Fujitsu recommends Windows 10 Pro.

Data Sheet
FUJITSU Desktop ESPRIMO P420 E85+

Your Immediately Deliverable Office PC

The FUJITSU ESPRIMO P420 delivers 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.

High performance and best price/performance ratio
Cost-effective system for price-conscious customers
- 4th generation Intel® Core™ processor family

Flexibility
Freedom of choice with tailored systems, perfect fit for specific requirements
- Flexible logistic concept - optional customizing program

Reliability
High-quality and functional stability
- Development and production in Europe

Lifecycle
Hardware continuity for long-term projects
- Managed lifecycle up to 12 months

Meets ENERGY STAR® requirements
Low power consumption and low costs, without any loss in performance
- Power supply with 85% efficiency
Components

Processor

- Intel® Core™ i7-4790 processor (4 Cores / 8 Threads, 3.60 GHz, up to 4.0 GHz, 8 MB, Intel® HD Graphics 4600) *
- Intel® Core™ i5-4690 processor (4 Cores / 4 Threads, 3.50 GHz, up to 3.9 GHz, 6 MB, Intel® HD Graphics 4600) *
- Intel® Core™ i5-4590 processor (4 Cores / 4 Threads, 3.30 GHz, up to 3.7 GHz, 6 MB, Intel® HD Graphics 4600) *
- Intel® Core™ i5-4460 processor (4 Cores / 4 Threads, 3.20 GHz, up to 3.4 GHz, 6 MB, Intel® HD Graphics 4600)
- Intel® Core™ i3-4170 processor (2 Cores / 4 Threads, 3.70 GHz, 3 MB, Intel® HD Graphics 4400)
- Intel® Pentium® processor G3460 (2 Cores / 2 Threads, 3.50 GHz, 3 MB, Intel® HD Graphics)
- Intel® Pentium® processor G3260 (2 Cores / 2 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics)
- Intel® Celeron® processor G1840 (2 Cores / 2 Threads, 2.80 GHz, 2 MB, Intel® HD Graphics)

*with Intel® Turbo Boost Technology (clock speed and performance will vary depending on workload and other variables)

Operating systems

Operating system pre-installed
- Windows 10 Pro
- Windows 8.1 Pro
- Windows 7 Professional 64-bit
- Windows 7 Professional 32-bit

Operating system compatible
- Windows 10 Pro (license + recovery media only)
- openSUSE Linux

Memory modules

- 2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
- 4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
- 8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM

Hard disk drives (internal)

- SSD SATA III Premium, 512 GB, 2.5-inch
- SSD SATA III Premium, 256 GB, 2.5-inch
- SSD SATA III Premium, 128 GB, 2.5-inch
- SSD SATA III, 256 GB, 2.5-inch
- SSD SATA III, 128 GB, 2.5-inch
- SSD SATA III, 256 GB, 2.5-inch, SED
- SSD SATA III, 128 GB, 2.5-inch, SED
- 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, 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, 320 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

- NVIDIA® NVS™ 315, 1 GB
- NVIDIA® GeForce® GTX 745 2 GB FH, 2 GB
- NVIDIA® GeForce® GTX630 DisplayPort 2GB 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
Fujitsu recommends Windows 10 Pro.

### Drives (optional)
- BD Triple Writer SATA slim (tray)
- DVD-ROM
- DVD Super Multi
- MultiCard Reader 24in1 USB 2.0 3.5"

### Interface add on cards/components (optional)
- USB 3.0 PCIe x1
- Gigabit Ethernet PCIe x1, DS
- Dual serial card PCIe x1

### Base unit

<table>
<thead>
<tr>
<th>Base unit</th>
<th>ESPRIMO P420 E85+</th>
</tr>
</thead>
</table>

#### Mainboard
- Mainboard type: D3230
- Formfactor: μATX
- Chipset: Intel® H81
- Processor socket: LGA 1150
- Processor quantity maximum: 1
- Supported capacity RAM (max.): 16 GB
- Memory slots: 2 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 Realtek RTL8111G

#### 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
- High Definition Audio, 5.1 surround sound

#### I/O controller on board
- Serial ATA total: 3
  thereof SATA III: 2
- Controller functions: Serial ATA II (3 Gbit)
  Serial ATA III (6 Gbit)
  NCQ
  AHCI

#### Interfaces
- Audio: line-in: 1
- Audio: line-out: 1
- Front audio: microphone: 1
- Front audio: headphone: 1
- USB 2.0 total: 6
- USB 3.1 Gen1 (USB 3.0) total: 2
- USB front: 2x 2.0
- USB rear: 2x 2.0/ 2x 3.0
- USB internal: 2x 2.0
- VGA: 1
- DVI: 1 (DVI-D)
Fujitsu recommends Windows 10 Pro.

### Interfaces

<table>
<thead>
<tr>
<th>Mouse / Keyboard (PS/2)</th>
<th>1/1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethernet (RJ-45)</td>
<td>1</td>
</tr>
</tbody>
</table>

### Input device / components

- Optical USB wheel mouse

### Input devices (optional)

- Optical USB/PS2 tilt wheel mouse
- KBPC PX ECO
- Mouse M440 ECO

### Drive bays

<table>
<thead>
<tr>
<th>Drive bays total</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.5-inch internal bays</td>
<td>2</td>
</tr>
<tr>
<td>3.5-inch external bays</td>
<td>1</td>
</tr>
<tr>
<td>5.25-inch external bays</td>
<td>2</td>
</tr>
</tbody>
</table>

Drive bay notes: 3,5” bay can be used for 2,5” drives

### Slots

<table>
<thead>
<tr>
<th>PCI-Express 2.0 x16</th>
<th>1 x (210 mm / 8.27 inch) Full height</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCI-Express x1</td>
<td>2 x (190 mm / 7.48 inch) Full height</td>
</tr>
</tbody>
</table>

### Graphics on board

<table>
<thead>
<tr>
<th>Graphics brand name</th>
<th>Intel® HD Graphics, HD Graphics 4400, HD Graphics 4600 (depending on processor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared video memory</td>
<td>up to 1,782 MB</td>
</tr>
</tbody>
</table>

#### 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

### Graphics features

- Dual display support
- DirectX® 11.1
- HDCP support
- OpenCL® 1.2
- OpenGL® 4.0

### 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

<table>
<thead>
<tr>
<th>Power efficiency note</th>
<th>Power supply efficiency (at 230V; 20% / 50% / 100% load): 83% / 86% / 85%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-Watt mode with hard-off switch</td>
</tr>
<tr>
<td>Rated voltage range</td>
<td>100 V - 240 V</td>
</tr>
<tr>
<td>Rated frequency range</td>
<td>50 Hz - 60 Hz</td>
</tr>
<tr>
<td>Operating voltage range</td>
<td>90 V - 264 V</td>
</tr>
<tr>
<td>Operating line frequency range</td>
<td>47 Hz - 63 Hz</td>
</tr>
<tr>
<td>Max. output of single power supply</td>
<td>280 W</td>
</tr>
<tr>
<td>Power factor correction/active power</td>
<td>active</td>
</tr>
<tr>
<td>Monitor outlet</td>
<td>No</td>
</tr>
</tbody>
</table>
Fujitsu recommends Windows 10 Pro.

### 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=f4725e85-5d74-41f1-99a0-7ef55a8d713d

### 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

### 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

#### Standard noise operation mode: CPU
- 50% load
  - 3.4 B / 21 dB(A) Bystander; 25 dB(A) Operator position

#### Standard noise operation mode: HDD
- Load
  - 3.4 B / 21 dB(A) Bystander; 26 dB(A) Operator position

#### Standard noise operation mode: Idle
- 3.4 B / 20 dB(A) Bystander; 26 dB(A) Operator position

#### Standard noise operation mode: ODD
- Load
  - 4.6 B / 32 dB(A) Bystander; 38 dB(A) Operator position

#### Standard noise operation mode: Office applications 2.0
- 3.4 B / 20 dB(A) Bystander; 26 dB(A) Operator position

### Dimensions / Weight / Environmental

**Dimensions (W x D x H)**
- 175 x 425 x 353 mm
- 6.89 x 16.74 x 13.9 inch

**Operating position**
Vertical

**Weight**
9 kg

**Weight (lbs)**
20.22 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 P420

**Model**
MI4W

**Germany**
TÜV GS

**Europe**
CE

**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)

**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

**System and BIOS Security**
- Boot sector virus protection
- Write protect option for the Flash EPROM
- 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)

### Miscellaneous

**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 140 g
- Material - Weight (lbs) EPS / PS 0.31 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
**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](http://support.ts.fujitsu.com/warranty)

**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](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
<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Order Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouse M440 ECO</td>
<td>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.</td>
<td>S26381-K450-L200</td>
</tr>
<tr>
<td>SOUNDSYSTEM DS E2000 Air</td>
<td>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.</td>
<td>S26391-F7128-L600</td>
</tr>
<tr>
<td>UC&amp;C USB Headset Stereo H650e</td>
<td>The UC&amp;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.</td>
<td>S26391-F7139-L10</td>
</tr>
<tr>
<td>Keyboard KBPC PX ECO</td>
<td>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.</td>
<td>S26381-K341-L1** (**: country specific variation)</td>
</tr>
<tr>
<td>Keyboard KB900</td>
<td>The KB900 is a very flat keyboard with extra low keys and spill-resistant protection. The elegant design and top-quality construction makes the KB900 the ideal input device for any PC or Notebook user. If you accidentally spill some water or coffee onto the keyboard, this special construction helps the liquid to flow away.</td>
<td>S26381-K560-L4** (**: Country specific variation)</td>
</tr>
</tbody>
</table>
More information

Fujitsu OPTIMIZATION Services
In addition to FUJITSU Desktop ESPRIMO P420 E85+, 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/

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

More information
Learn more about FUJITSU Desktop ESPRIMO P420 E85+, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/fts/ESPRIMO

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