

Fujitsu recommends Windows® 7.

# Data Sheet

## Fujitsu ESPRIMO E510 E85+ Desktop PC

Your Flexible Economy PC

Fujitsu All-round ESPRIMO PCs deliver high-quality computing for your office applications and projects at a very attractive price point. You can choose cost-optimized fixed configurations for immediate delivery. Alternatively, you can use configuration options to meet your specific hardware needs, while staying within your budget.

### Intelligent performance and best price/performance ratio

Cost-effective system for large enterprise projects

- 3rd generation Intel® Core™ processor family

### Flexibility

Freedom of choice with tailored systems, perfect fit for specific requirements

- Flexible logistics concept - Customizing program (made4you)

### Made in Germany

Outstanding quality and stable functions based on German production standards

- The development, production and function tests - all under one roof in Germany

### Lifecycle

Hardware continuity for long-lasting project requirements

- Managed lifecycle up to 12 months

### Meets ENERGY STAR® requirements

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

- Up to 86% energy efficient power supply



# Components

<b>Processor</b>	Intel® Core™ i7-3770 processor (4 Cores / 8 Threads, up to 3.90 GHz 3.40 GHz, 8 MB, Intel® HD Graphics 4000 with 3rd generation Core i processors) *
	Intel® Core™ i5-3570 processor (4 Cores / 4 Threads, up to 3.80 GHz 3.40 GHz, 6 MB, Intel® HD Graphics 2500) *
	Intel® Core™ i5-3470 processor (4 Cores / 4 Threads, up to 3.60 GHz 3.20 GHz, 6 MB, Intel® HD Graphics 2500) *
	Intel® Core™ i5-2400 processor (4 Cores / 4 Threads, 3.10 GHz, 6 MB, Intel® HD Graphics 2000)
	Intel® Core™ i3-2120 processor (2 Cores / 4 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics 2000)
	Intel® Pentium® processor G860 (2 Cores / 2 Threads, 3.00 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G850 (2 Cores / 2 Threads, 2.90 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G640 (2 Cores / 2 Threads, 2.80 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G630 (2 Cores / 2 Threads, 2.70 GHz, 3 MB, Intel® HD Graphics)
	Intel® Celeron® processor G540 (2 Cores / 2 Threads, 2.50 GHz, 2 MB, Intel® HD Graphics)
	Intel® Celeron® processor G530 (2 Cores / 2 Threads, 2.40 GHz, 2 MB, Intel® HD Graphics)
	*with Intel® Turbo Boost Technology (clock speed and will vary depending on workload and other variables)
<b>Operating systems</b>	
<b>Operating system</b>	Windows® 7 Home Basic (EM) 32-bit Windows® 7 Home Premium 64-bit Windows® 7 Professional 32-bit Windows® 7 Professional 64-bit
<b>Operating system compatible</b>	openSUSE Linux Windows® XP
<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>	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM 4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM 8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1600 MHz, PC3-12800, DIMM
<b>Hard disk drives (internal)</b>	SSD SATA III, 256 GB, 2.5-inch SSD SATA III, 128 GB, 2.5-inch HDD SATA III, 7200 rpm, 2000 GB, 3.5-inch HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch HDD SATA III, 7200 rpm, 500 GB, 3.5-inch HDD SATA III, 7200 rpm, 250 GB, 3.5-inch HDD SATA II, 7200 rpm, 320 GB, 2.5-inch HDD SATA II, 7200 rpm, 160 GB, 2.5-inch
<b>Hard disk notes</b>	Up to 18 GB of HDD space is reserved for system recovery
<b>Graphics add on cards (optional)</b>	NVIDIA® Quadro® NVS 300 LP, 512 MB NVIDIA® GeForce® GT630 DisplayPort 2GB LP, 2 GB NVIDIA® GeForce® 605 DisplayPort 1GB LP, 1 GB LFH59/ 2x DVI-I adapter cable LFH59/ 2x DP adapter cable DP to DVI-D (single link) Adapter Cable
<b>Drives (optional)</b>	BD Triple Writer SATA slim (tray) DVD-ROM DVD Super Multi MCR 24in1 & USB 3.0 front con., 3.5" MultiCard Reader 24in1 USB 2.0 3.5"

**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 E510 E85+

**Mainboard**

<b>Mainboard type</b>	D3171
<b>Formfactor</b>	µATX
<b>Chipset</b>	Intel® B75
<b>Processor socket</b>	LGA 1155
<b>Processor quantity maximum</b>	1
<b>Memory slots</b>	4 DIMM (DDR3)
<b>Supported capacity RAM (max.)</b>	32 GB
<b>Memory frequency</b>	1600 MHz
<b>Memory notes</b>	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
<b>LAN</b>	10/100/1000 MBit/s Realtek RTL 8111E
<b>BIOS version</b>	AMI Aptio 4.6
<b>BIOS features</b>	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)
<b>Audio codec</b>	Conexant CX20642
<b>Audio features</b>	Internal speaker supports audio playback (optional), High Definition Audio, 5.1 surround sound

**I/O controller on board**

<b>Serial ATA total</b>	4
<b>thereof SATA III</b>	1
<b>thereof eSATA</b>	1 (optional)
<b>Controller functions</b>	Serial ATA II (3 Gbit) Serial ATA III (6 Gbit) NCQ AHCI

**Interfaces**

<b>Audio: line-in</b>	1
<b>Audio: line-in / microphone</b>	1
<b>Audio: line-out</b>	1
<b>Front audio: microphone</b>	1
<b>Front audio: headphone</b>	1
<b>USB 2.0 total</b>	8
<b>USB 3.0 total</b>	4
<b>USB front</b>	2x 2.0
<b>USB rear</b>	4x 2.0/ 2x 3.0
<b>USB internal</b>	2x 2.0/ 2x 3.0
<b>VGA</b>	1
<b>DVI</b>	1 (DVI-D)
<b>Serial (RS-232)</b>	1 (9pin, 16 byte FIFO, 16550 compatible)
<b>Mouse / Keyboard (PS/2)</b>	2
<b>Ethernet (RJ-45)</b>	1
<b>Parallel</b>	1 (optional) (25pin with EPP and ECP)

**Interfaces**

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
--------------------------	--

**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 x1	2 x (174 mm / 6.85 inch) Low profile
PCI (32-bit / 33 MHz)	1 x (174 mm / 6.85 inch) Low profile

**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
Graphics features	Dual display support DirectX® 10.1 or DirectX® 11 (depending on CPU) HDCP support Open GL® 3.1 (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 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) : 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

**Electrical values**

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	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=fa532e76-0d02-4c65-beb8-9b4af0a2607a">http://docs.ts.fujitsu.com/dl.aspx?id=fa532e76-0d02-4c65-beb8-9b4af0a2607a</a>

**Heat dissipation**

Heat dissipation notes	See white paper Energy Consumption
------------------------	------------------------------------

**Noise emission**

Standard noise emission	2x2 GB, HDD, ODD, Windows According to ISO 7779:2010, ECMA-74
Standard noise notes / description	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)) Bystander position
Standard noise operation mode: HDD load	3.6 B / 23 dB(A)
Standard noise operation mode: Idle mode	3.6 B / 23 dB(A)
Standard noise operation mode: ODD load	4.7 B / 33 dB(A)
Standard noise operation mode: Office applications 2.0	3.7 B / 23 dB(A)
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 L <sub>wad</sub> (in B); 1B = 10dB
Blue angel noise operation mode: HDD load	tbd
Blue angel noise operation mode: Idle mode	tbd
Blue angel noise operation mode: ODD load	tbd

**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°C (50 - 95°F)

**Compliance**

Product	ESPRIMO E510
Model	DT8-D3171
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® 5.0 (dedicated regions) EPEAT® Gold (dedicated regions)
Compliance link	<a href="https://sp.ts.fujitsu.com/sites/certificates/">https://sp.ts.fujitsu.com/sites/certificates/</a>

**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**

Thermal management

**Compatibility (references)**DMI 2.0  
PC 2001  
WMI 1.5  
USB 2.0  
SMBIOS**Manageability**

<b>Manageability technology</b>	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) WoL (Wake on LAN)
---------------------------------	--

**Security**

<b>System protection</b>	Kensington Lock support Eye for padlock
<b>Audit proof protection</b>	Boot sector virus protection Write protect option for the Flash EPROM Control of external interfaces Optional: Trusted platform module (TPM 1.2)
<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>	500 x 290 x 540 mm
<b>Packaging dimension (inch)</b>	19.69 x 11.42 x 21.26 inch
<b>Max. quantity / pallet</b>	28
<b>Material - Weight (g) Carton</b>	940 g
<b>Material - Weight (lbs) Carton</b>	2.07 lbs
<b>Material - Weight (g) EPS / PS</b>	190 g
<b>Material - Weight (lbs) EPS / PS</b>	0.42 lbs
<b>Material - Weight (g) PE</b>	60 g
<b>Material - Weight (lbs) PE</b>	0.13 lbs
<b>Packaging notes</b>	printed user documentation is bleached in chlorine free process

**Warranty**

<b>Standard Warranty</b>	1 year
<b>Service level</b>	Bring-In / On-Site Service (depending on country)

---

**Warranty**

**Maintenance and Support Services - the perfect extension**

---

<b>Recommended Service</b>	5x9, Response Time: Next Business Day
<b>Spare Parts availability</b>	5 years
<b>Service Weblink</b>	<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 E510 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/](http://www.fujitsu.com/global/services/computing/)

#### Software

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

### More information

Learn more about Fujitsu ESPRIMO E510 E85+, 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/>



### Copyrights

All rights reserved, including intellectual property rights. Changes to technical data reserved. Delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.

For further information see [www.fujitsu.com/terms](http://www.fujitsu.com/terms)

Copyright © Fujitsu Technology Solutions

### Disclaimer

Technical data are subject to modification and delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner.

#### Contact

FUJITSU Technology Solutions  
Website: [www.fujitsu.com/fts](http://www.fujitsu.com/fts)  
2012-05-31 CE-EN

All rights reserved, including intellectual property rights. Changes to technical data reserved. Delivery subject to availability. Any liability that the data and illustrations are complete, actual or correct is excluded. Designations may be trademarks and/or copyrights of the respective manufacturer, the use of which by third parties for their own purposes may infringe the rights of such owner. For further information see [www.fujitsu.com/terms](http://www.fujitsu.com/terms)  
Copyright © Fujitsu Technology Solutions