

Fujitsu recommends Windows® 7.

# Data Sheet

## Fujitsu ESPRIMO E710 E90+ Desktop PC

Your Desktop PC Without Any Compromises

Fujitsu ESPRIMO E710 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



### Small form factor PC

Flexible desktop solution whatever the space required

- Less than 13 liters volume, can be positioned vertically and horizontally

### Energy Efficiency

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

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



### Green technology

Fujitsu's contribution to environmental protection for the continued existence of our planet

- 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



# Components

<b>Processor</b>	<p>Intel® Core™ i7-3770 processor (4 Cores / 8 Threads, 3.40 GHz, up to 3.9 GHz, 8 MB, Intel® HD Graphics 4000) *</p> <p>Intel® Core™ i5-3570 processor (4 Cores / 4 Threads, 3.40 GHz, up to 3.8 GHz, 6 MB, Intel® HD Graphics 2500) *</p> <p>Intel® Core™ i5-3470 processor (4 Cores / 4 Threads, 3.20 GHz, up to 3.6 GHz, 6 MB, Intel® HD Graphics 2500) *</p> <p>Intel® Core™ i3-2120 processor (2 Cores / 4 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics 2000)</p> <p>Intel® Pentium® processor G860 (2 Cores / 2 Threads, 3.00 GHz, 3 MB, Intel® HD Graphics)</p> <p>Intel® Pentium® processor G640 (2 Cores / 2 Threads, 2.80 GHz, 3 MB, Intel® HD Graphics)</p> <p>Intel® Celeron® processor G540 (2 Cores / 2 Threads, 2.50 GHz, 2 MB, Intel® HD Graphics)</p> <p>*with Intel® Turbo Boost Technology (clock speed and will vary depending on workload and other variables)</p>
<b>Operating systems</b>	
<b>Operating system</b>	<p>Windows® 7 Home Basic (EM) 32-bit</p> <p>Windows® 7 Home Premium 64-bit</p> <p>Windows® 7 Professional 32-bit</p> <p>Windows® 7 Professional 64-bit</p>
<b>Operating system compatible</b>	<p>openSUSE Linux</p> <p>Windows® XP</p>
<b>Operating system notes</b>	Limited Windows® XP support. Microsoft discontinued Windows® XP certification on system level, basic drivers via <a href="http://support.ts.fujitsu.com">http://support.ts.fujitsu.com</a>
<b>Memory modules</b>	<p>2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM</p> <p>4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM</p> <p>8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM</p>
<b>Hard disk drives (internal)</b>	<p>SSD SATA III, 256 GB, 2.5-inch</p> <p>SSD SATA III, 128 GB, 2.5-inch</p> <p>HDD SATA III, 7200 rpm, 2000 GB, 3.5-inch</p> <p>HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch</p> <p>HDD SATA III, 7200 rpm, 500 GB, 3.5-inch, business critical</p> <p>HDD SATA III, 7200 rpm, 500 GB, 3.5-inch</p> <p>HDD SATA III, 7200 rpm, 250 GB, 3.5-inch</p> <p>HDD SATA II, 7200 rpm, 320 GB, 2.5-inch</p> <p>HDD SATA II, 7200 rpm, 160 GB, 2.5-inch, S.M.A.R.T.</p>
<b>Hard disk notes</b>	Up to 18 GB of HDD space is reserved for system recovery
<b>Graphics add on cards (optional)</b>	<p>NVIDIA® Quadro® NVS 300 LP, 512 MB</p> <p>NVIDIA® GeForce® GT630 DisplayPort 2GB LP 0-Watt, 2 GB</p> <p>NVIDIA® GeForce® 605 DisplayPort 1GB LP, 1 GB</p> <p>LFH59/ 2x DVI-I adapter cable</p> <p>LFH59/ 2x DP adapter cable</p> <p>DP to DVI-D (single link) Adapter Cable</p> <p>2nd NVIDIA® Quadro® NVS 300 LP, 512 MB</p>
<b>Drives (optional)</b>	<p>BD Triple Writer SATA slim (tray)</p> <p>DVD-ROM</p> <p>DVD Super Multi</p> <p>MultiCard Reader 20in1, USB 2.0, 3.5-Inch</p>

**Interface add on cards/components  
(optional)**

WLAN III, 802.11g/Draft-n (Windows only)  
 Parallel Interface  
 Gigabit Ethernet PCIe x1, DS  
 eSATA Interface  
 Dual serial card PCIe x1, powered  
 Dual serial card PCIe x1

**Base unit** ESPRIMO E710 E90+

**Mainboard**

**Mainboard type** D3161  
**Formfactor** µATX  
**Chipset** Intel® Q75  
**Processor socket** LGA 1155  
**Processor quantity maximum** 1  
**Memory slots** 4 DIMM (DDR3)  
**Supported capacity RAM (max.)** 32 GB  
**Memory frequency** 1600 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** 10/100/1000 MBit/s Intel® 82579 V

**BIOS version** AMI Aptio 4.6

**BIOS features** BIOS Flash EPROM update by software  
 Recovery BIOS  
 Unified Extensible Firmware Interface (UEFI)

**Audio codec** Conexant CX20642

**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** 1  
**thereof eSATA** 2 (optional)  
**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 3.0 total** 4  
**USB front** 4x 2.0 or 2x 2.0/ 2x 3.0  
**USB rear** 6x 2.0 / 2x 3.0  
**USB internal** 2  
**VGA** 1 (via DVI to VGA adapter, part of shipment)  
**DisplayPort** 1  
**DVI** 1 (DVI-I)  
**Serial (RS-232)** 1 (9pin, 16 byte FIFO, 16550 compatible)  
**Mouse / Keyboard (PS/2)** 2

**Interfaces**

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)	Optical USB wheel mouse Optical USB/PS2 tilt wheel mouse KBPC PX ECO Mouse M440 ECO
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**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	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	1 x (174 mm / 6.85 inch) Low profile
PCI (32-bit / 33 MHz)	1 x (174 mm / 6.85 inch) Low profile
Slots optional configuration	or 2x PCI full high via Riser

**Graphics on board**

Graphics brand name	Intel® HD Graphics, HD Graphics 2000, HD Graphics 2500, HD Graphics 4000 (depending on CPU)
Shared video memory	up to 1759 MB
TFT resolution (VGA)	1024 x 768 pixel 1280 x 1024 pixel 1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1600 x 1200 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 features	Dual display support DirectX® 10.1 or DirectX® 11 (depending on CPU) HDCP support Open GL® 3.3 (depending on CPU) Open CL™ 1.1 (depending on CPU) For multi monitoring mode, graphics card and integrated graphics run in parallel (Microsoft® Windows 7® only)

**Graphics on board**

<b>Graphics notes</b>	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
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**Electrical values**

<b>Power efficiency note</b>	power supply efficiency (at 230V; 20% / 50% / 100% load) : 88% / 92% / 91%
<b>Rated voltage range</b>	100 V - 240 V
<b>Rated frequency range</b>	50 Hz - 60 Hz
<b>Operating voltage range</b>	90 V - 264 V
<b>Operating line frequency range</b>	47 Hz - 63 Hz
<b>Max. output of single power supply</b>	280 W
<b>Power factor correction/active power</b>	active
<b>Monitor outlet</b>	Switched

**Power consumption**

<b>Power consumption note</b>	See white paper Energy Consumption
<b>Link to Energy White Paper</b>	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=6fd6a36c-d028-4e30-9bc0-4096bb402d31">http://docs.ts.fujitsu.com/dl.aspx?id=6fd6a36c-d028-4e30-9bc0-4096bb402d31</a>

**Heat dissipation**

<b>Heat dissipation notes</b>	See white paper Energy Consumption
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**Noise emission**

<b>Related Processors for noise</b>	Core i5-3770
<b>Standard noise emission</b>	2x2 GB, HDD, ODD, Windows According to ISO 7779:2010, ECMA-74
<b>Standard noise notes / description</b>	A weighted sound power level L <sub>wad</sub> (in B) / Workplace related A-weighted sound pressure level L <sub>pAm</sub> (in dB(A))
<b>Standard noise operation mode: CPU 50% load</b>	3.6 B / 22 dB(A) Bystander; 26 dB(A) Operator position
<b>Standard noise operation mode: HDD load</b>	3.5 B / 21 dB(A) Bystander; 24 dB(A) Operator position
<b>Standard noise operation mode: Idle mode</b>	3.2 B / 19 dB(A) Bystander; 22 dB(A) Operator position
<b>Standard noise operation mode: ODD load</b>	4.7 B / 33 dB(A) Bystander; 40 dB(A) Operator position
<b>Standard noise operation mode: Office applications 2.0</b>	3.2 B / 19 dB(A) Bystander; 22 dB(A) Operator position
<b>Blue angel noise emission according certification</b>	According to ISO 7779:2010, ECMA-74 for max. possible configuration
<b>Blue angel noise notes / description</b>	A weighted sound power level L <sub>wad</sub> (in B); 1B = 10dB
<b>Blue angel noise operation mode: HDD load</b>	3.7 B = 37 dB
<b>Blue angel noise operation mode: Idle mode</b>	3.7 B = 37 dB
<b>Blue angel noise operation mode: ODD load</b>	4.7 B = 47 dB

**Dimensions / Weight / Environmental**

<b>Dimensions (W x D x H)</b>	340 x 382 x 98 mm 13.39 x 15.04 x 3.86 inch
<b>Operating position</b>	horizontal / vertical (optional, feet needed)
<b>Weight</b>	10 kg
<b>Weight (lbs)</b>	22.05 lbs
<b>Weight notes</b>	Actual weight may vary depending on configuration
<b>Operating ambient temperature</b>	10 - 35°C (50 - 95°F)

**Compliance**

<b>Product</b>	ESPRIMO E710
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**Compliance**

<b>Model</b>	DT8
<b>Germany</b>	TÜV GS
<b>Europe</b>	CE Nordic Swan in progress
<b>USA/Canada</b>	FCC Class B cCSAus
<b>Global</b>	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 5.0 (dedicated regions) EPEAT® Gold (dedicated regions)

**Additional Software**

<b>Additional software (preinstalled)</b>	Nero Essentials S (burning software) Fujitsu Recovery (Hard Disk Based Recovery) Norton Internet Security (incl. Firewall) 60 days version Microsoft® Office Starter: reduced-functionality Word and Excel® only, with advertising. No PowerPoint® or Outlook®. Buy Office 2010 to use the full-featured software.
<b>Additional software (optional)</b>	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink PowerDVD 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 10 Essentials XL

**Miscellaneous**

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

**Compatibility (references)**

DMI 2.0  
PC 2001  
WMI 1.5  
USB 2.0  
SMBIOS

**Manageability****Security**

<b>System protection</b>	Kensington Lock support Eye for padlock Optional: Integrated cabinet lock
<b>Audit proof protection</b>	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
<b>Access protection</b>	User and supervisor BIOS password Hard disk password Optional: Access protection via external SmartCard reader Optional: Access protection via internal SmartCard reader

**Serviceability**

EasyFix  
EasyChange for HDD  
EasyChange for optical drives

**Packaging information**

<b>Packaging dimension (mm)</b>	467 x 265 x 540 mm
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**Packaging information**

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	60 g
Material - Weight (lbs) PE	0.13 lbs
Packaging notes	printed user documentation is bleached in chlorine free process

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**Warranty**

Standard Warranty	1 year
Service level	Bring-In / On-Site Service (depending on country)
<b>Maintenance and Support Services - the perfect extension</b>	
Recommended Service	5x9, Response Time: Next Business Day
Spare Parts availability	5 years
Service Weblink	<a href="http://www.fujitsu.com/fts/services/support/index.html">http://www.fujitsu.com/fts/services/support/index.html</a>

## More information

### Fujitsu platform solutions

In addition to Fujitsu ESPRIMO E710 E90+, 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/](http://www.fujitsu.com/global/services/computing/)

#### Software

[www.fujitsu.com/software/](http://www.fujitsu.com/software/)

### More information

Learn more about Fujitsu ESPRIMO E710 E90+, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
[www.fujitsu.com/fts/ESPRIMO](http://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 resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>



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2012-07-11 CE-EN

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