

Fujitsu recommends Windows 8 Pro.

# Data Sheet

## Fujitsu CELSIUS M720 Workstation

Your "Thoroughbred" Workstation

If you're looking for reliable performance when using demanding applications, the Fujitsu CELSIUS M720 single-processor workstation meets your needs. It can be individually configured, helping you to enhance your productivity. It features best-in-class noise emissions of only 20 dB for a quiet and efficient working environment. Comprehensive ISV certifications ensure your applications run smoothly. Finally, the convenient cold plug access at front simplifies subsequent expansion.

### Performance

Higher productivity

- High performance multi-core processor, next generation graphics subsystems, quad-channel memory technology and high-speed hard disk drives

### Ergonomics

Noise-reduced system engineered in Germany

- Optimized thermal management, low-noise chassis and silent fans

### Reliability

System stability for the complete lifecycle

- High product standards thanks to top-quality components and comprehensive testing in certified in-house laboratories for 24/7 operation

### Certification of workstation applications

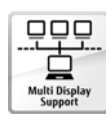
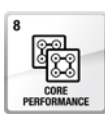
Stability, compatibility and performance for the main workstation applications

- Comprehensive support for ISV applications and ease of integration into existing IT networks

### Expandability

Excellent expandability for future demands

- Increased memory capacities of up to 128 GB



# Components

<b>Processor</b>	<p>Intel® Xeon® processor E5-2690 (8 Cores / 16 Threads, 2.90 GHz, up to 3.8 GHz, 20 MB, 8.0 GT/s )</p> <p>Intel® Xeon® processor E5-2680 (8 Cores / 16 Threads, 2.70 GHz, up to 3.5 GHz, 20 MB, 8.0 GT/s )</p> <p>Intel® Xeon® processor E5-2670 (8 Cores / 16 Threads, 2.60 GHz, up to 3.3 GHz, 20 MB, 8.0 GT/s )</p> <p>Intel® Xeon® processor E5-2667 (6 Cores / 12 Threads, 2.90 GHz, up to 3.5 GHz, 15 MB, 8.0 GT/s )</p> <p>Intel® Xeon® processor E5-2665 (8 Cores / 16 Threads, 2.40 GHz, up to 3.1 GHz, 20 MB, 8.0 GT/s )</p> <p>Intel® Xeon® processor E5-2660 (8 Cores / 16 Threads, 2.20 GHz, up to 3.0 GHz, 20 MB, 8.0 GT/s )</p> <p>Intel® Xeon® processor E5-2650L (8 Cores / 16 Threads, 1.80 GHz, up to 2.3 GHz, 20 MB, 7.2 GT/s )</p> <p>Intel® Xeon® processor E5-2650 (8 Cores / 16 Threads, 2.00 GHz, up to 2.8 GHz, 20 MB, 8.0 GT/s )</p> <p>Intel® Xeon® processor E5-2643 (4 Cores / 8 Threads, 3.30 GHz, up to 3.5 GHz, 10 MB, 8.0 GT/s )</p> <p>Intel® Xeon® processor E5-2640 (6 Cores / 12 Threads, 2.50 GHz, up to 3.0 GHz, 15 MB, 7.2 GT/s )</p> <p>Intel® Xeon® processor E5-2637 (2 Cores / 4 Threads, 3.00 GHz, up to 3.2 GHz, 5 MB, 8.0 GT/s )</p> <p>Intel® Xeon® processor E5-2630L (6 Cores / 12 Threads, 2.00 GHz, up to 2.5 GHz, 15 MB, 6.4 GT/s )</p> <p>Intel® Xeon® processor E5-2630 (6 Cores / 12 Threads, 2.30 GHz, up to 2.8 GHz, 15 MB, 7.2 GT/s )</p> <p>Intel® Xeon® processor E5-2620 (6 Cores / 12 Threads, 2.00 GHz, up to 2.5 GHz, 15 MB, 7.2 GT/s )</p> <p>Intel® Xeon® processor E5-2609 (4 Cores / 8 Threads, 2.40 GHz, 10 MB, 6.4 GT/s)</p> <p>Intel® Xeon® processor E5-2603 (4 Cores / 8 Threads, 1.80 GHz, 10 MB, 6.4 GT/s)</p> <p>Intel® Xeon® processor E5-1660 (6 Cores / 12 Threads, 3.30 GHz, up to 3.9 GHz, 15 MB, 8.0 GT/s )</p> <p>Intel® Xeon® processor E5-1650 (6 Cores / 12 Threads, 3.20 GHz, up to 3.8 GHz, 12 MB)</p> <p>Intel® Xeon® processor E5-1620 (4 Cores / 8 Threads, 3.60 GHz, up to 3.8 GHz, 10 MB)</p> <p>Intel® Xeon® processor E5-1607 (4 Cores / 8 Threads, 3.00 GHz, 10 MB)</p> <p>Intel® Xeon® processor E5-1603 (4 Cores / 8 Threads, 2.80 GHz, 10 MB)</p> <p>Intel® vPro™ with all Intel® Xeon® processors</p>
<b>Operating systems</b>	
<b>Operating system</b>	<p>Windows® 7 Professional 64-bit</p> <p>Windows® 7 Home Premium 64-bit</p>
<b>Operating system compatible</b>	<p>Windows® XP Professional x64 Edition</p> <p>Windows® XP Professional</p> <p>Linux</p>
<b>Operating system notes</b>	<p>Red Hat® certification starting with version 6.3</p> <p>Certified for Red Hat® Enterprise Linux</p> <p>Certified for SUSE Enterprise Desktop</p> <p>Certified for SUSE Enterprise Server</p> <p>For some configurations third party drivers are currently not available or configuration restrictions may apply.</p> <p>SCU ports are not supported for Windows® XP 32bit (restriction by Intel®). Therefore an additional storage controller (D2607 or D2616) is necessary.</p>
<b>Memory modules</b>	<p>2 GB (1 module(s) 2 GB) DDR3, ECC, 1600 MHz, PC3-12800</p> <p>4 GB (1 module(s) 4 GB) DDR3, ECC, 1600 MHz, PC3-12800</p> <p>8 GB (1 module(s) 8 GB) DDR3, ECC, 1600 MHz, PC3-12800</p>

**Graphics**

Ultra-high-end 3D: NVIDIA® Quadro® 6000, 6 GB, 448 cores, PCIe x16, 1x DVI-I, 2x DisplayPort
Ultra-high-end 3D: NVIDIA® Quadro® K5000, 4 GB, 1536 cores, PCIe x16, Dual Link DVI-I, DVI-D, 2x DisplayPort
Ultra-high-end 3D: NVIDIA® Quadro® 5000, 2.5 GB, 352 cores, PCIe x16, Dual Link DVI-I, 2x DisplayPort
High-end 3D: AMD FirePro™ W7000, 4 GB, 1140 stream processors, PCIe x16, 4 x DisplayPort
High-end 3D: AMD FirePro™ V7900, 2 GB, 1140 stream processors, PCIe x16, 4 x DisplayPort
High-end 3D: NVIDIA® Quadro® K4000, 3 GB, 768 cores, PCIe x16, Dual Link DVI-I, 2x DisplayPort
High-end 3D: NVIDIA® Quadro® 4000, 2 GB, 256 cores, PCIe x16, Dual Link DVI-I, 2x DisplayPort
Midrange 3D: NVIDIA® Quadro® K2000D, 2 GB, 384 cores, PCIe x16, 2x Dual Link DVI-I
Midrange 3D: NVIDIA® Quadro® 2000D, 1 GB, 192 cores, PCIe x16, 2x Dual Link DVI-I
Midrange 3D: NVIDIA® Quadro® K2000, 2 GB, 384 cores, PCIe x16, Dual Link DVI-I, 2x DisplayPort
Midrange 3D: NVIDIA® Quadro® 2000, 1 GB, 192 cores, PCIe x16, Dual Link DVI-I, 2x DisplayPort
Midrange 3D: AMD FirePro™ W5000, 2 GB, 800 stream processors, PCIe x16, Dual Link DVI-I, 2x DisplayPort
Midrange 3D: AMD FirePro™ V5900, 2 GB, 800 stream processors, PCIe x16, Dual Link DVI-I, 2x DisplayPort
Entry 3D: AMD FirePro™ V4900, 1 GB, 480 stream processors, PCIe x16, Dual Link DVI-I, 2x DisplayPort
Entry 3D: NVIDIA® Quadro® K600, 2 GB, 192 cores, PCIe x16, Dual Link DVI-I, DisplayPort
Entry 3D: NVIDIA® Quadro® 600, 1 GB, 96 cores, PCIe x16, Dual Link DVI-I, DisplayPort
Entry 3D: AMD FirePro™ V3900, 1 GB, 480 stream processors, PCIe x16, Dual Link DVI-I, DisplayPort
Entry 3D: NVIDIA® Quadro® 410, 512 MB, 192 cores, PCIe x16, 1x DVI-I, DisplayPort
Professional 2D: NVIDIA® Quadro® NVS 450, 512 MB, 2 x 8 cores, PCIe x16, 4 x DisplayPort
Professional 2D: NVIDIA® Quadro® NVS 300, 512 MB, 16 cores, PCIe Gen2 x16, 2x DVI/VGA
Remote Graphics: CELSIUS RemoteAccess Card, PCIe x1, 2x DVI-I, PCoIP
GPU computing card: NVIDIA® Tesla™ C2075, 6 GB, 448 cores, PCIe x16, 1x DVI-I

**Hard disk drives (internal)**

SSD SATA III, 512 GB, 2.5-inch
SSD SATA III, 256 GB, 2.5-inch
SSD SATA III, 128 GB, 2.5-inch
SSD SATA, 128 GB, 2.5-inch, FDE
HDD SATA III, 10000 rpm, 1000 GB, 2.5-inch, business critical
HDD SATA III, 10000 rpm, 600 GB, 2.5-inch
HDD SATA III, 10000 rpm, 500 GB, 2.5-inch, business critical
HDD SATA III, 10000 rpm, 300 GB, 2.5-inch
HDD SATA III, 7200 rpm, 2000 GB, 3.5-inch
HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch, business critical
HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch
HDD SATA III, 7200 rpm, 500 GB, 3.5-inch, business critical
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, 2000 GB, 3.5-inch, business critical
HDD SAS, 15000 rpm, 300 GB, 2.5-inch
HDD SAS, 10000 rpm, 600 GB, 2.5-inch
HDD SAS, 10000 rpm, 450 GB, 2.5-inch
HDD SAS, 10000 rpm, 300 GB, 2.5-inch

**Hard disk notes**

\*Disk imaging software of the customer must be 4k sector size / advanced format ready  
 One Gigabyte equals one billion bytes, when referring to hard disk drive capacity.  
 24/7 ready (business critical HDDs required)

**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)**

WLAN III, 802.11g/Draft-n (Windows only, dedicated regions only)  
 USB 3.0 PCIe x1  
 Serial Interface FH  
 Gigabit Ethernet PCIe x1, DS  
 Gigabit Ethernet PCIe x1  
 eSATA Interface  
 Dual serial card PCIe x1, powered  
 Dual serial card PCIe x1  
 Dual 1 Gigabit Ethernet PCIe x4  
 Dual 10 Gigabit Ethernet PCIe x8

**Drives**

up to 8x 2.5" HDDs (cold plug) and 1x 2.5" SSD or  
 up to 4x 3.5" HDDs (cold plug) and 1x 2.5" SSD or  
 up to 2x 2.5" and 2x 3.5" HDD (cold plug) and 1x 2.5" SSD

<b>Base unit</b>	CELSIUS M720	CELSIUS M720 power
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**Mainboard**

<b>Mainboard type</b>	D3128
<b>Formfactor</b>	ATX
<b>Chipset</b>	Intel® C602
<b>Processor socket</b>	Socket R
<b>Processor quantity maximum</b>	1
<b>Memory slots</b>	8 DIMM (DDR3) ECC/non-ECC
<b>Supported capacity RAM (max.)</b>	128 GB
<b>Memory notes</b>	128 GB of memory will be offered as soon as 16 GB UDIMM memory modules are available. In configurations with 4 GB and more the visible memory may be reduced to approximately 3.5 GB or less (for 32-bit operating systems) and configurations with 8 GB the visible memory may be reduced to approximately 7.5 GB or less (depending on system configuration). Large memory may lead to long boot times. When using a 32-bit operating system the maximum of memory might be 900 MB.

<b>LAN</b>	Built-in 10/100/1000 MBit/s Intel® 82579 LM
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<b>Audio codec</b>	Conexant CX20642
<b>Audio features</b>	High Definition Audio

**I/O controller on board**

<b>Serial ATA total</b>	6
<b>thereof SATA III</b>	2
<b>SATA RAID support</b>	0, 1, 10, 5
<b>SAS Controller type</b>	optional upgrade to 4 ports, Intel C604
<b>SAS RAID support</b>	0, 1, 10

**Interfaces**

<b>Audio: in (rear)</b>	1
<b>Audio: out (rear)</b>	1
<b>Audio: in</b>	1
<b>Audio: out</b>	1
<b>Internal speakers</b>	1
<b>USB 2.0 total</b>	11
<b>USB 3.0 total</b>	2
<b>USB front</b>	4 (2x USB 3.0)
<b>USB rear</b>	6
<b>USB internal</b>	3, thereof 1 type A
<b>Mouse / Keyboard (PS/2)</b>	1 / 1
<b>Ethernet (RJ-45)</b>	1

**Interfaces**

Interface Module notes	Anytime USB charge functionality
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**Drive bays**

Drive bays total	12
2.5-inch bays	8
3.5-inch internal bays	4
3.5-inch external bays	2
5.25-inch external bays	2

**Slots**

PCI-Express 3.0 x4 (mech. x8)	2 x (312 mm) Full height
PCI-Express 3.0 x16	2 x (312 mm / ) Full height
PCI-Express 2.0 x4 (mech. x16)	1 x (312 mm / ) Full height
PCI (32-bit / 33 MHz)	2 x (312 mm / ) Full height

**Electrical values**

Power consumption note	190 W depending on configuration	250 W depending on configuration
Rated voltage range	100 V - 240 V	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz	50 Hz - 60 Hz
Operating voltage range	100 V - 240 V	100 V - 240 V
Operating line frequency range	50 Hz - 60 Hz	50 Hz - 60 Hz
Max. output of single power supply	500 W up to 90% efficiency	800 W up to 90% efficiency

**Noise for standard configuration (HDD, ODD, FDD)**

Noise emission	According to ISO9296 (LpAm at bystander position)	According to ISO9296 (LpAm at bystander position)
Noise Operation mode 4: High load	20 dB(A)	20 dB(A)
Noise Operation mode 5: Office applications	20 dB(A)	20 dB(A)
Idle mode	20 dB(A)	20 dB(A)
Office mode	20 dB(A)	20 dB(A)
Noise notes	depending on configuration	depending on configuration

**Dimensions / Weight / Environmental**

Dimensions (W x D x H)	186 x 481 x 430 mm
Operating position	Vertical / horizontal
Weight	18 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35 °C
Operating relative humidity	5 - 85 % (relative humidity)

**Compliance**

Product	CELSIUS M720	CELSIUS M720 Power
Model	ETNA_S-D3128	
Germany	GS depending on configuration	
Europe	CE	
USA/Canada	cCSAus FCC Class B	
Global	RoHS (EU & China) Medical EMC standard IEC60601-1-2 in combination with medical kit Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 5.0 WEEE (Waste electrical and electronic equipment) EPEAT® Silver (dedicated regions)	
Japan	VCCI	
Russia	GOST	
South Korea	KCC	

**Compliance**

China	CCC
Taiwan	BSMI
Saudi Arabia	SASO
Compliance link	<a href="http://globalsp.ts.fujitsu.com/sites/certificates/default.aspx">http://globalsp.ts.fujitsu.com/sites/certificates/default.aspx</a> <a href="https://sp.ts.fujitsu.com/sites/certificates/">https://sp.ts.fujitsu.com/sites/certificates/</a>

**Security**

System protection	Kensington Lock support Eye for padlock Intrusion switch Optional: Integrated cabinet lock
Audit proof protection	Write protect option for the Flash EPROM Boot protection for floppy disk / CD drive and write protection for floppy disk drive Dynamic USB security for full hardware USB protection Control of all USB interfaces Trusted platform module (TPM 1.2) EraseDisk
Access protection	User and supervisor BIOS password Optional: Access protection via external SmartCard reader Optional: Access protection via internal SmartCard reader

**Additional Software**

Additional software (preinstalled)	Norton Internet Security (incl. Firewall) 60 days version Don't forget Office.
Additional software (optional)	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) Drivers & Utilities DVD (DUDVD) Windows® 7 and Windows® XP Nero Essentials (burning software)

**Miscellaneous**

	Rack mountable (5U)	Rack mountable (5U)
Spare part availability	5 years	5 years

**Manageability**

Manageability technology	DeskUpdate Driver management iAMT Intel® Active Manageability Technology v7.1 (not activated, not set up)
Manageability software	DeskView Client DeskView Instant BIOS Management DeskView Integration for Symantec Management Platform
DeskView components	Inventory Management BIOS Management Driver Management Security Management Alarm Management
Supported standards	WMI BootP (made4you) PXE WoL (Wake on LAN)
Manageability link	<a href="http://www.fujitsu.com/fts/manageability">http://www.fujitsu.com/fts/manageability</a>

**Input device / components**

	Optical USB tilt wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse Space Explorer USB Keyboard

**Warranty**

Standard Warranty	3 years (depending on country)
Service level	Bring-In / Onsite Service (for countries within region FTS CEMEA&I, for all other countries depending on local regulations, minimum: 3 years material warranty)

**Warranty****Warranty Terms & Conditions** <http://support.ts.fujitsu.com/warranty>**Maintenance and Support Services - the perfect extension****Recommended Service** 9x5, 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

**MicroSaver Slim**

The Fujitsu Kensington MicroSaver slim features the patented T-Bar locking mechanism with carbon tempered steel core cable and an external braided steel sheath. The MicroSaver slim is available with Kensington Master Access. This security solution allows you to manage and maintain a limitless number of locks with a master key.

Order Code:  
S26361-F1650-L200

**Display P24W-6 LED**

Enjoy perfect picture quality, outstanding ergonomics and usability as well as comfortable energy saving solutions of this Fujitsu P Line widescreen display.

Order Code:  
S26361-K1428-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

**SpaceMouse™ Pro**

Using the SpaceMouse™ Pro 3D mouse to navigate 3D models or environments is as simple as holding them in your hand. A slight movement of the controller cap delivers easy and precise control. SpaceMouse™ Pro is a companion to the traditional mouse and is operated with the free hand. Your traditional mouse hand is free to select, create and edit.

Order Code:  
S26381-K459-L100

**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

### Fujitsu OPTIMIZATION Services

In addition to Fujitsu CELSIUS M720, 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/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 CELSIUS M720, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
[www.fujitsu.com/fts/CELSIUS](http://www.fujitsu.com/fts/CELSIUS)

### 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/>



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