FUJITSU

Data Sheet
FUJITSU Workstation CELSIUS C620

1U of Pure Workstation Performance

If you need maximum workstation performance out of the datacenter, Fujitsu's compact CELSIUS C620 is your choice. The 1U rack-mount workstation sophisticatedly combines high-end graphics and single processor performance at highest density. Thus it is the ideal system for all users of CAx, visualization or HPC applications, having only limited space. Full security is ensured by keeping the high-quality CELSIUS C620 in the datacenter.

Density
Space saving rack workstation
- Full workstation performance packed in only 1U

Performance
Fully concentrate on core activities
- Sophisticated combination of Intel® Xeon® processor and high-end graphics cards ideal for remote CAx or HPC

Best visualization
Full GPU performance out of the datacenter
- FUJITSU CELSIUS C620 e.g. as a node in a render cluster

CELSIUS offering
Different workstations to meet individual needs
- Expands the CELSIUS portfolio to the datacenter

Manageability
Easy manageability saves time and resources
- Onboard gigabit remote management controller (iRMC S3)

Components

Processor	Intel® Core™ i3-3220 processor (2 Cores / 4 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics 2500)
	Intel® Xeon® processor E3-1275v2 (4 Cores / 8 Threads, 3.50 GHz, up to 3.9 GHz, 8 MB, Intel® HD Graphics P4000)
	Intel® Xeon® processor E3-1225v2 (4 Cores / 4 Threads, 3.20 GHz, up to 3.6 GHz, 8 MB, Intel® HD Graphics P4000)
	Intel® vPro™ with all Intel® Xeon® processors
Operating systems	
Operating system	Windows 8.1 Pro Windows 7 Professional 64-bit Windows 7 Professional 32-bit
Operating system compatible	Windows 10 Pro (license + recovery media only) Windows 10 Home Windows 8.1 Windows® Server 2012 R2 Windows® Server 2008 R2 Windows® XP Professional x64 Edition Windows® XP Professional
Operating system notes	For some configurations third party drivers are currently not available or configuration restrictions may apply. Limited Windows® XP support. Microsoft discontinued Windows® XP certification on system level, basic drivers via http://support.ts.fujitsu.com Certified for Red Hat© Enterprise Linux Certified for SUSE Enterprise Desktop Certified for SUSE Enterprise Server
Memory modules	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, ECC, 1,600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
Graphics	Ultra-high-end 3D: NVIDIA® Quadro® K5200, 8 GB, 2304 cores, PCIe x16, 1x Dual Link DVI-I, DVI-D, 2x DisplayPort
	High-end 3D: NVIDIA® Quadro® K4200, 4 GB, 1344 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Midrange 3D: NVIDIA® Quadro® K2200, 4 GB, 640 cores, PCIe x16, 1x Dual Link DVI-I, 2x DisplayPort
	Entry 3D: NVIDIA® Quadro® K620, 2 GB, 384 cores, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
	Entry 3D: NVIDIA® Quadro® K420, 1 GB, 192 cores, PCIe x16, 1x Dual Link DVI-I, 1x DisplayPort
	Professional 2D: NVIDIA® NVS™ 510, 2 GB, 16 cores, PCIe 2.0 x16, 4x miniDP, 4x miniDP/DP Adapter
	Professional 2D: NVIDIA® NVS™ 310, 512 MB, 16 cores, PCIe 2.0 x16, 2x DisplayPort
	GPU computing card: NVIDIA® GRID™ K2 8GB, 8 GB, 3,072 cores, PCIe x16
	Remote Graphics: CELSIUS RemoteAccess Dual Card, PCIe x1, 2x miniDP, PCoIP
	Remote Graphics: CELSIUS RemoteAccess Quad Card, PCIe x1, 4x miniDP, PCoIP
Personal Supercomputing	Coprocessor: Intel® Xeon Phi™ Coprocessor 5110P, PCIe x16
Hard disk drives (internal)	HDD SAS, 10,000 rpm, 900 GB, 2.5-inch
	HDD SAS, 10,000 rpm, 600 GB, 2.5-inch
	HDD SAS, 10,000 rpm, 300 GB, 2.5-inch
	HDD SATA III, 10,000 rpm, 1,000 GB, 2.5-inch, business critical
	HDD SATA III, 10,000 rpm, 500 GB, 2.5-inch, business critical
	HDD SATA III, 7,200 rpm, 4,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 3,000 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, 500 GB, 3.5-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)	DVD SuperMulti SATA slim
SCSI / SAS Controller	RAID 5/6 Ctrl. 6 Gbit/s 8 ports int. 512 MB Cache
	RAID 0/1 Ctrl. 6 Gbit/s 8 ports int.
Interface add on cards/components (optional)	
	Gigabit Ethernet PCIe x1, DS
	Dual 10 Gigabit Ethernet PCIe x8
Base unit	CELSIUS C620
Mainboard	
Mainboard type	D3188
Formfactor	proprietary
Chipset	Intel® C216
Processor socket	LGA 1155
Processor quantity maximum	1
Supported capacity RAM (max.)	32 GB
Memory slots	4 DIMM (DDR3) ECC/non-ECC
Memory frequency	1,600 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	2x Built-in 10/100/1,000 MBit/s Intel® 82579 LM and Intel® 82574L
BIOS features	BIOS Flash EPROM update by software
	Recovery BIOS
	Unified Extensible Firmware Interface (UEFI)
I/O controller on board	
Serial ATA total	5
thereof SATA III	2 (port 0 and 1)
Controller functions	Serial ATA II (3 Gbit)
	Serial ATA III (6 Gbit)
	NCQ
	AHCI
	RAID 0/1/5/10 (Windows XP not supported)
	Intel® Smart Response Technology (depending on CPU)
SATA RAID support	0, 1, 10, 5
Interfaces	
USB 2.0 total	2
USB 3.0 total	4
USB front	2x 2.0
USB rear	4x 3.0
USB internal	1
VGA	1 (depends on processor, via DVI to VGA adapter)
DVI	1 (depends on processor)
Serial (RS-232)	1 (9pin, 16 byte FIFO, 16550 compatible)
Ethernet (RJ-45)	2
Input device / components	
Input devices (optional)	Optical USB tilt wheel mouse
	Keyboard

Drive bays

2.5-inch internal bays	4
3.5-inch internal bays	2
5.25-inch external bays	1
Drive bay notes	Up to 4x 2.5-inch HDDs/SSDs (cold plug) + 1x 5.25-inch slim ODD or Up to 2x 3.5-inch HDDs (cold plug) + 1x 5.25-inch slim ODD

Slots

PCI-Express 3.0 x16	1 x (312 mm / 12.29 inch) Full height (double slot density)
PCI-Express 2.0 x4 (mech. x16)	1 x (/) Low profile

Graphics on board

Shared video memory	up to 1,759 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)	1,360 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
Graphics features	DirectX® 10.1 or DirectX® 11 (depending on CPU) HDCP support Open GL® 3.1 (depending on CPU) Open CL® 1.1 (depending on CPU)
Graphics notes	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; 20% / 50% / 100% load) : 87% / 90% / 87%
Rated voltage range	100 V - 240 V (AC Input)
Rated frequency range	47 Hz - 63 Hz
Operating voltage range	90 V - 264 V
Operating line frequency range	47 Hz - 63 Hz
Max. output of single power supply	500 W
Power supply output	500 W

Dimensions / Weight / Environmental

Dimensions (W x D x H)	431 x 683 x 44.45 mm
Operating position	Horizontal
Weight	approx. 13 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35 ℃
Operating relative humidity	5 - 85 % (relative humidity)

Compliance

Product	CELSIUS C620
Model	CR1U
Europe	CE Class A*
USA/Canada	FCC Class A
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL)
Compliance notes	* Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
Compliance link	http://globalsp.ts.fujitsu.com/sites/certificates

Additional Software

Additional software (preinstalled)	Nero Essentials S (burning software) Fujitsu Recovery (hard disk based recovery) Norton Internet Security (incl. Firewall) 60 days version Microsoft Office (buy license to activate the pre-installed Microsoft Office)
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink PowerDVD BD (playback software for Blu-ray Disc™, only with Blu-ray Disc™ drive / Blu-ray playback is not supported under Windows XP if the system runs on Intel onboard graphics) Nero 10 Essentials XL (burning/backup/DVD-playback suite)

Security

System and BIOS Security	EraseDisk Boot sector virus protection Write protect option for the Flash EPROM Embedded security (TPM 1.2) 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

Manageability

Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) iAMT Intel® Active Manageability Technology v8.0 (not activated, not set up)
Manageability software	DeskView 10.x client management including:
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)
Manageability link	http://www.fujitsu.com/fts/manageability http://www.fujitsu.com/fts/solutions/high-tech/solutions/workplace/manageability/feature-finder.html

Miscellaneous

	Extended lifetime

Packaging information

Packaging dimension (mm)	591 x 884 x 196 mm
Packaging dimension (inch)	23.27 x 34.8 x 7.72 inch
Max. quantity / pallet	12
Packaging notes	printed user documentation is bleached in chlorine free process

Warranty	
Warranty period	3 years (depending on country)
Warranty type	Onsite Service (for countries within region FTS CEMEA&I, for all other countries depending on local regulations, minimum: 3 years material warranty)
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

FUTRO L420		The FUJITSU FUTRO L420 meets a multitude of user and business needs. It is designed to handle standard office tasks and demanding, high-graphics applications over PCoIP. Dual-monitoring enables you to increase your productivity. As a smart zero client, the FUJITSU FUTRO L420 provides high security, easy management and zero noise, whilst being user-friendly and integrating easily into an existing VMware® network.	Order Code: S26361-K1062-V200
FUTRO L620		The FUJITSU FUTRO L620 meets a multitude of user and business needs. It is designed to handle standard office tasks and demanding, high-graphics applications over PCoIP. Quad-monitoring enables you to increase your productivity. As a smart zero client, the FUJITSU FUTRO L620 provides high security, easy management and zero noise, whilst being user-friendly and integrating easily into an existing VMware® network.	Order Code: S26361-K1062-V300
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
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 KB900		The KB900 is a very flat keyboard with extra low keys and spill-resistant protection. The elegant design and top-quality construction makes the KB900 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-K560-L4** (**: Country specific variation)

More information

Fujitsu OPTIMIZATION Services

In addition to the FUJITSU Workstation CELSIUS C620, 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 FUJITSU CELSIUS C620, 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

Copyrights

Disclaimer