FUJITSU

Fujitsu recommends Windows 10 Pro.

Data Sheet
FUJITSU Workstation CELSIUS J580

Maximum Warp in a SFF

No need to choose between size and performance in a Small Form Factor (SFF). As an industry first, the FUJITSU CELSIUS J580 offers full workstation performance in a 10 liter design. It is ideally suited for 2D and entry-level 3D performance and multi-monitor scenarios in control rooms, for surveillance and trading floors.

Breakthrough performance in a Small Form Factor design
German design and engineering with performance and TCO in mind
■ Choose between the energy-efficient Intel® Core™ processors or the powerful Intel® Xeon® E-2200 processor family
■ Support of Windows 10 Pro
■ 64 GB DDR4 2,666 MHz memory
■ Full-height graphics cards
■ Boost your storage performance to a capacity of up to 14 TB
■ Take advantage of the super-fast PCIe SSDs to provide a quick loading of core applications
■ PCI support
■ Support of 24/7 operation with reliable high-endurance and business critical drives

An industry first - taking the Small Form Factor to the next level
No compromise between performance, design and office space
■ 10 liter only
■ Full-height graphics up to NVIDIA® Quadro® P2200
■ 52% smaller form factor than the CELSIUS W580 microtower

Whisper quiet design
Fujitsu's desktop workstations are designed and engineered in Europe
■ Optimized thermal management and cooling solutions
■ Low-noise emission of 19 dB(A) lead to a silent workplace and enhanced productivity

Multi-monitor experience
Ideal for showrooms, control rooms, surveillance, trading floors or financial services companies
■ Up to 8 monitors with the NVIDIA® Mosaic™ technology

Components

Processor	Intel® Xeon® processor E-2278G (8 Cores / 16 Threads, 3.40 GHz, up to 5.0 GHz, 16 MB)
	Intel® Xeon® processor E-2276G (6 Cores / 12 Threads, 3.80 GHz, up to 4.9 GHz, 12 MB)
	Intel® Xeon® processor E-2274G (4 Cores / 8 Threads, 4.00 GHz, up to 4.9 GHz, 8 MB)
	Intel® Xeon® processor E-2246G (6 Cores / 8 Threads, 3.60 GHz, up to 4.8 GHz, 12 MB)
	Intel® Xeon® processor E-2244G (4 Cores / 8 Threads, 3.80 GHz, up to 4.8 GHz, 8 MB)
	Intel® Xeon® processor E-2236 (6 Cores / 12 Threads, 3.40 GHz, up to 4.8 GHz, 12 MB)
	Intel® Xeon® processor E-2234 (4 Cores / 8 Threads, 3.60 GHz, up to 4.8 GHz, 8 MB)
	Intel® Xeon® processor E-2226G (6 Cores / 6 Threads, 3.40 GHz, up to 4.6 GHz, 12 MB)
	Intel® Xeon® processor E-2224G (4 Cores / 4 Threads, 3.50 GHz, up to 4.7 GHz, 8 MB)
	Intel® Xeon® processor E-2224 (4 Cores / 4 Threads, 3.40 GHz, up to 4.6 GHz, 8 MB)
	Intel® Xeon® processor E-2174G (4 Cores / 8 Threads, 3.80 GHz, up to 4.7 GHz, 8 MB, Intel® UHD Graphics P630) *
	Intel® Xeon® processor E-2146G (6 Cores / 12 Threads, 3.50 GHz, up to 4.5 GHz, 12 MB, Intel® UHD Graphics P630) *
	Intel® Xeon® processor E-2144G (4 Cores / 8 Threads, 3.60 GHz, up to 4.5 GHz, 8 MB, Intel® UHD Graphics P630) *
	Intel® Xeon® processor E-2136 (6 Cores / 12 Threads, 3.30 GHz, up to 4.5 GHz, 12 MB) *
	Intel® Xeon® processor E-2134 (4 Cores / 8 Threads, 3.50 GHz, up to 4.5 GHz, 8 MB) *
	Intel® Xeon® processor E-2126G (6 Cores / 6 Threads, 3.30 GHz, up to 4.5 GHz, 12 MB, Intel® UHD Graphics P630) *
	Intel® Xeon® processor E-2124G (4 Cores / 4 Threads, 3.40 GHz, up to 4.5 GHz, 8 MB, Intel® UHD Graphics P630) *
	Intel® Xeon® processor E-2124 (4 Cores / 8 Threads, 3.30 GHz, up to 4.5 GHz, 8 MB) *
	Intel® Core™ i9-9900 processor (8 Cores / 16 Threads, 3.10 GHz, up to 5.0 GHz, 16 GB, Intel® UHD Graphics 630)
	Intel® Core™ i7-9700 processor (8 Cores / 8 Threads, 3.00 GHz, up to 4.7 GHz, 12 MB, Intel® HD Graphics 630) *
	Intel® Core™ i7-8700 processor (6 Cores / 12 Threads, 3.20 GHz, up to 4.6 GHz, 12 MB, Intel® UHD Graphics 630) *
	Intel® Core™ i5-9600 processor (6 Cores / 6 Threads, 3.10 GHz, up to 4.6 GHz, 9 MB, Intel® UHD Graphics 630) *
	Intel® Core™ i5-9500 processor (6 Cores / 6 Threads, 3.00 GHz, up to 4.4 GHz, 9 MB, Intel® UHD Graphics 630) *
	Intel® Core™ i5-8600 processor (6 Cores / 6 Threads, 3.10 GHz, up to 4.3 GHz, 9 MB, Intel® UHD Graphics 630) *
	Intel® Core™ i5-8500 processor (6 Cores / 6 Threads, 3.00 GHz, up to 4.1 GHz, 9 MB, Intel® UHD Graphics 630) *
	Intel® Core™ i3-9100 processor (4 Cores / 4 Threads, 3.60 GHz, up to 4.2 GHz, 6 MB, Intel® HD Graphics 630) *
	Intel® vPro® Platform with all Intel® Xeon® processors No Intel® vPro® technology with Intel® Core™ i5 and Core™ i7 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. Fujitsu recommends Windows 10 Pro. Windows 10 Pro for Workstations Windows 10 Home
Operating system compatible	Linux
Operating system notes	Certified for Red Hat© Enterprise Linux Certified for SUSE Enterprise Desktop Certified for SUSE Enterprise Server (pending) 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, 2,666 MT/s, UDIMM
	8 GB (1 module(s) 8 GB) DDR4, unbuffered, ECC, 2,666 MT/s, UDIMM
	8 GB (1 module(s) 8 GB) DDR4, unbuffered, non-ECC, 2,666 MT/s, UDIMM
	16 GB (1 module(s) 16 GB) DDR4, unbuffered, ECC, 2,666 MT/s, UDIMM
	16 GB (1 module(s) 16 GB) DDR4, unbuffered, non-ECC, 2,666 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: 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
	Entry 3D: NVIDIA® Quadro® P620, 2 GB, PCIe x16, 4 x miniDP
	Entry 3D: NVIDIA® Quadro® P400 , 2 GB, PCIe x16, 3 x miniDP
	Others: DP to DVI-D (single link) Adapter Cable
	Others: MiniDP to DP Adapter Cable
Hard disk drives (internal)	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
	SSD PCIe, 2048 GB M.2 NVMe Highend module
	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, 1x 2048 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
	RAID1 Bundle 2x512GB M.2 NVMe Highend
	RAID1 Bundle 2x256GB M.2 NVMe Highend
	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, 1024 GB M.2 NVMe module, SED
	SSD PCIe, 512 GB M.2 NVMe module, SED
	SSD PCIe, 256 GB M.2 NVMe module, SED
	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, 1024 GB, 2.5-inch
	SSD SATA III, 512 GB, 2.5-inch
	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 128 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 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 Super Multi ultra slim (tray)
	MultiCard Reader 24in1 USB 2.0 3.5"
Interface add on cards/components (optional)	
	WLAN 802.11ac (2x2) PCIe x1 and BT 5 (dedicated regions only)
	WLAN 802.11ac (2x2) PCIe x1 (dedicated regions only)
	Parallel Interface
	Gigabit Ethernet PCIe x1
	eSATA Interface
	Dual serial card PCIe x1
Riser Cards	1 x PCI-Express 3.0 x16, Full height (174 mm / 6.85 inch) ; 1 x PCI-Express 3.0 x4 (mech. x16), Full height (174 mm / 6.85 inch)
	1 x PCI-Express 3.0 x16, Full height (174 mm / 6.85 inch) ; 1 x PCI, Full height (174 mm / 6.85 inch)
Base unit	CELSIUS J580
Mainboard	
Mainboard type	D3628
Formfactor	proprietary
Chipset	Intel® C246
Processor socket	LGA 1151
Supported capacity RAM (max.)	64 GB
Memory slots	4 DIMM (DDR4) ECC/non-ECC
Memory frequency	2,666 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. 2666 MHz may be clocked down to 2400 MHz depending on processor and memory configuration
LAN	10/100/1,000 MBit/s Intel® I219LM
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	Internal speaker supports audio playback (optional), High Definition audio, 5.1 surround sound
I/O controller on board	
Serial ATA total	5
thereof SATA III	5
thereof eSATA	2 (optional)
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: microphone	1
Front audio: headphone	1
Internal speakers	1
USB 2.0 total	2
USB 3.1 Gen1 (USB 3.0) total	9
USB 3.1 Gen2 total	optional via add on card

Interfaces

USB front	2x USB 3.1 (gen2)
USB rear	6x USB 3.0; optional: additional 1x USB 3.1 Type C (Gen2) via add on card
USB internal	2x USB 2.0 + 1x USB A 3.0
DisplayPort	2
DVI	1 (DVI-D)
Serial (RS-232)	optional: serial port (9pin, 16 byte FIFO, 16550 compatible)
Mouse / Keyboard (PS/2)	2
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 KBPC PX ECO Mouse M440 ECO Space Explorer USB

Drive bays total

3.5-inch internal bays	1
5.25-inch external bays	1
Drive bay notes	5.25" bay: for slim optical disc drive only; internal 3.5" bay: 1x 3.5" drive (screwless) or 1x 2.5" drive (screws) or optional via adapter for 1x or 2x 2.5" drives (screws); external 3.5" bay: optional as internal 3.5" bay (screws)
M.2-2280	1 x on mainboard (for PCIe or SATA SSD modules), supports Intel® Optane™ technology

Graphics on board

Graphics brand name	Intel® HD Graphics P630, Intel® HD Graphics 630
Shared video memory	up to 1,782 MB
TFT resolution (VGA)	1,024 x 768 pixel 1,280 x 1,024 pixel 1,360 x 768 pixel 1,440 x 900 pixel 1,600 x 900 pixel 1,600 x 1,200 pixel 1,680 x 1,050 pixel 1,920 x 1,080 pixel
TFT resolution (DVI)	1,280 x 1,024 pixel 1,360 x 768 pixel 1,440 x 900 pixel 1,600 x 900 pixel 1,680 x 1,050 pixel 1,920 x 1,080 pixel 1,920 x 1,200 pixel
TFT resolution (DisplayPort)	1,280 x 1,024 pixel 1,360 x 768 pixel 1,440 x 900 pixel 1,600 x 900 pixel 1,680 x 1,050 pixel 1,920 x 1,080 pixel 1,920 x 1,200 pixel 2,560 x 1,440 pixel 2,560 x 1,600 pixel 3,440 x 1,440 pixel 3,840 x 2,160 pixel 4,096 x 2,304 pixel

Graphics on board

Graphics features	Support for up to three independent displays DirectX® 12 HDCP support OpenCL® 2.0 OpenGL® 4.4 One DisplayPort connector can be converted to DVI-D or HDMI with an optional external adapter For multi monitoring mode, graphics card and integrated graphics run in parallel DisplayPort interface supports Ver. 1.2 incl. Multi-Stream DVI-D interface supports audio output for HDMI monitors
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 (at 230V; 10% / 20% / 50% / 100% load) : 84% / 90% / 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	280 W
Power factor correction/active power	active

Noise for standard configuration (HDD, ODD)

Standard noise emission	4x8 GB, HDD, ODD, Windows 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 position; 21 dB(A) Operator position
Standard noise operation mode: HDD load	3.3 B/20 dB(A) Bystander position; 21 dB(A) Operator position
Standard noise operation mode: Idle mode	3.3 B/20 dB(A) Bystander position; 21 dB(A) Operator position
Standard noise operation mode: ODD load	4.4 B/30 dB(A) Bystander position; 33 dB(A) Operator position
Standard noise operation mode: Office applications 2.0	3.3 B/20 dB(A) Bystander position; 21 dB(A) Operator position

Dimensions / Weight / Environmental

Dimensions (W x D x H)	332 x 338 x 89 mm
	12.68 x 13.31 x 3.51 inch
Operating position	horizontal / vertical (optional, feet needed)
Weight	approx. 9 kg
Weight (lbs)	approx. 19.84 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 J580
Model	DTF
Germany	TÜV GS
Europe	CE
USA/Canada	FCC Class B cTUVus

Compliance

Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) ENERGY STAR® 7.1 EPEAT® Bronze (dedicated regions)
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)	Workplace Protect (secure authentication solution) 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)
System and BIOS Security	Embedded security (TPM 2.0) EraseDisk (optional) Credential Guard Ready and Device Guard Capable (Windows 10, v. 1809; requires 8 GB or more system RAM and SSD PCIe NVME) 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)
Workplace Embedded Tools	Auto BIOS Update via Fujitsu Server Auto BIOS Update via customer server Easy PC Protection

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 12.0 (depending on processor)
Manageability software	DeskView Client DeskView Instant BIOS Management
DeskView components	BIOS Management incl. Security Inventory Management Driver Management Alarm Management

Manageability

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 dimension (mm)	467 x 265 x 540 mm
Packaging dimension (inch)	18.39 x 10.43 x 21.26 inch
Max. quantity / pallet	28
Material - Weight (g) Carton	1180 g
Material - Weight (lbs) Carton	2.6 lbs
Material - Weight (g) EPS / PS	180 g
Material - Weight (lbs) EPS / PS	0.4 lbs
Material - Weight (g) PE	60 g
Material - Weight (lbs) PE	0.13 lbs
Packaging notes	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://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

Display P27-8 TS UHD		The FUJITSU Display P27-8 TS UHD has a 3840 x 2160 Ultra HD resolution ships with a thin bezel housing ideal for multi-monitor use scenarios. The monitor has a 178°/178° wide viewing angle that delivers consistent picture quality, a 100% sRGB color space, ECO function, DisplayView™ IT Suite manageability software and a range of connectivity options ideal for medium- and large-sized businesses.	Order Code: S26361-K1610-V160
Blue LED Mouse GL9000		Blue LED Mouse GL9000 comes in a slim design with proven Fujitsu engineering quality. The state-of-the-art blue LED sensor enables ultra precise switchable resolution at 1,000, 1,500 and 2,000 dpi. Blue LED Mouse GL9000 makes your life easier because it's tailor-made for right handed users. It just feels great in your hand.	Order Code: S26381-K438-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 the FUJITSU Workstation CELSIUS J580, 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 J580, 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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