc drive only;
	internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws; optional screwless). drive cage for external 3.5" bay and internal 2.5" bay: optional
M.2-2280	1 x on mainboard (for PCIe or SATA SSD modules), supports Intel® Optane™ technology
Slots	
PCI-Express 3.0 x16	1 x (240 mm / 9.45 inch) Full height
PCI-Express 2.0 x4 (mech. x16)	1 x (210 mm / 8.27 inch) Full height
PCI-Express x1	2 x (174mm / 210 mm / 6.85 inch / 8.27 inch) Full height

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Graphics on board	
Graphics brand name	Intel® HD Graphics 510, Intel® HD Graphics 530, Intel® HD Graphics 610, Intel® HD Graphics 630
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 1,600 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	11LLD.//UUCS.LS.1UJILSU.C0111/U1.dSDX:1U=140E340/-4UUd-4134-9CU1-3709EL39ZZd3
Link to Energy White Paper  Heat dissipation	http://docs.ts.fujitsu.com/dl.aspx?id=f48e3487-4dda-4134-9c01-3789ec3922a5

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Noise emission	
Related Processors for noise	Intel® Core™ i7 7700
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	3.5"-HDD: 3.9 B / 25 dB(A) Bystander; 29 dB(A) Operator position
Standard noise operation mode: HDD load	3.5"-HDD: 3.3 B / 20 dB(A) Bystander; 22 dB(A) Operator position
Standard noise operation mode: Idle mode	3.5"-HDD: 3.2 B / 19 dB(A) Bystander; 20 dB(A) Operator position
Standard noise operation mode: ODD load	3.5"-HDD: 4.6 B / 32 dB(A) Bystander; 38 dB(A) Operator position
Standard noise operation mode: Office applications 2.0	3.5"-HDD: 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	3.6 B = 36 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)	180 x 304 x 375 mm
	7.09 x 11.97 x 14.76 inch
Operating position	Vertical
Weight	7 kg
Weight (lbs)	15.50 lbs
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35 ℃ (50 - 95 ℉)
Operating relative humidity	5 - 85 % (relative humidity)
Compliance	
Product	ESPRIMO P957/E90+
Model	MI6W
Germany	TÜV GS
Еигоре	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) TPM 2.0 for China (optional)
Compliance link	https://sp.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) Microsoft Office (buy license to activate the pre-installed Microsoft Office)

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Additional Software	
Additional software (optional)	Recovery DVD for Windows®
Additional software (optional)	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)
Manageability software	iAMT 11.6 (depending on processor)  DeskView Client
manageability software	DeskView Instant BIOS Management
DeskView components	BIOS Management incl. Security
	Inventory Management Driver 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)
	Cable Cover (optional; covers and secures the ports and cables on rear side)
System and BIOS Security	Embedded security (TPM 2.0)
	EraseDisk (optional) Credential Guard Ready and Device Guard Capable (Windows 10, v. 1511)
	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 PC Protection (optional)
Miscellaneous	Koyboard on (Special Fujiteu koyboard required)
	Keyboard on (Special Fujitsu keyboard required) Thermal management
	Low Power Active Mode
Serviceability	
	EasyFix
	EasyChange for HDD EasyChange for optical drives
Dackaging information	Losychonge for optical drives
Packaging information Packaging dimension (mm)	439 x 296 x 499 mm
Packaging dimension (inch)	17.28 x 11.65 x 19.65 inch
Max. quantity / pallet	24
mon quantity / panet	<u>-                                    </u>

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Packaging information	
Material - Weight (g) Carton	1040 g
Material - Weight (lbs) Carton	2.29 lbs
Material - Weight (g) EPS / PS	165 g
Material - Weight (lbs) EPS / PS	0.36 lbs
Material - Weight (g) PE	60 g
Material - Weight (lbs) PE	0.13 lbs
Packaging notes	If cable cover is inlcuded in packaging: 1.) packaging dimension is increasing to: $505 \times 298 \times 537$ mm / (19.88 x 11.73 x 21.14 inch); 2.) material weight of carton will increase to 1400g; 3.) max. quantity/pallet = 18; 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 Terms & Conditions	http://support.ts.fujitsu.com/warranty
Product Support Services - the perfec	t extension
Recommended Service	9x5, Onsite Response Time: Next Business Day-duplicate
Spare Parts availability	5 years after end of product life
Service Weblink	http://www.fujitsu.com/fts/services/support

## Recommended Accessories

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

## More information

### Fujitsu OPTIMIZATION Services

In addition to FUJITSU Desktop ESPRIMO P957/ 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.

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