FUJITSU

Fujitsu recommends Windows 10 Pro for business.

Data Sheet
FUJITSU Workstation CELSIUS J5010

Space-saving design that packs a workstation-sized punch

No need to choose between size and performance in a Small Form Factor (SFF). FUJITSU CELSIUS J5010 offers high-end performance in a compact 8.3 liter design. Ideally suited for 2D and 3D CAD, this small yet powerful computer is a great match for space-constrained workplaces that need workstation-class performance and reliability.

Breakthrough performance
Power through demanding workflows with unparalleled ease
- 10th generation Intel® Core™ and Intel® Xeon® W-1200 processors
- Support of Windows 10 Pro
- Up to 128 GB DDR4 2,933 MHz memory (incl. ECC)
- Full-height graphics cards
- Support of 24/7 operation with reliable high-endurance and business critical drives

Space-saving design – taking the small form factor to next level
No compromise between performance, design and space
- Compact housing (8.3 liter) which is 17% smaller than the previous generation system
- Extremely quiet workstation with NVIDIA® Quadro® P2200 graphics card

Whisper-quiet design
Pleasant working environment that helps you focus on what matters most
- Innovative thermal design for optimized thermal management and cooling
- Lowest-noise emission in its category – helps you realize a silent workplace and enhanced productivity

Ultimate usability
Easy access, upgrade and use of the system
- Tool-less access to components, easy change and screw-less add on cards
- High reliability – built for 24/7 operations
- Software compatibility – ISV certifications for leading software applications

Applicable in a wide range of usage scenarios
Ideal for CAD, design, multimedia, visualization and manufacturing; great choice for multi-monitoring in control rooms, surveillance and trading floors with limited space
- Supports graphics-accelerated applications
- Advanced CPUs in combination with flash storage for best application performance
- Up to 8 monitors with the NVIDIA® Mosaic™ technology

intel® XEON® inside™   NVIDIA QUADRO

Components

Processor	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-1270 (8 Cores / 16 Threads, 3.40 GHz, up to 5.0 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™ i7-10700 processor (8 Cores / 16 Threads, 2.90 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 10 Pro for Workstations Windows 10 Pro. Fujitsu recommends Windows 10 Pro for business. Windows 10 Home
Operating system notes	For some configurations third party drivers are currently not available or configuration restrictions may apply. Windows 10 Support: After the end of the product life FUJITSU will continue to test and support all upcoming Window 10 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 10 Semi-Annual-Channel Support" at http://support.ts.fujitsu.com.
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® Quadro® P2200, 5 GB, PCIe x16, 4 x DisplayPort
	Midrange 3D: AMD Radeon™ Pro WX 5100, 8 GB, 320 stream processors, PCIe x16, 4 x DisplayPort
	Entry 3D: NVIDIA® Quadro® P1000, 4 GB, PCIe x16, 4 x miniDP
	Entry 3D: NVIDIA® Quadro® P620 LP, 2 GB, PCIe x16, 4 x miniDP
	Entry 3D: NVIDIA® Quadro® P400 LP, 2 GB, PCIe x16, 3 x miniDP
	Entry 3D: AMD Radeon™ Pro WX 3100, 4 GB, 320 stream processors, PCIe x16, 1 x DisplayPort, 2 x miniDP
	Entry 3D: AMD Radeon™ Pro WX 2100, 2 GB, 320 stream processors, PCIe x16, 1 x DisplayPort, 2 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
	SSD PCIe, 1024 GB M.2 NVMe module, SED
	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
	SSD PCIe, 256 GB M.2 NVMe module
	SSD PCIe, 128 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
	HDD SATA III, 7,200 rpm, 2000 GB, 3.5-inch
Mass storage 2.5 inch size	HDD SATA III, 7,200 rpm, 2,000 GB, 2.5-inch, business critical
Mass storage 3.5 inch size	HDD SATA III, 7,200 rpm, 1000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 1000 GB, 3.5-inch
Mass storage 2.5 inch size	HDD SATA III, 5,400 rpm, 500 GB, 2.5-inch
	SSD SATA III, 960 GB High Endurance, 1DWDP, 2.5-inch
	SSD SATA III, 480 GB High Endurance, 1DWDP, 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. 24/7 ready (business critical HDDs required) SED (Self-Encrypting Drive) SSD (Solid State Disk)
Drives (optional)	BD Triple Writer SATA ultra slim (tray)
	DVD Super Multi ultra slim (tray)
	SD Card reader
Interface add on cards/components (optional)	
	Gigabit Ethernet PCIe x1
	Intel® WI-FI 6 AX200 and Bluetooth 5.1 vPro, SRD 5.8GHz (dedicated regions only)
	Dual serial card PCIe x1 LP
Base unit	CELSIUS J5010
Mainboard	
Mainboard type	D3828
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
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	4
thereof SATA III	4

I/O controller on board

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 Gen 1 (5 Gbps) total	3
USB 3.2 Gen 2 (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 or 1x USB 3.2 Gen 1 Type A
VGA	optional
DisplayPort	2
DVI	optional (DVI-D)
Serial (RS-232)	1 (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)
Interface Module notes	Anytime USB charge functionality

Input device / components

Input devices (optional)	Keyboard Mouse

Drive bays

Drive bays total	3
2.5-inch internal bays	1
5.25-inch external bays	1
Drive bay notes	1x internal 3.5" bay optional (screwless), can be used via adapter for 1x or 2x 2.5" drives (screwless); 5.25" bay: for slim optical disc drive only;
M.2-2280	2 x on mainboard for SSD NVMe (PCIe 3.0 x4; up to 32Gbit/s)

Slots

PCI-Express 3.0 x4 (mech. x16)	1 x (150 mm / 5.91 inch)
PCI-Express 3.0 x16	1 x (210 mm / 8.27 inch) Low profile or full height (via Riser card), optional
M.2-2230	on mainboard for WLAN/Bluetooth module

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 on board

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
	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	300 W
Power factor correction/active power	active
Monitor outlet	Switched

Noise emission

Related Processors for noise	Intel® Xeon™ W-1290 processor
Standard noise emission	HDD, M.2
	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	3.3 B / 20 dB(A) Bystander; 21 dB(A) Operator position (HDD+M.2)
Standard noise operation mode: HDD load	3.5 B / 22 dB(A) Bystander; 26 dB(A) Operator position (HDD+M.2)
Standard noise operation mode: Idle mode	3.2 B / 19 dB(A) Bystander; 21 dB(A) Operator position (HDD+M.2)
Standard noise operation mode: ODD load	4.5 B / 31 dB(A) Bystander; 37 dB(A) Operator position (HDD+M.2)
Standard noise operation mode: Office applications 2.0	3.2 B / 20 dB(A) Bystander; 21 dB(A) Operator position (HDD+M.2)

Dimensions / Weight / Environmental

Dimensions (W x D x H)	314 x 296 x 89 mm
	12.36 x 11.65 x 3.51 inch
Operating position	horizontal / vertical (optional, feet needed)
Weight	approx. 8 kg

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Dimensions / Weight / Environmental

Weight (lbs)	approx. 17.64 lbs
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35 ℃ (50 - 95 ℉)
Operating relative humidity	5 - 85 % (relative humidity)

Compliance

Product	CELSIUS J5010
Model	DTG
Germany	TÜV GS
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 EPEAT® in progress (dedicated regions) 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)	Adobe® Reader® (pdf reader) 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 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.)

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)
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)

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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 information

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

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/

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)

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More information

Fujitsu products, solutions & services

In addition to the FUJITSU Workstation CELSIUS J5010, 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 J5010, 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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