FUJITSU

Fujitsu recommends Windows 10 Pro.

Data Sheet
FUJITSU Workstation CELSIUS M770

Bring Your Ideas To Life

At Fujitsu, we are proud of our engineering capabilities which allowed us to optimize the CELSIUS M770 to combat today's professional and technical challenges making it the ideal desktop workstation for computer-aided engineering area as well as demanding media & entertainment applications.

Perfomance you can count on
Spectrum of performance due to a wide range of professional grade features
- 1st Generation Intel® Xeon® Processor W Family
- Support of Windows 10 Pro for Workstations
- Support of up to 256 GB DDR4 2,666 memory
- Fujitsu SSD PCIe card (up to 2 x 1 TB)

Smart Access and Smart Security
Human centric innovation meets security
- Cold-plug Technology: Storage accessible via a front disk tray
- Optional security lock (side door and front access)
- Intrusion detector sensor integrated into the power supply

Smart Usability and Smart Power Supply
Engineering excellence
- Easy serviceability: Cable-free design, green touchpoints
- Digital power supply to support IPMI FRU (data tracking)
- Rack mountable (4U)

Made in Germany
From design to production – an "IT made in Germany" quality in which you can trust
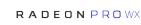- Comprehensive testing in certified in-house laboratories for 24/7 operation
- Intelligent tri-channel thermal management
- Whisper quiet: 20 dB(A)
- Good Design Award 2017 (Japan)

We are (VR) ready
Enjoy a fully immersive and real-time Virtual Reality experience with low latency at high frame rates
- Powered by the NVIDIA® Quadro® P4000, P5000 and P6000 VR-ready graphics cards

Components

Processor	Intel® Xeon® processor W-2155 (10 Cores, 3.30 GHz, up to 4.5 GHz)	
	Intel® Xeon® processor W-2145 (8 Cores, 3.70 GHz, up to 4.5 GHz)	
	Intel® Xeon® processor W-2135 (6 Cores, 3.70 GHz, up to 4.5 GHz)	
	Intel® Xeon® processor W-2133 (6 Cores, 3.60 GHz, up to 3.9 GHz)	
	Intel® Xeon® processor W-2125 (4 Cores, 4.00 GHz, up to 4.5 GHz)	
	Intel® Xeon® processor W-2123 (4 Cores, 3.60 GHz, up to 3.9 GHz)	
	Intel® Xeon® processor W-2104 (4 Cores, 3.20 GHz)	
	Intel® Xeon® processor W-2102 (4 Cores, 2.90 GHz)	
	Intel® vPro™ technology	
Operating systems		
Operating system pre-installed	Windows 10 Pro for Workstations Windows 7 Professional (available through downgrade rights from Windows 10 Pro)	Windows 10 Pro for Workstations Windows 7 Professional (available through downgrade rights from Windows 10 Pro)
Operating system compatible	Linux	Linux
Operating system notes	Certified for Red Hat© Enterprise Linux Certified for SUSE Enterprise Desktop Certified for SUSE Enterprise Server	Certified for Red Hat© Enterprise Linux Certified for SUSE Enterprise Desktop Certified for SUSE Enterprise Server
Memory modules	8 GB (1 module(s) 8 GB) DDR4, registered, ECC, 2,666 MHz	
	16 GB (1 module(s) 16 GB) DDR4, registered, ECC, 2,666 MHz	
	32 GB (1 module(s) 32 GB) DDR4, registered, ECC, 2,666 MHz	
Graphics	Ultra-high-end 3D: NVIDIA® Quadro® P6000, 24 GB, PCIe x16, 1x Dual Link DVI-D, 4 x DisplayPort	
	Ultra-high-end 3D: NVIDIA® Quadro® P5000, 16 GB, PCIe x16, 1x Dual Link DVI-D, 4 x DisplayPort	
	High-end 3D: NVIDIA® Quadro® P4000, 8 GB, PCIe x16, 4 x DisplayPort	
	High-end 3D: AMD Radeon Pro™ WX8100, 8 GB, PCIe x16, 4x miniDP	
	Midrange 3D: NVIDIA® Quadro® P2000, 5 GB, PCIe x16, 4 x DisplayPort	
	Entry 3D: NVIDIA® Quadro® P1000, 4 GB, PCIe x16, 4x miniDP	
	Entry 3D: AMD Radeon Pro™ WX3100, 4 GB, 320 stream processors, PCIe x16, 1x DisplayPort, 2x miniDP	
	Entry 3D: NVIDIA® Quadro® P600, 2 GB, PCIe x16, 4x miniDP	
	Entry 3D: AMD Radeon Pro™ WX2100, 2 GB, 320 stream processors, PCIe x16, 1x DisplayPort, 2x miniDP	
	Entry 3D: NVIDIA® Quadro® P400 , 2 GB, PCIe x16, 3x miniDP	
	Remote Graphics: CELSIUS RemoteAccess Quad Card, PCIe x1, 4x miniDP, PCoIP	
	Remote Graphics: CELSIUS RemoteAccess Dual Card, PCIe x1, 2x miniDP, PCoIP	

Hard disk drives (internal)	SSD PCIe, 1024 GB M.2 NVMe Highend module
	SSD PCIe, 512 GB M.2 NVMe Highend module
	SSD PCIe, 256 GB M.2 NVMe Highend module
	SSD PCIe, 2x 1024 GB M.2 NVMe Highend card
	SSD PCIe, 2x 512 GB M.2 NVMe Highend card
	SSD PCIe, 2x 256 GB M.2 NVMe Highend card
	SSD PCIe, 1x1024 GB M.2 NVMe Highend card
	SSD PCIe, 1x 512 GB M.2 NVMe Highend card
	SSD PCIe, 1x 256 GB M.2 NVMe Highend card
	SSD PCIe, 1024 GB M.2 NVMe module
	SSD PCIe, 512 GB M.2 NVMe module
	SSD PCIe, 256 GB M.2 NVMe module
	SSD PCIe, 2x 1024 GB M.2 NVMe card
	SSD PCIe, 2x 512 GB M.2 NVMe card
	SSD PCIe, 2x 256 GB M.2 NVMe card
	SSD PCIe, 1x 1024 GB M.2 NVMe card
	SSD PCIe, 1x 512 GB M.2 NVMe card
	SSD PCIe, 1x 256 GB M.2 NVMe card
	SSD SATA III, 960 GB High Endurance, 2.5-inch
	SSD SATA III, 480 GB High Endurance, 2.5-inch
	SSD SATA III, 240 GB High Endurance, 2.5-inch
	SSD SATA III, 1024 GB, 2.5-inch
	SSD SATA III, 512 GB, 2.5-inch
	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 512 GB, 2.5-inch, SED
	SSD SATA III, 256 GB, 2.5-inch, SED
	HDD SAS, 10,000 rpm, 1800 GB, 2.5-inch
	HDD SAS, 10,000 rpm, 1200 GB, 2.5-inch
	HDD SAS, 10,000 rpm, 900 GB, 2.5-inch
	HDD SAS, 10,000 rpm, 600 GB, 2.5-inch
	HDD SATA III, 7,200 rpm, 6,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 4,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 2,000 GB, 2.5-inch, business critical
	HDD SATA III, 7,200 rpm, 1,000 GB, 2.5-inch, business critical
	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
Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. 24/7 ready (Business Critical HDDs or SAS HDDs or High Endurance SSDs required) Up to 20 GB of HDD space is reserved for system recovery SSHD (Solid State Hard Disk, Hybrid drive) SED (Self-Encrypting Drive) SSD (Solid State Disk)
Drives (optional)	BD Triple Writer SATA ultra slim (tray)
	DVD-ROM
	DVD Super Multi
	DVD Super Multi ultra slim (tray)
	MultiCard Reader 24in1 USB 2.0 3.5"

SCSI / SAS Controller	LSI RAID Ctrl SAS 1GB (D3216) RAID 5/6 Ctrl. 12 Gbit/s 8 ports int.	
	LSI RAID Ctrl SAS (D3327) RAID 0/1 Ctrl. 12 Gbit/s 8 ports int.	

Interface add on cards/components (optional)		
	WLAN 802.11ac (2x2) PCIe x1 FH and BT 4.1 (dedicated regions only, up to BT 4.2 depending on OS version)	
	WLAN 802.11ac (2x2) PCIe x1 FH (dedicated regions only)	
	PLAN EP X550-T2 2x10GBASE-T	
	Gigabit Ethernet PCIe x1, DS	
	eSATA Interface	
	Dual serial card PCIe x1	

Base unit	CELSIUS M770 (S26361-K1507-V115)	CELSIUS M770power (S26361-K1507-V415)

Mainboard		
Mainboard type	D3498	
Formfactor	extended ATX	
Chipset	Intel® C422	
Processor socket	Socket R4	
Processor quantity maximum	1	
Supported capacity RAM (max.)	512 GB	
Memory slots	8 DIMM (DDR4) ECC	
Memory frequency	2,666 MHz	
Memory notes	Quad channel support. For quad channel performance, a minimum of 4 memory modules have to be ordered. Capacity per channel has to be the same. DDR4 2,400 MHz will be clocked with 2,133 MHz in combination with 6th generation Intel® processor	
LAN	10/100/1,000 MBit/s Intel® I219LM	
BIOS version	AMI Aptio V	
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	

I/O controller on board		
Serial ATA total	8	
thereof SATA III	8	
thereof eSATA		
Controller functions	Serial ATA III (6 Gbit) NCQ AHCI RAID 0/1/5/10	

Interfaces		
Audio: in (rear)	1	
Audio: out (rear)	1	
Audio: in	1	
Audio: out	1	
Internal speakers	1	
USB 2.0 total	2 optional via front panel	
USB 3.1 Gen1 (USB 3.0) total	6	
USB 3.1 Gen2 total	2 optional via front panel	
USB front	2x USB 2.0; 2x USB 3.1 (Gen1); optional: 2x USB 3.1 Type-C (Gen2) instead of 2x USB 2.0	
USB rear	6	
USB internal	3, thereof 1 type A	

Interfaces

Ethernet (RJ-45)	1
eSATA	1 (optional)
Interface Module notes	Anytime USB charge functionality
Input device / components	

Drive bays

Drive bays total	7
2.5-inch internal bays	4
3.5-inch internal bays	4
3.5-inch external bays	1
5.25-inch external bays	1
Drive bay notes	Total 4x 3.5-inch/2.5-inch Disk Tray front accessible (with Cold-plug access)
M.2-2280	1 x on mainboard (for PCIe SSD modules)

Slots

PCI-Express 3.0 x1	2 x (340 mm / 13.39 inch) Full height
PCI-Express 3.0 x4	2 x (340 mm / 13.39 inch) Full height
PCI-Express 3.0 x8	1 x (200 mm) Full height
PCI-Express 3.0 x16	2 x (340 mm / 13.39 inch) Full height

Electrical values

Power consumption note	225 W depending on configuration	400 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	90 V - 264 V	90 V - 264 V
Operating line frequency range	47 Hz - 63 Hz	47 Hz - 63 Hz
Max. output of single power supply	450 W up to 90% efficiency	800 W up to 90% efficiency
Power factor correction/active power	active	active
Power supply output	2 graphics power rails (on Mainboard)	2 graphics power rails (on Mainboard)

Noise for standard configuration (HDD, ODD)

Related Processors for noise	Intel® Xeon® Processor W Family W-2125	Intel® Xeon® Processor W Family W-2125
Standard noise emission	According to ISO 7779:2010, ECMA-74	According to ISO 7779:2010, ECMA-74
Standard noise notes / description	A-weighted sound power level Lwad (in B) / Workplace related A-weighted sound pressure level LpAm (in dB(A))	A-weighted sound power level Lwad (in B) / Workplace related A-weighted sound pressure level LpAm (in dB(A))
Standard noise operation mode: CPU 50% load	3.7 B / 21 dB(A) Bystander position	3.7 B / 21 dB(A) Bystander position
Standard noise operation mode: CPU 90% load	3.7 B / 21 dB(A) Bystander position	3.7 B / 21 dB(A) Bystander position
Standard noise operation mode: HDD load	3.8 B / 22 dB(A) Bystander position	3.8 B / 22 dB(A) Bystander position
Standard noise operation mode: Idle mode	3.7 B / 21 dB(A) Bystander position	3.7 B / 21 dB(A) Bystander position
Standard noise operation mode: ODD load	4.5 B / 27 dB(A) Bystander position	4.5 B / 27 dB(A) Bystander position
Standard noise operation mode: Office applications 2.0	3.7 B / 21 dB(A) Bystander position	3.7 B / 21 dB(A) Bystander position

Dimensions / Weight / Environmental

Dimensions (W x D x H)	180 x 476 x 433 mm
	7.1 x 18.7 x 17.1 inch
Operating position	Vertical / horizontal
Weight	approx. 18 kg
Weight (lbs)	approx. 39.67 lbs
Weight notes	Actual weight may vary depending on configuration

Dimensions / Weight / Environmental

Operating ambient temperature	10 - 35 ℃ (50 - 95 ℉)
Operating relative humidity	5 - 85 % (relative humidity)

Compliance

Product	CELSIUS M770	CELSIUS M770power
Model	CM17	
Germany	GS depending on configuration	
Europe	CE	
USA/Canada	FCC Class B cCSAus	
Global	RoHS (EU & China) Microsoft Operating Systems (HCT / HCL entry / WHQL) WEEE (Waste electrical and electronic equipment) EPEAT® Silver (dedicated regions) ENERGY STAR® 6.1 in progress	
China	CCC (planned) TPM 2.0 for China (optional)	
Compliance notes	Product Name maybe followed by suffixes	
Compliance link	https://sp.ts.fujitsu.com/sites/certificates	

Additional Software

Additional software (preinstalled)	Workplace Protect (secure authentication solution) McAfee Multi Access Security (anti-virus and internet security software; 60 days trial version) 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

Security

Physical Security	Kensington Lock support Eye for padlock Intrusion switch Integrated cabinet lock (optional)	Kensington Lock support Eye for padlock Intrusion switch Integrated cabinet lock (optional)
System and BIOS Security	Embedded security (TPM 2.0) EraseDisk (optional) Boot sector virus protection Write protect option for the Flash EPROM Control of all USB interfaces External USB ports can be disabled separately Control of external interfaces	Embedded security (TPM 2.0) EraseDisk (optional) Boot sector virus protection Write protect option for the Flash EPROM Control of all USB interfaces External USB ports can be disabled separately 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) Workplace Protect (secure authentication solution)	User and supervisor BIOS password Hard disk password Access protection via external SmartCard reader (optional) Access protection via internal SmartCard reader (optional) Workplace Protect (secure authentication solution)
Workplace Embedded Tools	Auto BIOS Update via Fujitsu Server Auto BIOS Update via customer server (optional) Easy PC Protection (optional)	Auto BIOS Update via Fujitsu Server Auto BIOS Update via customer server (optional) Easy PC Protection (optional)

Manageability

Manageability technology	DeskUpdate Driver management iAMT 9.0 (depending on CPU) PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) WoL (Wake on LAN)

Manageability

Manageability software	DeskView Client DeskView Instant BIOS Management	
DeskView components	Inventory Management BIOS Management Driver Management Security Management Alarm Management	
Supported standards	WMI (Windows Management Instrumentation) PXE (Preboot Execution Environment) DMI (Desktop Management Interface) SMBIOS (System Management BIOS) WBEM (Web Based Enterprise Management) CIM (Common Information Model)	
Manageability link	http://www.fujitsu.com/fts/manageability	

Miscellaneous

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

Packaging information

Packaging notes	printed user documentation is bleached in chlorine free process	printed user documentation is bleached in chlorine free process

Warranty

Warranty period	3 years (depending on country)
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

Product Related 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

More information

Fujitsu OPTIMIZATION Services

In addition to the FUJITSU Workstation CELSIUS M770, 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/

More information

Learn more about the FUJITSU Workstation CELSIUS M770, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
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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