

Data Sheet

FUJITSU Workstation CELSIUS J550

Small and Powerful

If you need a powerful yet small workstation, searching for the level of 3D performance previously only available in a workstation tower than the Fujitsu's CELSIUS J550 is the ideal choice. Thanks to its innovative 10 liter design, the CELSIUS J550 small form factor workstation is the first to support standard, full-height graphics cards.



Small but a strong performer

Astounding computing power in a small form factor

- Choose between the energy-efficient Intel® Core™ processors or the powerful Intel® Xeon® E3-1200 v5 processor family
- Support of Windows 10 or Linux® operating systems
- Next generation DDR4 memory up to 64 GB
- Boost your storage performance to a capacity of up to 13.5 TB and take advantage of the super-fast PCIe SSDs up to 512 GB to provide a quick loading of core applications and reliable high-endurance and business critical drives designed for 24/7 operation

Innovative design

Support of standard, full height graphics cards and legacy slots for a great customer TCO

- Up to NVIDIA® Quadro® M2000 graphic card
- Legacy PCI is still optionally available

The smallest member of the CELSIUS workstation family

The CELSIUS J550 combines powerful workstation performance and great expandability

- Small footprint in a 10 liter design
- 66% smaller form factor than the CELSIUS W550 micro-tower

Multi-monitor experience

Enjoy maximum viewing capabilities and increase your productivity

- Support 4 monitors when choosing AMD Eyefinity™ or NVIDIA® Mosaic™ technologies
- Up to 8 monitors when selecting Nvidia's professional 2D graphics

Whisper quiet design Made in Germany

Fujitsu's desktop workstations are designed, engineered and manufactured in the heart of Europe

- Optimized thermal management and cooling solutions
- NVIDIA® NVS™ 315 fanless graphic card



Components

Processor	<p>Intel® Core™ i7-6700 processor (4 Cores / 8 Threads, 3.40 GHz, up to 4.0 GHz, 8 MB, Intel® HD Graphics 530) *</p> <p>Intel® Core™ i5-6600 processor (4 Cores / 4 Threads, 3.30 GHz, up to 3.9 GHz, 6 MB, Intel® HD Graphics 530) *</p> <p>Intel® Core™ i5-6500 processor (4 Cores / 4 Threads, 3.20 GHz, up to 3.6 GHz, 6 MB, Intel® HD Graphics 530) *</p> <p>Intel® Core™ i3-6100 processor (2 Cores / 4 Threads, 3.70 GHz, 3 MB, Intel® HD Graphics 530)</p> <p>Intel® Xeon® processor E3-1280v5 (4 Cores / 8 Threads, 3.70 GHz, up to 4.0 GHz, 8 MB) *</p> <p>Intel® Xeon® processor E3-1275v5 (4 Cores / 8 Threads, 3.60 GHz, up to 4.0 GHz, 8 MB, Intel® HD Graphics P530) *</p> <p>Intel® Xeon® processor E3-1270v5 (4 Cores / 8 Threads, 3.60 GHz, up to 4.0 GHz, 8 MB) *</p> <p>Intel® Xeon® processor E3-1245v5 (4 Cores / 8 Threads, 3.50 GHz, up to 3.9 GHz, 8 MB, Intel® HD Graphics P530) *</p> <p>Intel® Xeon® processor E3-1240v5 (4 Cores / 8 Threads, 3.50 GHz, up to 3.9 GHz, 8 MB) *</p> <p>Intel® Xeon® processor E3-1230v5 (4 Cores / 8 Threads, 3.40 GHz, up to 3.8 GHz, 8 MB) *</p> <p>Intel® Xeon® processor E3-1225v5 (4 Cores / 4 Threads, 3.30 GHz, up to 3.7 GHz, 8 MB, Intel® HD Graphics P530) *</p> <p>Intel® Xeon® processor E3-1220v5 (4 Cores / 4 Threads, 3.00 GHz, up to 3.5 GHz, 8 MB) *</p> <p>Intel® vPro™ with all Intel® Xeon® processors</p> <p>No Intel® vPro™ technology with Intel® Core i5 and Core i7 processors</p> <p>*with Intel® Turbo Boost Technology (clock speed and performance will vary depending on workload and other variables)</p>
Operating systems	
Operating system	<p>Windows 10 Pro</p> <p>Windows 8.1 Pro</p> <p>Windows 7 Professional 64-bit</p>
Operating system compatible	<p>Windows 10</p> <p>Windows 8.1</p> <p>Windows 7 Professional 32-bit</p> <p>Linux</p>
Microsoft OS support information	This system receives full support from Microsoft with Windows 10/Windows 10 Pro only. For any other Microsoft OS installed, this device has limited support from Microsoft. For more information, please see Microsoft's Support Lifecycle FAQ.
Operating system notes	<p>Certified for Red Hat® Enterprise Linux (pending)</p> <p>Certified for SUSE Enterprise Desktop (pending)</p> <p>Certified for SUSE Enterprise Server (pending)</p> <p>For some configurations third party drivers are currently not available or configuration restrictions may apply.</p>
Memory modules	
	4 GB (1 module(s) 4 GB) DDR4, unbuffered, ECC, 2,133 MHz, UDIMM
	4 GB (1 module(s) 4 GB) DDR4, unbuffered, non-ECC, 2,133 MHz, UDIMM
	8 GB (1 module(s) 8 GB) DDR4, unbuffered, ECC, 2,133 MHz, UDIMM
	8 GB (1 module(s) 8 GB) DDR4, unbuffered, non-ECC, 2,133 MHz, UDIMM
	16 GB (1 module(s) 16 GB) DDR4, unbuffered, ECC, 2,133 MHz, UDIMM
	16 GB (1 module(s) 16 GB) DDR4, unbuffered, non-ECC, 2,133 MHz, UDIMM
Graphics	Midrange 3D: NVIDIA® Quadro® M2000, 4 GB, 768 cores, PCIe x16, 4 x DisplayPort
Graphics	Midrange 3D: NVIDIA® Quadro® K2200, 4 GB, 640 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
Graphics	Midrange 3D: AMD FirePro™ W5100, 4 GB, PCIe x16, 4 x DisplayPort
Graphics	Midrange 3D: AMD FirePro™ W4300, 4 GB, 512 stream processors, PCIe x16, 4x miniDP, 4x miniDP/DP Adapter
Graphics	Entry 3D: NVIDIA® Quadro® K1200, 4 GB, 384 cores, PCIe x16, 4x miniDP, 4x miniDP/DP Adapter
Graphics	Entry 3D: AMD FirePro™ W4100, 2 GB, 512 stream processors, PCIe x16, 4x miniDP, 4x miniDP/DP Adapter
Graphics	Entry 3D: NVIDIA® Quadro® K620, 2 GB, 384 cores, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
Graphics	Entry 3D: AMD FirePro™ W2100, 2 GB, 320 stream processors, PCIe x16, 2x DisplayPort
Graphics	Entry 3D: NVIDIA® Quadro® K420, 1 GB, 192 cores, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
Graphics	Professional 2D: NVIDIA® NVS™ 510, 2 GB, 16 cores, PCIe 2.0 x16, 4x miniDP, 4x miniDP/DP Adapter
Graphics	Professional 2D: NVIDIA® NVS™ 315, 1 GB, 48 cores, PCIe 2.0 x16, 1x LFH59 (max. 2x DP or 2x DVI-I)

Hard disk drives (internal)	SSD PCIe 1x512 GB Highend card SSD PCIe 1x256 GB Highend card SSD PCIe 512 GB M.2 Highend SSD PCIe 256 GB M.2 Highend SSD PCIe 128 GB M.2 Highend SSD SATA III, 480 GB High Endurance, 2.5-inch SSD SATA III, 400 GB High Endurance, 2.5-inch SSD SATA III, 240 GB High Endurance, 2.5-inch SSD SATA III, 200 GB High Endurance, 2.5-inch SSD SATA III 256GB M.2 Mainstream SSD SATA III 128 GB M.2 Mainstream SSD SATA III, 1024 GB Mainstream, 2.5-inch SSD SATA III, 512 GB Mainstream, 2.5-inch SSD SATA III, 256 GB Mainstream, 2.5-inch SSD SATA III, 128 GB Mainstream, 2.5-inch SSD SATA III, 512 GB Mainstream, 2.5-inch, SED SSD SATA III, 256 GB Mainstream, 2.5-inch, SED SSD SATA III, 128 GB Mainstream, 2.5-inch, SED SSD SATA III, 128 GB Entry, 2.5-inch SSHD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch SSHD SATA III, 5,400 rpm, 500 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, 1000 GB, 2.5-inch, enhanced availability HDD SATA III, 7,200 rpm, 500 GB, 2.5-inch, enhanced availability 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 HDD SATA II, 5,400 rpm, 500 GB, 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) 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 FH and BT 4.1 (dedicated regions only, up to BT 4.2 depending on OS version) WLAN 802.11ac (2x2) PCIe x1 FH (dedicated regions only) Parallel Interface Gigabit Ethernet PCIe x1, DS 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 J550
Mainboard	
Mainboard type	D3427
Formfactor	proprietary
Chipset	Intel® C236
Processor socket	LGA 1151
Processor quantity maximum	1
Supported capacity RAM (max.)	64 GB
Memory slots	4 DIMM (DDR4) ECC/non-ECC
Memory frequency	2,133 MHz
Memory notes	Dual channel support For dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same.
LAN	10/100/1,000 MBit/s Intel® I219LM
BIOS version	AMI Aptio V
BIOS features	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI) CSM (Compatibility Support Module)
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 3.0 total	9
USB front	2x USB 3.0
USB rear	6x USB 3.0
USB internal	2x USB 2.0 + 1x USB 3.0
DisplayPort	2
DVI	1 (DVI-D)
Serial (RS-232)	1 ; optional: 2nd 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

3.5-inch internal bays	1
3.5-inch external 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)

Graphics on board**Graphics brand name**

Intel® HD Graphics P530, Intel® HD Graphics 530

Shared video memory

up to 1,782 MB

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
3,840 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 (requires Intel® Core™ i3, i5 or i7 processors)
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)**Noise emission**

According to ISO9296

Noise for standard configuration (HDD, ODD)

Related Processors for noise	Intel® Xeon® E3-1275v5
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)) (depending on configuration)
Standard noise operation mode: CPU 50% load	3.4 B / 21 dB(A) Bystander position; 23 dB(A) Operator position
Standard noise operation mode: CPU 90% load	3.4 B / 22 dB(A) Bystander position; 24 dB(A) Operator position
Standard noise operation mode: HDD load	3.2 B / 19 dB(A) Bystander position; 20 dB(A) Operator position
Standard noise operation mode: Idle mode	3.2 B / 18 dB(A) Bystander position; 19 dB(A) Operator position
Standard noise operation mode: ODD load	4.3 B / 30 dB(A) Bystander position; 33 dB(A) Operator position
Standard noise operation mode: Office applications 2.0	3.2 B / 19 dB(A) Bystander position; 19 dB(A) Operator position
Blue angel noise emission according certification	According to ISO 7779:2010, ECMA-74 for max. possible configuration
Blue angel noise notes / description	A-weighted sound power level Lwad (in B); 1B = 10dB
Blue angel noise operation mode: HDD load	4.1 B = 41 dB (A)
Blue angel noise operation mode: Idle mode	3.8 B = 38 dB (A)
Blue angel noise operation mode: ODD load	4.6 B = 46 dB (A)

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 °C (50 - 95 °F)
Operating relative humidity	5 - 85 % (relative humidity)

Compliance

Product	CELSIUS J550
Model	DTF
Germany	GS (planned)
Europe	CE
USA/Canada	FCC Class B cCSAus
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) EPEAT® Gold (dedicated regions) (planned) ENERGY STAR® 6.1 (dedicated regions)
China	CCC (planned) China RoHS
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates

Additional Software

Additional software (preinstalled)	Workplace Protect (secure authentication solution) Adobe® Reader® (pdf reader) McAfee Multi Access Security (anti-virus and internet security software; 60 days trial version) Win7: Fujitsu Recovery (hard disk based recovery) Win8: Microsoft Push Button Recovery (hard disk based recovery) Microsoft Office (buy license to activate the pre-installed Microsoft Office)
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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

Security

Physical Security	Kensington Lock support Eye for padlock Integrated cabinet lock (optional)
System and BIOS Security	Embedded security (TPM 1.2) EraseDisk (optional) 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 Embedded Tools	Auto BIOS Update via Fujitsu Server Auto BIOS Update via customer server (optional) Easy PC Protection (optional) Easy Restore (optional)

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 11.0 (depending on processor)
Manageability software	DeskView Client DeskView Instant BIOS Management
DeskView components	On/Offline remote client management Detailed system inventory management and reports BIOS Management Remote power management System notifications Security Remote Control DeskView Helpdesk Integration WoL (Wake on LAN)
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) Thermal management Extended lifetime 24/7 (limited configurations)
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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://support.ts.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/fts/services/support

Recommended Accessories

Display P24W-7 LED



If you're a pixel, color and performance-hungry professional using demanding applications, the FUJITSU P24W-7 LED Display is the perfect choice. The display provides outstanding picture performance thanks to a cutting-edge graphic panel. It also boasts unique and innovative features such as our patent-applied Presence Sensor technology and the Always Available Powered USB Hub.

Order Code:
S26361-K1498-V140

Display P27T-7 UHD



For pixel, color and performance-hungry professionals using demanding applications, look no further than the FUJITSU P27T-7 UHD Display. It provides outstanding picture quality with Ultra High Definition (UHD) resolution, also known as 4k. Picture in Picture (PiP), unrivalled ergonomics, a multitude of UHD supporting interfaces and manageability make this the perfect choice.

Order Code:
S26361-K1564-V140

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

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

More information

Fujitsu OPTIMIZATION Services

In addition to the FUJITSU Workstation CELSIUS J550, 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 J550, 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>



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