FUJITSU

Fujitsu recommends Windows 10 Pro.

Data Sheet
FUJITSU Workstation CELSIUS W580

Mini CAD Powerhouse

If you thought you would need to sacrifice performance, expandability, price or energy efficiency in a microtower design – think again. As an industry first, the FUJITSU CELSIUS W580 desktop workstation goes far and beyond with its innovative 21 liter, space-saving microtower design. No compromise for architects, designers and engineers.

No compromise in terms of performance, expandability and price
Designed with CAD customers in mind: performance, reliability and great flexibility - at an affordable price
- Choose between the energy-eficient Intel® Core™ processors or the powerful Intel® Xeon® E-2100 processor family
- Support of Windows 10 Pro
- 64 GB DDR4 2,666 MHz memory (incl. ECC)
- Maximum capacity of 16 TB
- Boost your storage performance with super-fast PCIe SSDs

Industry's smallest VR-ready desktop workstation
Innovative, new space saving design - designed, engineered and produced in Germany
- An industry first: 21 liter only desktop microtower workstation
- NVIDIA® Quadro® P4000 VR-ready graphics (with CELSIUS W580power)
- Optimized thermal management and cooling solutions
- Enjoy a silent workplace environment thanks to a low noise emission of only 18 dB(A)

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

2-in-1: Workstation & Point-of-Sales device
Your workstation can not only be deployed as a traditional workstation but also as a point-of-sales device in any retail environment
- Connect your cash drawer and your scanner to two serial ports
- Support of 24/7 operation with reliable high-endurance and business critical drives

Components

Processor	Intel® Xeon® processor E-2186G (6 Cores / 12 Threads, 3.80 GHz, up to 4.7 GHz, 12 MB, Intel® UHD Graphics P630) *
	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™ i7-8700 processor (6 Cores / 12 Threads, 3.20 GHz, up to 4.6 GHz, 12 MB, Intel® UHD Graphics 630) *
	Intel® Core™ i7-8700K processor (6 Cores / 12 Threads, 3.70 GHz, up to 4.7 GHz, 12 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™ i3-8100 processor (4 Cores / 4 Threads, 3.60 GHz, 6 MB, Intel® UHD Graphics 630)
	Intel® vPro™ with all Intel® Xeon® processors No Intel® vPro™ technology with Intel® Core i5 and Core i7 processors *with Intel® Turbo Boost Technology (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	Windows 10 Pro. Fujitsu recommends Windows 10 Pro. Windows 10 Pro for Workstations Windows 10 Home
Operating system compatible	Linux	Linux
Operating system notes	Certified for Red Hat© Enterprise Linux (pending) Certified for SUSE Enterprise Desktop (pending) 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.	Certified for Red Hat© Enterprise Linux (pending) Certified for SUSE Enterprise Desktop (pending) 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 MHz, UDIMM
	8 GB (1 module(s) 8 GB) DDR4, unbuffered, ECC, 2,666 MHz, UDIMM
	8 GB (1 module(s) 8 GB) DDR4, unbuffered, non-ECC, 2,666 MHz, UDIMM
	16 GB (1 module(s) 16 GB) DDR4, unbuffered, ECC, 2,666 MHz, UDIMM
	16 GB (1 module(s) 16 GB) DDR4, unbuffered, non-ECC, 2,666 MHz, UDIMM

Graphics	High-end 3D: AMD Radeon™ Pro WX 7100 , 8 GB, PCIe x16, 4 x DisplayPort
	High-end 3D: NVIDIA® Quadro® P4000, 8 GB, PCIe x16, 4 x DisplayPort
	Midrange 3D: NVIDIA® Quadro® P2000, 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, 4x miniDP
	Entry 3D: AMD Radeon™ Pro WX 3100, 4 GB, 320 stream processors, PCIe x16, 1x DisplayPort, 2x miniDP
	Entry 3D: AMD Radeon™ Pro WX 2100, 2 GB, 320 stream processors, PCIe x16, 1x DisplayPort, 2x miniDP
	Entry 3D: NVIDIA® Quadro® P620, 2 GB, PCIe x16, 4x 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
	Others: VGA Extension Card
	Others: DP to DVI-D (single link) Adapter Cable
Notes	NVIDIA® Quadro® P4000 requires CELSIUS W580power or CELSIUS W580power+.

Hard disk drives (internal)	SSD SATA III, 960 GB High Endurance, 3DWPD, 2.5-inch
	SSD SATA III, 480 GB High Endurance, 3DWPD, 2.5-inch
	SSD SATA III, 240 GB High Endurance, 3DWPD, 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
	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
	Intel Optane Memory (16 GB)
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-ROM
	DVD Super Multi
	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

Base unit	CELSIUS W580	CELSIUS W580power

Mainboard

Mainboard type	D3617
Chipset	Intel® C246
Processor socket	LGA 1151
Processor quantity maximum	1
Supported capacity RAM (max.)	64 GB
Memory slots	4 DIMM (DDR4) ECC/non-ECC
Memory frequency	2,666 MHz
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 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 ALC671
Audio features	Internal speaker supports audio playback (optional), High Definition audio, 5.1 surround sound

I/O controller on board

Serial ATA total	8
thereof SATA III	8
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	6
USB 3.1 Gen1 (USB 3.0) total	7
USB 3.1 Gen2 total	optional via add on card
USB front	2x USB 2.0; 2x USB 3.1 (gen2), 1x USB 3.1 (gen2) Type C; optional: 1x USB 3.1 Type-C (Gen2) via add on card and front adapter bay
USB rear	2x USB 2.0; 3x USB 3.1 (Gen1); 1x USB 3.1 (Gen2); optional: additional 1x USB 3.1 Type C (Gen2) via add on card
USB internal	2x USB 2.0 + 1x USB A 3.1 (gen2)
VGA	optional: via adapter card

Interfaces

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, USB Typ C connector supports up to 15W

Input device / components

Input devices (optional)	Keyboard Mouse KBPC PX ECO Mouse M440 ECO Space Explorer USB
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	1 x on mainboard (for PCIe or SATA SSD modules), supports Intel® Optane™ technology

Slots

PCI-Express 3.0 x1	2 x (/) Full height
PCI-Express 3.0 x4 (mech. x16)	1 x (215 mm /) Full height
PCI-Express 3.0 x16	1 x (240 mm /) Full height
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 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) : 75% / 83% / 85% / 84%	power supply efficiency at 10% / 20% / 50% / 100% load for 230V: 80% / 87% / 90% / 87%; for 115V: 80% / 87% / 90% / 87%
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	280 W	400 W
Power factor correction/active power	active	active

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	approx. 12 kg
Weight (lbs)	approx. 30.86 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 W580	CELSIUS W580power
Model	MI6W	
Germany	GS (planned)	
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)	
	ENERGY STAR® in progress	
	EPEAT® in progress (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)	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

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)	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 (optional) Credential Guard Ready and Device Guard Capable (Windows 10, v. 1709) 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) Credential Guard Ready and Device Guard Capable (Windows 10, v. 1709) 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 Easy PC Protection	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
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 (Special Fujitsu keyboard required)
	Keyboard on with one key (KBPX Eco, KB521)	Thermal management
	Keyboard on with 2 keys (CTRL+CTRL) with PS2 or special USB keyboards	Keyboard on with one key (KBPX Eco, KB521)
	Keyboard on with any key (USB)	Keyboard on with 2 keys (CTRL+CTRL) with PS2 or special USB keyboards
	Thermal management	Keyboard on with any key (USB)
	Extended lifetime 24/7 (limited configurations)	Extended lifetime 24/7 (limited configurations)

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

Display P27-8 TE Pro		The FUJITSU Display P27-8 TE Pro has a 2560 x 1440 QHD resolution and comes with a thin bezel housing ideal for multi-monitor use scenarios. The monitor has a wide viewing angle that delivers consistent picture quality, a 100% sRGB color space coverage, ECO function, DisplayView™ IT Suite manageability software and a range of connectivity options ideal for medium- and large-sized businesses.	Order Code: S26361-K1609-V140
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
Wireless Keyboard Set LX901		The Wireless Keyboard LX901 is a top of the line desktop solution for lifestyle orientated customers, who want only the best for their desk. This superb keyboard set offers ambitious users more functions, security and better features than a conventional interface device. It even includes 2.4 GHz technology and 128 AES encryption.	S26381-K565-L4** (**: Country specific variation)

More information

Fujitsu products, solutions & services

In addition to the FUJITSU Workstation CELSIUS W580, 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 W580, 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