

Data Sheet

Fujitsu ESPRIMO E520 E85+

Your Flexible and Economic PC

FUJITSU ESPRIMO E520 PCs deliver high-quality computing for your demanding office applications. Designed for the specific needs of project-based customers they cover attractive price points and focus on providing the continuity needed for daily operations. They can be either individually configured or customized to meet your specific hardware needs.

High performance and best price/performance ratio

Powerful and cost-effective small form factor desktop for projects

- 4th generation Intel® Core™ processor family

System management

The perfect answer to offload your IT administrators

- DeskView Admin enhances the management of the devices in your IT infrastructure during productive operation - even remotely and after hours

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

- 85% energy efficient power supply



Components

| | |
|------------------------------------|--|
| Processor | <p>Intel® Core™ i7-4790 processor (4 Cores / 8 Threads, 3.60 GHz, up to 4.0 GHz, 8 MB, Intel® HD Graphics 4600) *</p> <p>Intel® Core™ i5-4690 processor (4 Cores / 4 Threads, 3.50 GHz, up to 3.9 GHz, 6 MB, Intel® HD Graphics 4600) *</p> <p>Intel® Core™ i5-4590 processor (4 Cores / 4 Threads, 3.30 GHz, up to 3.7 GHz, 6 MB, Intel® HD Graphics 4600) *</p> <p>Intel® Core™ i5-4460 processor (4 Cores / 4 Threads, 3.20 GHz, up to 3.4 GHz, 6 MB, Intel® HD Graphics 4600)</p> <p>Intel® Core™ i3-4170 processor (2 Cores / 4 Threads, 3.70 GHz, 3 MB, Intel® HD Graphics 4400)</p> <p>Intel® Pentium® processor G3460 (2 Cores / 2 Threads, 3.50 GHz, 3 MB, Intel® HD Graphics)</p> <p>Intel® Pentium® processor G3260 (2 Cores / 2 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics)</p> <p>Intel® Celeron® processor G1840 (2 Cores / 2 Threads, 2.80 GHz, 2 MB, Intel® HD Graphics)</p> <p>*with Intel® Turbo Boost Technology (clock speed and performance will vary depending on workload and other variables)</p> |
| Operating systems | |
| Operating system | <p>Windows 8.1 Pro</p> <p>Windows 8.1</p> <p>Windows 7 Professional 64-bit</p> <p>Windows 7 Professional 32-bit</p> |
| Operating system compatible | <p>Windows 10 Pro (license + recovery media only)</p> <p>openSUSE Linux</p> |
| Memory modules | <p>2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM</p> <p>4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM</p> <p>8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM</p> |
| Hard disk drives (internal) | <p>SSD SATA III Premium, 512 GB, 2.5-inch</p> <p>SSD SATA III Premium, 256 GB, 2.5-inch</p> <p>SSD SATA III Premium, 128 GB, 2.5-inch</p> <p>SSD SATA III, 256 GB, 2.5-inch</p> <p>SSD SATA III, 128 GB, 2.5-inch</p> <p>SSD SATA III, 256 GB, 2.5-inch, SED</p> <p>SSD SATA III, 128 GB, 2.5-inch, SED</p> <p>SSHD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch</p> <p>SSHD SATA III, 5,400 rpm, 500 GB, 2.5-inch</p> <p>HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch</p> <p>HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch</p> <p>HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch</p> <p>HDD SATA III, 7,200 rpm, 250 GB, 3.5-inch</p> <p>HDD SATA II, 5,400 rpm, 320 GB, 2.5-inch</p> |
| Hard disk notes | <p>Up to 20 GB of HDD space is reserved for system recovery</p> <p>SSHD (Solid State Hard Disk, Hybrid drive)</p> <p>SSD (Solid State Disk)</p> <p>SED (Self-Encrypting Drive)</p> |
| Graphics | <p>NVIDIA® GeForce® GTX 745 2 GB LP, 2 GB</p> <p>NVIDIA® GeForce® GT630 DisplayPort 2GB LP, 2 GB</p> <p>NVIDIA® GeForce® 605 DisplayPort 1GB LP, 1 GB</p> <p>DVI-I to VGA Adapter</p> <p>DP to DVI-D (single link) Adapter Cable</p> <p>DP Extension Card</p> |
| Drives (optional) | <p>BD Triple Writer SATA slim (tray)</p> <p>DVD-ROM</p> <p>DVD Super Multi</p> <p>MultiCard Reader 24in1 USB 2.0 3.5"</p> |

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

| |
|--|
| WLAN 802.11 a/g/n (2x2), (dedicated regions only, not for Indonesia) |
| Parallel Interface |
| Gigabit Ethernet PCIe x1, DS |
| eSATA Interface |
| Dual serial card PCIe x1 |

Base unit

| | |
|--------------------------------|---|
| Base unit | ESPRIMO E520 E85+ |
| Mainboard | |
| Mainboard type | D3220 |
| Formfactor | µATX |
| Chipset | Intel® B85 |
| Processor socket | LGA 1150 |
| Processor quantity maximum | 1 |
| Supported capacity RAM (max.) | 32 GB |
| Memory slots | 4 DIMM (DDR3) |
| Memory frequency | 1,600 MHz |
| Memory notes | Dual channel support For dual channel performance, identical memory modules in each channel are necessary (minimum 2 modules). |
| LAN | 10/100/1,000 MBit/s Intel® I217LV |
| BIOS version | AMI Aptio 4.6 |
| BIOS features | BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI) |
| 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 | 4 |
| thereof SATA III | 4 |
| thereof eSATA | 1 (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 | 8 |
| USB 3.1 Gen1 (USB 3.0) total | 4 |
| USB front | 2x 2.0 |
| USB rear | 4x 2.0/ 2x 3.0 |
| USB internal | 2x 2.0/ 2x 3.0 |
| VGA | 1 |
| DisplayPort | 1 (optional) |

Interfaces

| | |
|-------------------------|--|
| DVI | 1 (DVI-D) |
| 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) |
| eSATA | 1 (optional) |
| Interface Module notes | Anytime USB charge functionality |

Input device / components

| | |
|--------------------------|---|
| | Optical USB wheel mouse |
| Input devices (optional) | 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 (210 mm / 7.87 inch) Low profile |
| PCI-Express 2.0 x4 (mech. x16) | 1 x (210 mm / 7.87 inch) Low profile |
| PCI-Express x1 | 2 x (210 mm / 8.27 inch) Low profile |

Graphics on board

| | |
|------------------------------|---|
| Graphics brand name | Intel® HD Graphics, HD Graphics 4400, HD Graphics 4600 (depending on processor) |
| 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 (requires Intel® Core™ i3, i5 or i7 processor) |

Graphics on board

| | |
|--------------------------|--|
| Graphics features | Support for up to three independent displays DirectX® 11.1 HDCP support Open CL® 1.2 OpenGL® 4.0 For multi monitoring mode, graphics card and integrated graphics run in parallel (Microsoft® Windows® 7 or Windows 8) |
| 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; 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 |
| 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=d2e45dd8-0189-4c6f-94b0-94247e523506 |

Heat dissipation

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

Noise emission

| | |
|---|--|
| Related Processors for noise | Intel® Core™ i7 4770 |
| Standard noise emission | 2x2 GB, HDD, ODD, Windows According to ISO 7779:2010, ECMA-74 |
| Standard noise notes / description | Bystander position Operator position |
| Standard noise operation mode: CPU 50% load | 4.0 B / 26 dB(A) bystander position / 29 dB (A) operator position |
| Standard noise operation mode: HDD load | 3.5 B / 22 dB(A) bystander position / 24 dB (A) operator position |
| Standard noise operation mode: Idle mode | 3.5 B / 21 dB(A) bystander position / 23 dB (A) operator position |
| Standard noise operation mode: ODD load | 4.7 B / 33 dB(A) bystander position / 38 dB (A) operator position |
| Standard noise operation mode: Office applications 2.0 | 3.4 B / 21 dB(A) bystander position / 23 dB (A) operator position |
| Blue angel noise emission according certification | According to ISO 7779:2010, ECMA-74 for max. possible configuration |
| Blue angel noise operation mode: HDD load | 3.9 B = 39 dB |
| Blue angel noise operation mode: Idle mode | 3.8 B = 38 dB |
| Blue angel noise operation mode: ODD load | 4.9 B = 49 dB |

Dimensions / Weight / Environmental

| | |
|--------------------------------------|---|
| Dimensions (W x D x H) | 330 x 405 x 104 mm 13.0 x 15.95 x 4.1 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) |
| Operating relative humidity | 5 - 85 % (relative humidity) |

Compliance

| | |
|------------------------|---|
| Product | ESPRIMO E520 |
| Model | DTL2 |
| Germany | TÜV GS Blauer Engel / Blue Angel |
| 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) EPEAT® Gold (dedicated regions) ENERGY STAR® 6.0 (dedicated regions) |
| Compliance link | https://sp.ts.fujitsu.com/sites/certificates |

Additional Software

| | |
|---|---|
| Additional software (preinstalled) | Workplace Protect (secure authentication solution) 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) WoL (Wake on LAN) |
| 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) |
| Manageability link | http://www.fujitsu.com/fts/manageability |

Security

| | |
|--------------------------|--|
| Physical Security | Kensington Lock support Eye for padlock |
|--------------------------|--|

| Security | |
|---|---|
| System and BIOS Security | Boot sector virus protection Write protect option for the Flash EPROM Control of external interfaces Optional: Trusted platform module (TPM 1.2) |
| User Security | User and supervisor BIOS password Hard disk password Access protection via external SmartCard reader (optional) Access protection via internal SmartCard reader (optional) |
| Miscellaneous | |
| | Thermal management |
| Packaging information | |
| Packaging dimension (mm) | 467 x 265 x 540 mm |
| Packaging dimension (inch) | 18.39 x 10.43 x 21.26 inch |
| Max. quantity / pallet | 28 |
| Material - Weight (g) Carton | 1180 g |
| Material - Weight (lbs) Carton | 2.6 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 |
| Warranty | |
| Warranty period | 1 year (for countries in EMEA) |
| Warranty type | Bring-In / Onsite Service (for countries within region EMEA, for all other countries depending on local regulations) |
| 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 B24-8 TE Pro |  | The FUJITSU Display B24-8 TE Pro is made for intensive office work. With visual and mechanical ergonomics this marble-grey display enables fatigue-free working for hours in front of the screen. The large 60.5 cm (23.8-inch) screen allows you to keep always track of all open applications. This high-quality display works unfailingly around the clock. Easy connectivity, manageability and usability help you increase your productivity. | Order Code: S26361-K1577-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 |
| 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 |

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

In addition to Fujitsu ESPRIMO E520 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/products/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu ESPRIMO E520 E85+, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
<http://ts.fujitsu.com>

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 http://ts.fujitsu.com/terms_of_use.html
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

Address: x-xx-x, street, city, state, ZIP code, country
Phone: xx-xxxx-xxxx
Fax: xx-xxxx-xxxx
Email: xxx.xxxxx@xx.fujitsu.com
Website: [www.fujitsu.com/\[country\]](http://www.fujitsu.com/[country])
2017-04-01 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 http://ts.fujitsu.com/terms_of_use.html
Copyright © Fujitsu Technology Solutions