

Fujitsu recommends Windows 10 Pro for business

Datasheet

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

- Choose between the latest 10th Gen Intel® Core™ processors or the powerful Intel® Xeon® W-1200 processors
- Up to 128 GB DDR4 2,933 MHz memory (incl. ECC)
- Full-length graphics cards (up to NVIDIA® Quadro RTX™ 4000)
- 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 liters desktop microtower workstation
- Powered by professional VR-ready graphics from 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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Specification

Processor	<p>Intel® Xeon® processor W-1270 (8 Cores / 16 Threads, 3.40 GHz, 16 MB, Intel® UHD Graphics P630)*</p> <p>Intel® Xeon® processor W-1250 (6 Cores / 12 Threads, 3.30 GHz, 12 MB, Intel® UHD Graphics P630)*</p> <p>Intel® Core™ i7-10700 processor (8 Cores / 16 Threads, 2.90 GHz, 16 MB, Intel® UHD Graphics 630) **</p> <p>Intel® Core™ i5-10500 processor (6 Cores / 12 Threads, 3.10 GHz, 12 MB, Intel® UHD Graphics 630) *</p> <p>Intel® Core™ i3-10100 processor (4 Cores / 8 Threads, 3.60 GHz, 6 MB, Intel® UHD Graphics 630) *</p> <p>Intel® vPro® Platform Logo with all Intel® Xeon® processors</p> <p>Intel® vPro® Platform Logo with Intel® Core™ i5-10500 and Intel® Core™ i7-10700</p> <p>*with Intel® Turbo Boost Technology 2.0 (clock speed and performance will vary depending on workload and other variables)</p> <p>**with Intel® Turbo Boost Max Technology 3.0 (clock speed and performance will vary depending on workload and other variables)</p>
Operating systems	
Operating system pre-installed	<p>Windows 10 Pro for Workstations</p> <p>Windows 10 Pro. Fujitsu recommends Windows 10 Pro for business.</p>
Memory modules	<p>32 GB (1 module(s) 32 GB) DDR4, unbuffered, ECC, 2,933 MT/s, UDIMM</p> <p>32 GB (1 module(s) 32 GB) DDR4, unbuffered, non-ECC, 2,933 MT/s, UDIMM</p> <p>16 GB (1 module(s) 16 GB) DDR4, unbuffered, ECC, 2,933 MT/s, UDIMM</p> <p>16 GB (1 module(s) 16 GB) DDR4, unbuffered, non-ECC, 2,933 MT/s, UDIMM</p> <p>8 GB (1 module(s) 8 GB) DDR4, unbuffered, ECC, 2,933 MT/s, UDIMM</p> <p>8 GB (1 module(s) 8 GB) DDR4, unbuffered, non-ECC, 2,933 MT/s, UDIMM</p>
Mass storage M.2 technology	<p>SSD PCIe 1,024 GB M.2 NVMe</p> <p>SSD PCIe 1,024 GB M.2 NVMe SED</p> <p>SSD PCIe 512 GB M.2 NVMe</p> <p>SSD PCIe 512 GB M.2 NVMe SED</p> <p>SSD PCIe 256 GB M.2 NVMe</p> <p>SSD PCIe 256 GB M.2 NVMe SED</p>
Mass storage 3.5 inch size	<p>HDD SATA III 2,000 GB 7.2k (3.5 inch)</p> <p>HDD SATA III 1,000 GB 7.2k (3.5 inch) Business-critical</p> <p>HDD SATA III 1,000 GB 7.2k (3.5 inch)</p>
Hard disk notes	<p>One Gigabyte equals one billion bytes, when referring to hard disk drive capacity.</p> <p>SSD (Solid State Disk)</p> <p>SED (Self-Encrypting Drive)</p>
Graphics	<p>NVIDIA® Quadro® RTX 4000, 8 GB, PCIe x16, 3 x DisplayPort, 1 x Virtual Link</p> <p>Others: MiniDP to DP Adapter Cable</p>
Drives (optional)	DVD Super Multi ultra slim (tray)
Interface add on cards / Components (optional)	<p>Parallel Interface FH</p> <p>1st Serial port (active)</p> <p>PS/2 interface (keyboard and mouse)</p>
Drives	SD-Card 4.0 reader in front

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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 must be ordered. Capacity per channel must be the same. 2,933 MHz may be clocked down to 2,400 MHz depending on processor, memory configuration, and memory type.
LAN	10/100/1,000 Mbit/s Intel® I219LM
Integrated WLAN	Intel® Wi-Fi 6 AX200 (2x2/160) Gig+ and Bluetooth 5.1 (optional)
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	5 (1 Internal)
USB 3.2 Gen 1x1 (5 Gbps) total	2
USB 3.2 Gen 2x1 (10 Gbps) total	5 and 1 (optional)
USB front	2x USB 2.0 2x USB 3.2 Gen 2x1 1x USB 3.2 Gen 2x1 Type-C (supports up to 15 W)
USB rear	2x USB 2.0 2x USB 3.2 Gen 1x1 2x USB 3.2 Gen 2x1 Additional 1x USB 3.2 Gen 2x1 Type-C (supports DisplayPort 1.4 and power delivery (PD) up to 15 W or 60 W (occupies PCIe x16 slot) (optional)
USB internal	1x USB 2.0 Type A
VGA	Optional
DisplayPort	2
DVI	DVI-D (optional)
Serial (RS-232)	Serial port (optional (9 pin, 16 byte FIFO, 16550 compatible))
Mouse / keyboard (PS/2)	2 (optional)
Ethernet (RJ-45)	1
Parallel	1 (optional (25 pin with EPP and ECP))
eSATA	1 (optional)
Interface module notes	Anytime USB charge functionality

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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 inch bays: one bay in HH format, one bay for slim optical disc drive only; Internal 3.5 inch bays: 3.5 inch drive (screwless) or 2.5 inch drive (screws); M.2-2280 1 x on mainboard for SSD NVMe (PCIe 3.0 x4; up to 32 Gbit/s)
Slots	
PCI-Express 3.0 x1	2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) full height
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 1,080 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 <ul style="list-style-type: none"> ▪ DVI-D ▪ HDMI® ▪ VGA
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 60 Hz
Electrical values	
Power efficiency note	Power supply efficiency in % at 10% / 20% / 50% / 100% load 80Plus PLATINUM 680 W: For 230 V; 89 / 92 / 93 / 92 For 115 V; 88 / 91 / 92 / 90 80Plus PLATINUM 300 W: For 230 V; 88 / 92 / 94 / 93 For 115 V; 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	680 W
Power factor correction / active power	Active
Power supply output	2 graphics power rails (6 pin and 8 pin connectors)

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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 L _{wad} (in B) / Workplace related A-weighted sound pressure level L _{pAm} (in dB(A))
Standard noise operation mode: CPU 50% load	For 300 W PLATINUM PSU: 2.8 B / 18 dB(A) Bystander; 23 dB(A) Operator position (SSD M.2)
Standard noise operation mode: HDD mode	For 300 W PLATINUM PSU: 2.8 B / 18 dB(A) Bystander; 23 dB(A) Operator position (SSD M.2)
Standard noise operation mode: Idle mode	For 300 W PLATINUM PSU: 2.8 B / 18 dB(A) Bystander; 22 dB(A) Operator position (SSD M.2)
Standard noise operation mode: ODD load	For 300 W PLATINUM PSU: 4.5 B / 36 dB(A) Bystander; 42 dB(A) Operator position (SSD M.2)
Standard noise operation mode: Office Applications 2.0	For 300 W PLATINUM PSU: 2.8 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	M17W
Global	RoHS (Restriction of hazardous substances) Microsoft Operating Systems (HCT / HCL entry / WHQL) Microsoft Secured-core PC certification (for selected configurations) ENERGY STAR® 8.0, 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 (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)	Adobe® Reader® (pdf reader) McAfee® LiveSafe™ (provides award-winning antivirus protection for your PC and much more. 30 days trial pre-installed) Microsoft® Office 30 days trial
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink Power2Go DVD (playback software for DVD) Nero Essentials XL Microsoft® Office Professional 2019 Microsoft® Office Home and Business 2019 (A Microsoft Account is required to activate each copy of these products. For purchase and activation only in the region in which it was acquired.)
Manageability	
Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) WoL (Wake on LAN) iAMT 14.0 (depending on processor)
Manageability software	DeskView Client DeskView Instant BIOS Management

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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)
Security	
Physical security	Kensington Lock support Eye for padlock
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)
Miscellaneous	
	Keyboard on with any key (USB) Thermal management
Packaging information	
Packaging dimension (mm)	495 x 300 x 490 mm
Packaging dimension (inch)	19.49 x 11.81 x 19.29 inch
Material - weight (g) carton	1224 g
Material - weight (lbs) carton	2.7 lbs
Packaging notes	Bulk packaging for projects (optional)
Warranty	
Warranty period	Recommended 3 years (depending on country)
Warranty type	Bring-in / onsite service (depending on local regulations)
Warranty terms & conditions	www.fujitsu.com/hk/microsite/warranty/
Product support services - the perfect extension	
Spare parts availability	5 years

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More information

Fujitsu OPTIMIZATION solutions

In addition to 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

hk.fujitsu.com/pc

Software

www.fujitsu.com/software/

More information

To learn more about Fujitsu Workstation CELSIUS W5010, please contact your Fujitsu sales representative, Fujitsu Business partner, or visit our website.

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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Contact Us

HONG KONG

Fujitsu Business Technologies Asia Pacific Ltd.

Tel: (852) 3910-8228

Email: fpc.hksales@hk.fujitsu.com
hk.fujitsu.com/pc

INDONESIA

PT Fujitsu Indonesia

Tel: (62) 21-570-9330

Email: marketing@id.fujitsu.com
id.fujitsu.com/pc

TAIWAN

Fujitsu Taiwan Ltd.

Tel: (886) 2-2311-2255

Email: ftl.lifebook@fujitsu.com
tw.fujitsu.com/pc

SINGAPORE

Fujitsu Asia Pte Ltd.

Tel: (65) 6512-7555

Email: fapl.info@fujitsu.com
sg.fujitsu.com/pc

PHILIPPINES

Fujitsu Philippines, Inc.

Tel: (63) 2-8841-8488

Email: info.fpi@fujitsu.com
ph.fujitsu.com/pc

THAILAND

Fujitsu (Thailand) Co., Ltd.

Tel: (66) 0-2302-1500

Email: info.th@fujitsu.com
th.fujitsu.com/pc

CHINA

Fujitsu (China) Holdings Co., Ltd. – PC China Division

Tel: 86 (21) 58871000-8721

Email: fpcacn.support@cn.fujitsu.com cn.fujitsu.com/pc

MALAYSIA

Fujitsu (Malaysia) Sdn. Bhd

Tel: (60) 3-8230-4188

Email: askfujitsu.my@fujitsu.com
my.fujitsu.com/pc

VIETNAM

Fujitsu Vietnam Limited

Tel: (84-24) 2220-3113

Email: sales-vn@fujitsu.com
vn.fujitsu.com/pc

Note: For countries not listed above, please contact Hong Kong office.

Specification disclaimers

1. Not all features are available in all editions or versions of Windows. Systems may require upgraded and/or separately purchased hardware, drivers, software or BIOS update to take full advantage of Windows functionality. Windows 10 is automatically updated, which is always enabled. ISP fees may apply and additional requirements may apply over time for updates. 2. GB = 1 billion bytes. TB = 1 trillion bytes, when referring to hard disk drive capacity. Accessible capacity may vary, also depending on used software. Up to 20 GB of HDD space is reserved for system recovery. 3. Shared memory depending on main memory size and operating system.

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