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Fujitsu recommends Windows 7.

Data Sheet

Fujitsu CELSIUS W410 Workstation

The low-cost gateway to workstation performance

The CELSIUS W410 is an excellent system providing advanced performance for workstation applications. Powered by the 2nd generation Intel® Core™ processor family and available with a wide selection of professional graphics cards, this system offers you advanced power and productivity of workstation technology and is ideal for business environments such as entry-level 2D CAD.

Noise-reduced system engineered in Germany

Quiet and productive working environment

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

Advanced performance

Get more done in less time

- The latest processors and professional graphics cards

Upgradeability

Minimum downtime in the event of rapid component upgrades

- Screw less access system design

Leading workstation application certification

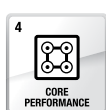
Maximum compatibility and performance with customer-preferred applications

- 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	Intel® Core™ i7-2600 processor (4 Cores / 8 Threads, 3.40 GHz, 8 MB, Intel® HD Graphics 2000) Intel® Core™ i5-2500 processor (4 Cores / 4 Threads, 3.30 GHz, 6 MB, Intel® HD Graphics 2000) Intel® Core™ i5-2400 processor (4 Cores / 4 Threads, 3.10 GHz, 6 MB, Intel® HD Graphics 2000) Intel® Core™ i3-2100 processor (2 Cores / 4 Threads, 3.10 GHz, 3 MB, Intel® HD Graphics 2000) Intel® Pentium® processor G840 (2 Cores / 2 Threads, 2.80 GHz, 3 MB, Intel® HD Graphics) Intel® Pentium® processor G620 (2 Cores / 2 Threads, 2.60 GHz, 3 MB, Intel® HD Graphics)
Operating system	Genuine Windows® 7 Home Basic (EM) 32-bit Genuine Windows® 7 Home Premium 64-bit Genuine Windows® 7 Professional 32-bit Genuine Windows® 7 Professional 64-bit
Operating system compatible	openSUSE Linux Genuine Windows Vista® Genuine Windows® XP
Operating system notes	Buy Microsoft® Office 2010 to use the full-featured Office software on this PC. Limited Windows® XP support. Microsoft discontinued Windows® XP certification on system level, basic drivers via http://support.ts.fujitsu.com
Memory modules	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM 4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1333 MHz, PC3-10600, DIMM
Graphics add on cards (optional)	Midrange 3D: ATI FirePro™ V5900, 2 GB, 800 stream processors, PCIe x16, DL-DVI-I, 2x DP Midrange 3D: ATI FirePro™ V5800, 1 GB, 800 stream processors, PCIe x16, DL-DVI-I, 2x DP Midrange 3D: NVIDIA® Quadro® 2000, 1 GB, 192 cores, PCIe x16, DL-DVI-I, 2x DP Entry 3D: ATI FirePro™ V4800, 1 GB, 400 stream processors, PCIe x16, DL-DVI-I, 2x DP Entry 3D: NVIDIA® Quadro® 600, 1 GB, 96 cores, PCIe x16, DL-DVI-I, DP Entry 3D: NVIDIA® Quadro® 400, 512 MB, 48 cores, PCIe x16, 1x DVI-I, DP Entry 3D: ATI FirePro™ V3800, 512 MB, 400 stream processors, PCIe x16, DL-DVI-I, DP Professional 2D: NVIDIA® Quadro® NVS 450, 512 MB, 2 x 8 cores, PCIe x16, 4 x DP Professional 2D: NVIDIA® Quadro® NVS 300, 512 MB, 16 cores, PCIe Gen2 x16, 2x DVI/VGA
Hard disk drives (internal)	SSD SATA, 256 GB, 2.5-inch SSD SATA, 128 GB, 2.5-inch SATA III, 10000 rpm, 600 GB, 3.5-inch internal SATA III, 10000 rpm, 300 GB, 2.5-inch SATA III, 7200 rpm, 1000 GB, 3.5-inch, business critical SATA III, 7200 rpm, 1000 GB, 3.5-inch SATA III, 7200 rpm, 500 GB, 3.5-inch, business critical SATA III, 7200 rpm, 500 GB, 3.5-inch SATA III, 7200 rpm, 320 GB, 3.5-inch SATA II, 7200 rpm, 2000 GB, 3.5-inch, business critical SATA II, 7200 rpm, 160 GB, 2.5-inch
Hard disk notes	Up to 18 GB of HDD space is reserved for system recovery
Drives (optional)	Blu-ray Disc™ Triple Writer DVD-ROM DVD Super Multi MultiCard Reader 20in1, USB 2.0, 3.5-Inch MultiCard Reader 20in1 USB 3.0 front con., 3.5-Inch

**Interface add on cards/components
(optional)**

WLAN III, 802.11g/Draft-n (Windows only)
 USB 3.0 PCIe x1
 Parallel Interface
 Gigabit Ethernet PCIe x1, DS
 FireWire PCI-Card IEEE1394
 eSATA Interface
 Dual serial card PCIe x1, powered
 Dual serial card PCIe x1

Base unit CELSIUS W410

Mainboard

Mainboard type D3062
Formfactor proprietary
Chipset Intel® Q67
Processor socket LGA 1155
Processor quantity maximum 1
Memory slots 4 DIMM (DDR3)
Supported capacity RAM (max.) 32 GB
Memory frequency 1333 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.
 > 16 GB support with future memory modules

LAN 10/100/1000 MBit/s Intel® 82579 LM

BIOS version AMI Aptio 4.6

BIOS features BIOS Flash EPROM update by software
 Recovery BIOS

Audio codec Conexant CX20642

Audio features Internal speaker supports audio playback, High Definition audio, 5.1 surround sound

I/O controller on board

Serial ATA total 6
thereof SATA III 2
thereof eSATA 2 (optional)

Controller functions Serial ATA II (3 Gbit)
 Serial ATA III (6 Gbit)
 NCQ
 AHCI
 Raid 1/0

Interfaces

Audio: line-in 1
Audio: line-in / microphone 1
Audio: line-out 1
Front audio: microphone 1
Front audio: headphone 1
USB 2.0 total 14
USB 3.0 total optional
USB front 4
USB rear 8
USB internal 2
VGA 1 (via DVI to VGA adapter)
DisplayPort 1

Interfaces

DVI	1
Serial (RS-232)	1 (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

Drive bays

Drive bays total	7
2.5-inch internal bays	1
3.5-inch internal bays	2
3.5-inch external bays	2
5.25-inch external bays	2

Slots

PCI-Express 2.0 x16	1 x (312 mm) full height
PCI-Express 2.0 x4 (mech. x16)	1 x (312 mm) full height
PCI-Express x1	1 x (312 mm) full height
PCI (32-bit / 33 MHz)	1 x (170 mm) full height

Graphics on board

Graphics brand name	Intel® HD Graphics or HD Graphics 2000 (depending on CPU)
Shared video memory	up to 1759 MB
TFT resolution (VGA)	1024 x 768 pixel 1280 x 1024 pixel 1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1600 x 1200 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DVI)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel
TFT resolution (DisplayPort)	1360 x 768 pixel 1440 x 900 pixel 1600 x 900 pixel 1680 x 1050 pixel 1920 x 1080 pixel 1920 x 1200 pixel 2560 x 1440 pixel 2560 x 1600 pixel
Graphics features	Dual display support DirectX 10.1 HDCP support For multi monitoring mode, graphics card and integrated graphics run in parallel (Microsoft® Windows 7® only) Open GL® 3.0
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
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	300 W
Power factor correction/active power	active

Noise for standard configuration (HDD, ODD, FDD)

Noise emission	According to ISO9296
Related Processors for noise	Intel Core i5-2500
Noise Operation mode 1: ODD load (Blue angel requirement)	25 db(A)
Noise Operation mode 2: HDD load (Blue angel requirement)	19 db(A)
Noise Operation mode 3: CPU 90% load (Blue angel requirement)	21 db(A)
Noise Operation mode 4: High load	21 db(A)
Noise Operation mode 5: Office applications	19 db(A)
Idle mode (Blue Angel requirement)	19 db(A)
Noise notes / description	A weighted sound power level Lwad (in B) / workplace related A-weighted sound pressure level LpAm (in dB(A)), Bystander position

Dimensions / Weight / Environmental

Dimensions (W x D x H)	175 x 419 x 395 mm
Operating position	Vertical
Weight	approx. 11 kg
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35C
Operating relative humidity	5 - 85 % (relative humidity)

Compliance

Product	CELSIUS W410
Model	M15W-D3062
Germany	Blauer Engel / Blue Angel in progress GS
Europe	CE Nordic Swan
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) ENERGY STAR® 5.0 EPEAT® Silver (dedicated regions)
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

Security

System protection	Kensington Lock support Eye for padlock Optional: Integrated cabinet lock Optional: Intrusion switch
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Security	
Audit proof protection	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
Access protection	User and supervisor BIOS password Hard disk password Optional: Access protection via external SmartCard reader Optional: Access protection via internal SmartCard reader
Additional Software	
Additional software (preinstalled)	Nero Essentials S (burning software) Fujitsu Recovery (Hard Disk Based Recovery)
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)
Miscellaneous	
	Keyboard on (Special Fujitsu keyboard required) Thermal management Extended lifetime
Manageability	
Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) Intrusion switch (optional) iAMT 7.0
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 Advanced alerts (ASF implementation) Security Remote Control DeskView Helpdesk Integration WoL (Wake on LAN)
Manageability link	http://ts.fujitsu.com/manageability http://www.altiris.com/fujitsu
Input device / components	
Input devices (optional)	Optical USB tilt wheel mouse Optical USB/PS2 tilt wheel mouse KBPC PX ECO Mouse M440 ECO
Warranty	
Standard Warranty	3 years (depending on country)
Service level	On-site Service (depending on country)
Maintenance and Support Services - the perfect extension	
Recommended Service	5x9, Response Time: Next Business Day
Service Weblink	http://ts.fujitsu.com/Supportservice

More information

Fujitsu platform solutions

In addition to Fujitsu CELSIUS W410, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Dynamic Infrastructures

With the Fujitsu Dynamic Infrastructures approach, Fujitsu offers a full portfolio of IT products, solutions and services, ranging from clients to datacenter solutions, Managed Infrastructure and Infrastructure as-a-Service. How much you benefit from Fujitsu technologies and services depends on the level of cooperation you choose. This takes IT flexibility and efficiency to the next level.

Computing Products

www.fujitsu.com/global/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu CELSIUS W410, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
<http://ts.fujitsu.com/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 resolve issues of environmental energy efficiency through IT. Please find further information at <http://www.fujitsu.com/global/about/environment/>



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