Fujitsu recommends Windows 11 Pro.

Data Sheet
FUJITSU Workstation CELSIUS W5010

Mini CAD Powerhouse

If you thought you would need to sacrifice performance, expandability, price or energy efficiency in a microtower design – think again. The FUJITSU CELSIUS W5010 desktop workstation goes far and beyond with its innovative design, featuring maximum graphic performance and dual slot full-length graphics card support. With its best-in-class low-noise emissions, it enables a quiet and efficient working environment.





No compromise in terms of performance, expandability and price
Designed with CAD customers in mind: performance, reliability and flexibility - at an affordable price

- Support of Windows 10 Pro for Workstations
- Choose between the latest 10th generation Intel® Core™ processors or the powerful Intel® Xeon® W-1200 processors
- Up to 128 GB DDR4 2,933 MHz memory (incl. ECC)
- Dual slot full-length graphics cards (up to NVIDIA RTX™ A5000)
- Broad choice of processors and professional graphics cards
- Support of 24/7 operation with reliable high-endurance and business critical drives

VR-ready desktop workstation
Enjoy a fully immersive and real-time VR experience

- 21-liter desktop microtower workstation
- Powered by professional VR-ready graphics from AMD and NVIDIA
- Optimized thermal management and cooling solutions
- Enjoy a silent workplace environment thanks to low noise emission

The smartest microtower workstation
Ultimate usability, reliability and ease of use

- Clean, clutter-free interiors with less cables and cold-plug technology for HDDs inside
- Tool-less access to components for easy access and upgrade
- High-speed data transfer with SSD NVMe
- Supports massive amount of data storage with 4 storage slots

Multiple application scenarios
Ideal for 3D CAD, CAE, design, multimedia, visualization and manufacturing

- Supports graphics-accelerated applications
- Advanced CPUs in combination with flash storage for best application performance
- Up to 8 monitors with the NVIDIA® Mosaic™ technology

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Components

Processor	Intel® Xeon® processor W-1290P (10 Cores / 20 Threads, 3.70 GHz, up to 5.2 GHz, Intel® UHD Graphics P630)
	Intel® Xeon® processor W-1290 (10 Cores / 20 Threads, 3.20 GHz, up to 5.1 GHz, Intel® UHD Graphics P630)
	Intel® Xeon® processor W-1270P (8 Cores / 16 Threads, 3.80 GHz, up to 5.1 GHz, Intel® UHD Graphics P630)
	Intel® Xeon® processor W-1270 (8 Cores / 16 Threads, 3.40 GHz, up to 5.0 GHz, Intel® UHD Graphics P630)
	Intel® Xeon® processor W-1250P (6 Cores / 12 Threads, 4.10 GHz, up to 4.8 GHz, Intel® UHD Graphics P630)
	Intel® Xeon® processor W-1250 (6 Cores / 12 Threads, 3.30 GHz, up to 4.7 GHz, Intel® UHD Graphics P630)
	Intel® Core™ i9-10900 processor (10 Cores / 20 Threads, 2.80 GHz, 20 MB, Intel® UHD Graphics 630) **
	Intel® Core™ i9-10900K processor (10 Cores / 20 Threads, 3.70 GHz, 20 MB, Intel® UHD Graphics 630) **
	Intel® Core™ i7-10700 processor (8 Cores / 16 Threads, 2.90 GHz, 16 MB, Intel® UHD Graphics 630) **
	Intel® Core™ i7-10700K processor (8 Cores / 16 Threads, 3.80 GHz, 16 MB, Intel® UHD Graphics 630) **
	Intel® Core™ i5-10600 processor (6 Cores / 12 Threads, 3.30 GHz, 12 MB, Intel® UHD Graphics 630) *
	Intel® Core™ i5-10500 processor (6 Cores / 12 Threads, 3.10 GHz, 12 MB, Intel® UHD Graphics 630) *
	Intel® Core™ i3-10100 processor (4 Cores / 8 Threads, 3.60 GHz, 6 MB, Intel® UHD Graphics 630) *
	Intel® vPro® Platform with all Intel® Xeon® processors Intel® vPro® Platform Logo with Intel® Core™ i5, Intel® Core™ i7 and Intel® Core™ i9 processors *with Intel® Turbo Boost Technology 2.0 (clock speed and performance will vary depending on workload and other variables)
Operating systems	
Operating system pre-installed	Windows 11 Pro. Fujitsu recommends Windows 11 Pro for business. Windows 11 Home Windows 10 Pro
Operating system compatible	FREE Upgrade to Windows 11. Timing varies by device. Certain features require specific hardware (see see aka.ms/windows11-spec)
Operating system notes	Certified for Red Hat© Enterprise Linux Certified for SUSE Enterprise Desktop Certified for SUSE Enterprise Server After the end of the product life Fujitsu will continue to test and support all upcoming Windows releases for a period of maximum 5 years, depending on the available extension of hardware services through Fujitsu Warranty top ups. For details please see "Fujitsu Service Statement for Windows General Availability Channel" at https://support.ts.fujitsu.com/IndexProdSupport.asp?lng=com&OpenTab=
Memory modules	4 GB (1 module(s) 4 GB) DDR4, unbuffered, non-ECC, 2,933 MT/s, UDIMM
	8 GB (1 module(s) 8 GB) DDR4, unbuffered, ECC, 2,933 MT/s, UDIMM
	8 GB (1 module(s) 8 GB) DDR4, unbuffered, non-ECC, 2,933 MT/s, UDIMM
	16 GB (1 module(s) 16 GB) DDR4, unbuffered, ECC, 2,933 MT/s, UDIMM
	16 GB (1 module(s) 16 GB) DDR4, unbuffered, non-ECC, 2,933 MT/s, UDIMM
	32 GB (1 module(s) 32 GB) DDR4, unbuffered, ECC, 2,933 MT/s, UDIMM
	32 GB (1 module(s) 32 GB) DDR4, unbuffered, non-ECC, 2,933 MT/s, UDIMM
Graphics	Midrange 3D: NVIDIA RTX™ A2000, 6 GB, PCIe x16, 4 x DisplayPort
	Entry 3D: AMD Radeon™ Pro WX 3200, 4 GB, PCIe x16, 4 x miniDP
	Ultra-high-end 3D: NVIDIA® Quadro RTX™ 5000, 16 GB, PCIe x16, 4 x DisplayPort, 1 x Virtual Link
	High-end 3D: NVIDIA® Quadro RTX™ 4000, 8 GB, PCIe x16, 3 x DisplayPort, 1 x Virtual Link
	Entry 3D: NVIDIA® T1000, 4 GB, PCIe x16, 4 x miniDP
	Entry 3D: NVIDIA® Quadro® P1000, 4 GB, PCIe x16, 4 x miniDP
	Entry 3D: NVIDIA® T600, 4 GB, PCIe x16, 4 x miniDP
	Entry 3D: NVIDIA® Quadro® P620, 2 GB, PCIe x16, 4 x miniDP
	Entry 3D: NVIDIA® Quadro® P400 , 2 GB, PCIe x16, 3 x miniDP
	Entry 3D: NVIDIA® T400, 2 GB, PCIe x16, 3 x miniDP
	Others: MiniDP to DP Adapter Cable
Mass storage 2.5 inch size	SSD SATA III, 512 GB, 2.5-inch
	SSD SATA III, 256 GB, 2.5-inch

Mass Storage M.2 technology	SSD PCIe, 2048 GB M.2 NVMe module on carrier card
	SSD PCIe, 2048 GB M.2 NVMe module
	SSD PCIe, 1024 GB M.2 NVMe module, SED
	SSD PCIe, 1024 GB M.2 NVMe module on carrier card
	SSD PCIe, 1024 GB M.2 NVMe module
	SSD PCIe, 512 GB M.2 NVMe module, SED
	SSD PCIe, 512 GB M.2 NVMe module on carrier card
	SSD PCIe, 512 GB M.2 NVMe module
	SSD PCIe, 256 GB M.2 NVMe module, SED
	SSD PCIe, 256 GB M.2 NVMe module on carrier card
	SSD PCIe, 256 GB M.2 NVMe module
	RAID1 Bundle 2x512GB M.2 NVMe Highend
	RAID1 Bundle 2x256GB M.2 NVMe Highend
Mass storage 3.5 inch size	HDD SATA III, 7,200 rpm, 8000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 4000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 2000 GB, 3.5-inch, business critical
Mass storage 2.5 inch size	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
	SSD SATA III, 960 GB High Endurance, 1.5DWDP, 2.5-inch
	SSD SATA III, 480 GB High Endurance, 1.5DWDP, 2.5-inch
	SSD SATA III, 240 GB High Endurance, 1DWDP, 2.5-inch
Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. SSD (Solid State Disk) SED (Self-Encrypting Drive)
Drives (optional)	BD Triple Writer SATA ultra slim (tray)
	DVD Super Multi
	DVD Super Multi ultra slim (tray)
	MultiCard Reader 15in1 USB 3.0 3.5"
Interface add on cards/components (optional)	
	Intel 2x1Gb Ethernet Adapter I350-T2
	Dual serial card PCIe x1
Drives	SD-Card 4.0 reader in front

Base unit

Base unit	CELSIUS W5010
Mainboard	
Mainboard type	D3817
Formfactor	proprietary
Chipset	Intel® W480
Processor socket	LGA 1200
Processor quantity maximum	1
Supported capacity RAM (max.)	128 GB
Memory slots	4 DIMM (DDR4) ECC/non-ECC
Memory frequency	2,933 MT/s
Memory notes	Dual channel support For dual channel performance, 2 memory modules have to be ordered. Capacity per channel has to be the same. 2933 MHz may be clocked down to 2400MHz depending on processor and memory configuration
LAN	10/100/1,000 MBit/s Intel® I219LM

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Mainboard	
Integrated WLAN	optional; Intel® Wi-Fi 6 AX200 (2x2/160) Gig+ and Bluetooth 5.1
BIOS version	AMI Aptio V UEFI Specification 2.6
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)
Audio type	On board
Audio codec	Realtek ALC623
Audio features	Internal speaker supports audio playback (optional), High Definition audio, 5.1 surround sound
I/O controller on board	
Serial ATA total	6
thereof SATA III	6
Controller functions	Serial ATA III (6 Gbit) NCQ AHCI RAID 0/1/5/10
Interfaces	
Audio: line-in	1
Audio: line-out	1
Front audio: headset	1
Internal speakers	1
USB 2.0 total	4
USB 3.2 Gen1 (5 Gbps) total	3
USB 3.2 Gen2 (10 Gbps) total	5 and 1 optional
USB front	2x USB 2.0; 2x USB 3.2 Gen 2; 1x USB 3.2 Gen 2 Type-C (supports up to 15W)
USB rear	2x USB 2.0; 2x USB 3.2 Gen 1; 2x USB 3.2 Gen 2; optional: additional 1x USB 3.2 Gen 2 Type-C (supports DisplayPort 1.4 and power delivery (PD) up to 15W or 60W (occupies PCIe x16 slot)
USB internal	1x USB 2.0 Type A
VGA	optional
DisplayPort	2
DVI	optional (DVI-D)
Serial (RS-232)	optional: serial port (9pin, 16 byte FIFO, 16550 compatible)
Mouse / Keyboard (PS/2)	2 (optional)
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	
Input devices (optional)	Keyboard Mouse
Drive bays	
Drive bays total	6
2.5-inch internal bays	1
3.5-inch internal bays	2
3.5-inch external bays	1
5.25-inch external bays	2
Drive bay notes	5,25" bays: one bay in HH format, one bay for slim optical disc drive only; internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);
M.2-2280	2 x on mainboard for SSD NVMe (PCIe 3.0 x4; up to 32Gbit/s) thereof 1x supporting M.2-2280 only thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)
Slots	
PCI-Express 3.0 x1	2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height

Slots	
PCI-Express 3.0 x4 (mech. x16)	1 x (270 mm / 10.63 inch)
PCI-Express 3.0 x16	1 x (270 mm / 10.63 inch) Full height
Graphics on board	
Graphics brand name	Intel® UHD Graphics P630, Intel® UHD Graphics 630
Shared video memory	Up to half size of total system memory
TFT resolution (VGA)	Up to 1,920 x 1,080 pixel
TFT resolution (DVI)	up to 1,920 x 1,200 pixel
TFT resolution (DisplayPort)	Up to 4,096 x 2,304 pixel
TFT resolution (HDMI)	Up to 4,096 x 2,160 pixel (30 Hz)
Graphics features	Support for up to three independent displays DirectX® 12 HDCP support OpenCL™ 2.1 OpenGL® 4.5 For multi monitoring mode, graphics card and integrated graphics run in parallel DisplayPort interface supports Ver. 1.4 incl. Multi-Stream Digital audio formats are supported, including Dolby Digital Plus (7.1 channels) DVI-D interface supports audio output if connected to the HDMI interface of a display via suitable adapter cables (not included) Additional I/O connectors configurable, choice of DVI-D HDMI™ VGA USB Type-C™ (supports DisplayPort™ 1.4 and power delivery (PD) up to 15W) USB Type-C™ (supports DisplayPort™ 1.4 and power delivery (PD) up to 60W. Occupies PCIe x16 slot)
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 in % at 10% / 20% / 50% / 100% load 80Plus PLATINUM 680W: for 230V ; 89/92/93/92 for 115V ; 88/91/92/90 80Plus PLATINUM 300W: for 230V ; 88/92/94/93 for 115V ; 87/91/92/91
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	300W or 680 W (depending on PSU)
Power factor correction/active power	active
Power supply output	Power supply PLATINUM 680W: 2 graphics power rails (6 pin- and 8 pin connectors)
Noise emission	
Related Processors for noise	Intel® Xeon™ W-1250 processor
Standard noise emission	NVIDIA® Quadro® P1000 16 GB, ODD, Windows 10 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))
Standard noise operation mode: CPU 50% load	for 300W PLATINUM PSU: 3.2 B / 18 dB(A) Bystander; 23 dB(A) Operator position (SSD M.2)
Standard noise operation mode: HDD load	for 300W PLATINUM PSU: 3.2 B / 18 dB(A) Bystander; 23 dB(A) Operator position (SSD M.2)

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Noise emission	
Standard noise operation mode: Idle mode	for 300W PLATINUM PSU: 3.2 B / 18 dB(A) Bystander; 22 dB(A) Operator position (SSD M.2)
Standard noise operation mode: ODD load	for 300W PLATINUM PSU: 4.9 B / 36 dB(A) Bystander; 42 dB(A) Operator position (SSD M.2)
Standard noise operation mode: Office applications 2.0	for 300W PLATINUM PSU: 3.2 B / 18 dB(A) Bystander; 22 dB(A) Operator position (SSD M.2)
Dimensions / Weight / Environmental	
Dimensions (W x D x H)	180 x 304 x 375 mm
	7.09 x 11.97 x 14.76 inch
Operating position	Vertical
Weight	approx. 10 kg
Weight (lbs)	approx. 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	CELSIUS W5010
Model	MI7W
Germany	GS TÜV NRTL
Europe	CE
USA/Canada	FCC Class B cTUVus
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) Microsoft Secured-core PC certification (for selected configurations) ENERGY STAR® 8.0, depending on configuration TCO Certified 8.0 (depending on configuration) EPEAT® Silver (dedicated regions), depending on configuration ENERGY STAR® compliance is an order option. Non ENERGY STAR/ TCO/ EPEAT compliant products are marked at brand name with additional suffix "n".
China	CCC (planned) CCC (depending on configuration) CEL (Chinese energy label) TPM 2.0 for China (optional)
Compliance link	https://sp.ts.fujitsu.com/sites/certificates
Additional Software	
Additional software (preinstalled)	McAfee® LiveSafe™ (provides award-winning antivirus protection for your PC and much more. 30 days trial pre-installed) Microsoft Office (1 month trial for new Microsoft® Office 365 customers. Buy 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 Microsoft® Office Professional 2021 Microsoft® Office Home and Business 2021 (Need to buy license to activate the pre-installed Microsoft Office. Purchase and activation only in the region in which it was acquired.)
Security	
Physical Security	Kensington Lock support Eye for padlock Integrated cabinet lock (optional) Cable Cover (optional; covers and secures the ports and cables on rear side)

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Security	
System and BIOS Security	Embedded security (TPM 2.0) EraseDisk Credential Guard Ready and Device Guard Capable (requires 8 GB or more system RAM and SSD PCIe NVME) Modern Standby ready (for configurations with NVMe SSD and w/o PCIe cards) 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) AuthConductor Client Basic (secure authentication solution)
Manageability	
Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) WoL (Wake on LAN) iAMT 14.0 (depending on processor)
Manageability software	DeskView Client DeskView Instant BIOS Management
DeskView components	BIOS Management incl. Security Inventory Management Driver 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
Miscellaneous	
	Keyboard on (Special Fujitsu keyboard required) Keyboard on with one key (KBPX Eco, KB521) Keyboard on with 2 keys (CTRL+CTRL) with PS2 or special USB keyboards Keyboard on with any key (USB) Thermal management Extended lifetime 24/7 (limited configurations)
Packaging dimension (mm)	
Packaging notes	printed user documentation is bleached in chlorine free process; Bulk packagaging for projects (optional)
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://www.fujitsu.com/warranty
Digital bug fixes	Subject to availability and following their generic release for the product, bug fixes and function-preserving patches for product-related software (firmware) can be downloaded from the technical support at: https://support.ts.fujitsu.com/ free of charge by entering the respective product serial number. For application software supplied together with the product, please directly refer to the support websites of the respective software manufacturer.
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/emeia/products/product-support-services/

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Recommended Accessories

Blue LED Mouse M960		The Blue LED Mouse M960 comes in a slim design with proven Fujitsu engineering quality. The track on glass Blue LED sensor enables ultra precise switchable resolution at 1,000, 1,600 and 2,000 dpi. Blue LED Mouse M960 makes your life easier because it's tailor-made for right handed users. It just feels great in your hand.	Order Code: S26381-K470-L100
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 KB955		The KB955 is a very flat keyboard with extra low keys and spill-resistant protection. The elegant design and top-quality construction makes the KB955 the ideal input device for any PC or Notebook user. If you accidently spill some water or coffee onto the keyboard, this special construction helps the liquid to flow away.	S26381-K955-L4** (**: Country specific variation)

More information

Fujitsu products, solutions & services

In addition to the FUJITSU Workstation CELSIUS W5010, 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 W5010, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/emeia/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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