Fujitsu recommends Windows.

# Data Sheet FUJITSU CELSIUS C620 Workstation

### 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, DCC, 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 workstation

Full workstation performance packed in only 1U

#### Performance

Fully concentrate on core activities

Sophisticated combination of Intel<sup>®</sup> Xeon<sup>®</sup> 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)











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## Components

Processor	Intel® Core™ i3-3220 processor (2 Cores / 4 Threads, 3.30 GHz, 3 MB, Intel® HD Graphics 2500)
	Intel® Xeon® processor E3-1280v2 (4 Cores / 8 Threads, 3.60 GHz, up to 4.0 GHz, 8 MB)
	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 E3-1270v2 (4 Cores / 8 Threads, 3.50 GHz, up to 3.9 GHz, 8 MB)
	Intel® Xeon® processor E3-1245v2 (4 Cores / 8 Threads, 3.40 GHz, up to 3.8 GHz, 8 MB, Intel® HD Graphics P4000)
	Intel® Xeon® processor E3-1240v2 (4 Cores / 8 Threads, 3.40 GHz, up to 3.8 GHz, 8 MB)
	Intel® Xeon® processor E3-1230v2 (4 Cores / 8 Threads, 3.30 GHz, up to 3.7 GHz, 8 MB)
	Intel® Xeon® processor E3-1225v2 (4 Cores / 4 Threads, 3.20 GHz, up to 3.6 GHz, 8 MB, Intel® HD Graphics P4000)
	Intel® Xeon® processor E3-1220v2 (4 Cores / 4 Threads, 3.10 GHz, up to 3.5 GHz, 8 MB)
	Intel <sup>®</sup> vPro™ with all Intel <sup>®</sup> Xeon <sup>®</sup> processors
)perating systems	
Operating system	Windows 8.1 Pro 64-bit
	Windows 8.1 Pro
	Windows 8.1 64-bit
	Windows 8.1 Windows 8 Pro
	Windows 8 Pro
	Windows 7 Professional 64-bit
Operating system compatible	Windows® XP
	Linux
	Windows® Server 2008 R2
	Windows® Server 2012
)perating 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
Nemory modules	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
1	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
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Hard disk drives (internal)	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 128 GB, 2.5-inch, SED
	SSD SATA III, 128 GB, 2.5-inch
	HDD SATA III, 10,000 rpm, 1,000 GB, 2.5-inch, business critical
	HDD SATA III, 10,000 rpm, 600 GB, 2.5-inch
	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, 2,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch, business critical
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch
	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
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
Drives (optional)	DVD SuperMulti SATA slim
SCSI / SAS Controller	RAID Contr BBU Upgrade for RAID 5/6 Ctrl
	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

Base unit	CELSIUS C620
Mainboard	
Mainboard type	D3188
Formfactor	proprietary
Chipset	Intel® C216
Processor socket	LGA 1155
Processor type support	Intel® Core™ i3 processor#Intel® Xeon® processor E3-1200v2 product family
Processor quantity maximum	1
Memory slots	4 DIMM (DDR3) ECC/non-ECC
Supported capacity RAM (max.)	32 GB
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	
Drive bays total	7
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) or Up to 2x 3.5-inch HDDs (cold plug)
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 on board	
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
Noise for standard configuration (HDD, ODD)	_
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 °C
Operating relative humidity	5 - 85 % (relative humidity)
Compliance	
Product	CELSIUS C620
Model	CR1U
Europe	CE Class A*
JSA/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 <sup>®</sup> 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)
Managaahilibu cafbuara	iAMT Intel® Active Manageability Technology v8.0 (not activated, not set up)
Manageability software	DeskView 10.x client management including: On/Offline remote client management
DeskView components	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)	264 x 490 x 87 mm
Packaging dimension (inch)	10.39 x 19.29 x 3.43 inch
Max. quantity / pallet	12
Packaging notes	printed user documentation is bleached in chlorine free process
Warranty	
Standard Warranty	3 years (depending on country)
Service level	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
Maintenance and Support Services -	the perfect extension
Recommended Service	9x5, Response Time: Next Business Day
	E vegre after and ef product life
Spare Parts availability	5 years after end of product life

## **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 S26361-K1062-V200 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:

### Fujitsu recommends Windows.

#### 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 S26361-K1062-V300 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:

SpaceMouse<sup>™</sup> Pro



Using the SpaceMouse<sup>™</sup> 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<sup>™</sup> 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 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/services/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



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T: 01256 782030

E: sales@data-storage.co.uk W: www.data-storage.co.uk

#### Contact

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