

DATA SHEET

CELSIUS V840

Your ultimate workstation

Issue: August 2009

CELSIUS V840

The CELSIUS V Series is the high-end workstation with unlimited performance. You need more performance, memory, data security and expandability than conventional dual-processor workstations can provide? Then the Ultra-High-End CELSIUS V series is right for you. The ISV certification process enables workstation users to run their preferred applications with the best possible performance and maximum system stability.

Extremely powerful workstations

Get more done in less time

- Fastest available processors, graphics and hard disk drives

Noise-reduced system

Silent working environment

- Optimized thermal management, low-noise chassis and silent fans

Serviceability

Minimum downtime if system failure

- Service-friendly system design

Leading workstation application certification

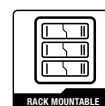
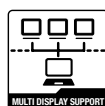
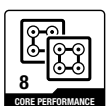
Maximum compatibility and performance with customer-preferred applications

- Full support for ISV applications and easy integration into existing IT environments

Built to order

Free configurability for all product lines

- Customer is given a system optimized for his requirements



Components

Processor

AMD Opteron™ 2384 (2.7 GHz, 4 MB , [DDR2-800 only])
AMD Opteron™ 2380 (2.5 GHz, 4 MB , [DDR2-800 only])
AMD Opteron™ 2376 (2.3 GHz, 4 MB , [DDR2-800 only])
AMD Opteron™ 2356 (2.3 GHz, 4 MB , [DDR2-667 only])
AMD Opteron™ 2354 (2.2 GHz, 4 MB , [DDR2-667 only])
AMD Opteron™ 2350 (2.0 GHz, 4 MB , [DDR2-667 only])
AMD Opteron™ 2346 HE (1.8 GHz, 4 MB , [DDR2-667 only])

Memory modules

16 GB (2 module(s) with 8 GB) DDR2, ECC, 667 MHz, DIMM
8 GB (2 module(s) with 4 GB) DDR2, ECC, 800 MHz, DIMM
8 GB (2 module(s) with 4 GB) DDR2, ECC, 667 MHz, DIMM
4 GB (2 module(s) with 2 GB) DDR2, ECC, 800 MHz, DIMM
4 GB (2 module(s) with 2 GB) DDR2, ECC, 667 MHz, PC2-5300, DIMM
2 GB (2 module(s) with 1 GB) DDR2, ECC, 800 MHz, DIMM
2 GB (2 module(s) with 1 GB) DDR2, ECC, 667 MHz, PC2-5300, DIMM

Graphics add on cards (optional)

Remote Graphics: CELSIUS RemoteAccess Card, , PCIe x1, 2x DVI-I
GPU computing card: NVIDIA® Tesla C1060, 4 GB, PCIe x16, -
Ultra-high-end 3D: Second NVIDIA® Quadro FX 5800, 4 GB, PCIe x16, 2x DVI-I, DP
Ultra-high-end 3D: Second NVIDIA® Quadro FX 4800, 1.5 GB, PCIe x16, 1x DVI-I, 2x DP
Ultra-high-end 3D: Second NVIDIA® Quadro FX 4700x2, 2x1 GB, PCIe x16, 4x SL DVI-I
Ultra-high-end 3D: NVIDIA® Quadro FX 5800, 4 GB, PCIe x16, 2x DL-DVI-I, DP
Ultra-high-end 3D: NVIDIA® Quadro FX 5600, 1536 MB, PCIe x16, 2x DL-DVI-I
Ultra-high-end 3D: NVIDIA® Quadro FX 4800, 1.5 GB, PCIe x16, 2x DL-DVI-I, 2x DP
Ultra-high-end 3D: NVIDIA® Quadro FX 4700x2, 2x1 GB, PCIe x16, 4x SL DVI-I
Ultra-high-end 3D: NVIDIA® Quadro FX 4600, 768 MB, PCIe x16, 2x DL-DVI-I
Ultra-high-end 3D: 2nd NVIDIA® Quadro FX 5600, 1.5 GB, PCIe x16, 2x DL-DVI-I
High-end 3D: NVIDIA® Quadro FX 3800, 1024 MB, PCIe x16, DL-DVI-I, 2x DP
High-end 3D: NVIDIA® Quadro FX 3700, 512 MB, PCIe Gen2 x16, 2x DL-DVI-I
High-end 3D: ATI FirePro™ V7750, 1024 MB, PCIe x16, 2x DP, 1x DVI-I
High-end 3D: ATI FireGL V7600, 512 MB, PCIe x16, 2x DL-DVI-I
Midrange 3D: NVIDIA® Quadro FX 1800, 768 MB, PCIe x16, DL-DVI-I, 2x DP
Midrange 3D: NVIDIA® Quadro FX 1700, 512 MB, PCIe x16, 2x DL-DVI-I, HDTV-out
Midrange 3D: NVIDIA® Quadro FX 580, 512 MB, PCIe x16, DL-DVI-I, 2x DP
Midrange 3D: NVIDIA® Quadro FX 570, 256 MB, PCIe x16, 2x DL-DVI-I
Midrange 3D: ATI FirePro™ V5700, 512 MB, PCIe x16, DL-DVI-I, 2x DP
Midrange 3D: ATI FireGL V5600, 512 MB, PCIe x16, 2x DL-DVI-I
Entry 3D: NVIDIA® Quadro FX 380, 256 MB, PCIe x16, 2x DL-DVI-I
Entry 3D: NVIDIA® Quadro FX 370, 256 MB, PCIe x16, DL-DVI-I, SL DVI-I
Entry 3D: ATI FirePro™ V3700, 256 MB, PCIe x16, 2x DL-DVI-I
Multi monitor 2D: NVIDIA® Quadro NVS 290, 256 MB, PCIe x1, 2 x SL DVI-I
Professional 2D: NVIDIA® Quadro NVS 290, 256 MB, PCIe x16, 2 x SL DVI-I

Hard disk drives (internal)

SATA II, 10000 rpm, 300 GB, 2.5-inch, S.M.A.R.T.
SATA II, 10000 rpm, 150 GB, 2.5-inch, S.M.A.R.T.
SATA II, 7200 rpm, 1000 GB, 3.5-inch, S.M.A.R.T. business critical
SATA II, 7200 rpm, 1000 GB, 3.5-inch, S.M.A.R.T.
SATA II, 7200 rpm, 750 GB, 3.5-inch, S.M.A.R.T. business critical
SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T. business critical
SATA II, 7200 rpm, 500 GB, 3.5-inch, S.M.A.R.T.
SATA II, 7200 rpm, 250 GB, 3.5-inch, S.M.A.R.T.
SATA II, 7200 rpm, 160 GB, 3.5-inch, S.M.A.R.T.
SAS, 15000 rpm, 450 GB, 3.5-inch
SAS, 15000 rpm, 300 GB, 3.5-inch
SAS, 15000 rpm, 146 GB, 3.5-inch

Hard disk notes

One Gigabyte equals one billion bytes, when referring to hard disk drive capacity.

Drives (optional)	1.44 MB Floppy
	Blu-ray Disc Triple Writer
	DVD
	DVD Super Multi

Interface add on cards/components (optional)	WLAN II, 802.11g, 54Mbps (Windows only)
	Gigabit Ethernet PCIe x1
	Dual serial card, PCI, EX-43092

Base unit	CELSIUS V840
Mainboard type	D2533
Formfactor	AT03
Chipset	NVIDIA® nForce professional (3600 and 3050); NEC uPD720404 PCIe/PCI-X bridge
Processor socket	Socket F
Processor quantity maximum	2
Memory slots	8
Supported capacity RAM (max.)	64 GB
Memory notes	In configurations with 4 GB and more the visible memory may be reduced to approximately 3.5 GB or less (for 32 bit operating systems) and configurations with 8 GB the visible memory may be reduced to approximately 7.5 GB or less (depending on system configuration).
LAN	10/100/1000 MBit/s 2 x NVIDIA® LAN, 10/100/1000 Mbit/s ASF 2.0
WLAN	optional
Audio codec	Realtek ALC262
Audio features	High Definition audio
Fast IDE/Ultra DMA-100	
Serial ATA total	6
SATA RAID support	5
SAS Controller type	8

Interfaces	
Audio: in (rear)	2
Audio: out / SPDIF (rear)	1
Front Audio: in	1
Front Audio: out	1
FireWire (IEEE1394) (front)	1
FireWire (IEEE1394) (rear)	1
Internal speakers	1
USB 2.0 total	10
USB front	2
USB rear	6
USB internal	2
Serial (RS-232)	1 (9 pin)
Mouse / Keyboard (PS/2)	2
Ethernet (RJ-45)	2
Drive bays total	7
3.5-inch internal bays	4
5.25-inch external bays	3
Mini PCI slots	
PCI-Express x16	2 x (350 mm) full height
PCI-Express x8	2 x (350 mm) full height
PCI-X (64 bit / 133 MHz)	2
PCI (32-bit / 33 MHz)	1 x (350 mm) full height
Power consumption note	
Operating voltage range	100 - 240 V

Operating line frequency range	50 - 60 Hz
Max. output of power supply	1000

Noise emission	
Noise Operation mode 4: High load	28 dB
Idle mode	27 dB
Noise notes / description	depending on configuration

Dimensions / Weight / Environmental

Dimension (W x D x H)	215 x 620 x 446 mm
Weight	26 kg
Weight notes	Weight may vary depending on actual configuration
Operating ambient temperature	15 - 35°C
Operating relative humidity	20 - 75 %

Compliance

Product	CELSIUS V840-2
Model	MCL-D2533
Germany	GS
Europe	CE
USA/Canada	CSA FCC Class B
Global	RoHS (Restriction of hazardous substances)
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

Physical security	Kensington Lock support Eye for padlock Optional: Integrated cabinet lock
System security	Write protect option for the Flash EPROM Boot protection for floppy disk / CD drive and write protection for floppy disk drive
User security	Optional: Access protection via internal SmartCard reader Hard disk password User and supervisor BIOS password Optional: SmartCase Logon+

Operating system

Operating system optional preinstalled	Microsoft® Windows Vista® Business 64bit Microsoft® Windows Vista® Business 32bit
Operating system compatible	Microsoft® Windows® XP Professional x64 Edition Microsoft® Windows® XP Professional Linux
Operating system notes	RedHat / Novell certification For some configurations third party drivers are currently not available or configuration restrictions may apply.

Additional software (preinstalled)	
Additional software (included as a CD/DVD)	Drivers & Utilities DVD (DUDVD) Windows Vista® Norton Internet Security (incl. Firewall)

Manageability features	
Manageability type	DeskView 10
Manageability link	http://ts.fujitsu.com/manageability

Warranty

Service level	(depending on country)
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Maintenance and Support Services - the perfect extension

Recommended Service	5x9, Response Time: Next Business Day
Service Weblink	http://ts.fujitsu.com/Supportservice

Information about environmental care, policies, programs and our Environmental Guideline FSC 03230:

<http://ts.fujitsu.com/aboutus>

Take back and Recycling information:

<http://ts.fujitsu.com/recycling>

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