Fujitsu recommends Windows® 7.

# Data Sheet
## Fujitsu CELSIUS W410 Workstation

The Low-cost Gateway to Workstation Performance

If your application requirements have outgrown the performance of a standard PC, the Fujitsu CELSIUS W410 is designed for you. This attractively-priced, compact workstation is individually configurable and allows easy tool-less expansion for greater working flexibility. Unique low-noise emissions and full ISV certification for your applications help you increase your productivity.

**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

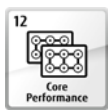**Leading workstation application certification**
Maximum compatibility and performance with customer-preferred applications
■ Full support for ISV applications and easy integration into existing IT environments

**Built to order**
Free configurability for all product lines
■ Customer is given a system optimized for his requirements

# Components

| | |
|---|---|
| | Intel® vPro™ Logo with Intel® Core i5-2400, Intel® Core™ i5-2500 and Intel® Core™ i7-2600 processors. |
| **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™ i3-2120 processor (2 Cores / 4 Threads, 3.30 GHz, 3 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 G850 (2 Cores / 2 Threads, 2.90 GHz, 3 MB, Intel® HD Graphics) |
| | Intel® Pentium® processor G840 (2 Cores / 2 Threads, 2.80 GHz, 3 MB, Intel® HD Graphics) |
| | Intel® Pentium® processor G630 (2 Cores / 2 Threads, 2.70 GHz, 3 MB, Intel® HD Graphics) |
| | Intel® Pentium® processor G620 (2 Cores / 2 Threads, 2.60 GHz, 3 MB, Intel® HD Graphics) |
| | Intel® Celeron® processor G530 (2 Cores / 2 Threads, 2.40 GHz, 2 MB, Intel® HD Graphics) |
| **Operating systems** | |
| **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** | 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)** | Entry 3D: AMD FirePro™ V4900, 1 GB, 400 stream processors, PCIe x16, Dual Link DVI-I, 2x DisplayPort |
| | Midrange 3D: ATI FirePro™ V5800, 1 GB, 800 stream processors, PCIe x16, Dual Link DVI-I, 2x DisplayPort |
| | Midrange 3D: NVIDIA® Quadro® 2000D, 1 GB, 192 cores, PCIe x16, 2x Dual Link DVI-I |
| | Midrange 3D: NVIDIA® Quadro® 2000, 1 GB, 192 cores, PCIe x16, Dual Link DVI-I, 2x DisplayPort |
| | Midrange 3D: AMD FirePro™ V5900, 2 GB, 800 stream processors, PCIe x16, Dual Link DVI-I, 2x DisplayPort |
| | Entry 3D: ATI FirePro™ V4800, 1 GB, 400 stream processors, PCIe x16, Dual Link DVI-I, 2x DisplayPort |
| | Entry 3D: NVIDIA® Quadro® 600, 1 GB, 96 cores, PCIe x16, Dual Link DVI-I, DisplayPort |
| | Entry 3D: NVIDIA® Quadro® 400 , 512 MB, 48 cores, PCIe x16, 1x DVI-I, DisplayPort |
| | Entry 3D: ATI FirePro™ V3800, 512 MB, 400 stream processors, PCIe x16, Dual Link DVI-I, DisplayPort |
| | Professional 2D: NVIDIA® Quadro® NVS 450, 512 MB, 2 x 8 cores, PCIe x16, 4 x DisplayPort |
| | Professional 2D: NVIDIA® Quadro® NVS 300, 512 MB, 16 cores, PCIe Gen2 x16, 2x DVI/VGA |
| **Hard disk drives (internal)** | SSD SATA III, 512 GB, 2.5-inch |
| | SSD SATA III, 256 GB, 2.5-inch |
| | SSD SATA III, 128 GB, 2.5-inch |
| | SSD SATA, 256 GB, 2.5-inch |
| | SSD SATA, 128 GB, 2.5-inch |
| | HDD SATA III, 10000 rpm, 600 GB, 3.5-inch internal |
| | HDD SATA III, 10000 rpm, 300 GB, 2.5-inch |
| | HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch, business critical |
| | HDD SATA III, 7200 rpm, 1000 GB, 3.5-inch |
| | HDD SATA III, 7200 rpm, 500 GB, 3.5-inch, business critical |
| | HDD SATA III, 7200 rpm, 500 GB, 3.5-inch |
| | HDD SATA III, 7200 rpm, 320 GB, 3.5-inch |
| | HDD SATA II, 7200 rpm, 2000 GB, 3.5-inch, business critical |
| | HDD SATA II, 7200 rpm, 320 GB, 2.5-inch |
| | HDD SATA II, 7200 rpm, 160 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 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 |
| | 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 |

## Interfaces

| | |
|---|---|
| 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 |
| 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<br>1280 x 1024 pixel<br>1360 x 768 pixel<br>1440 x 900 pixel<br>1600 x 900 pixel<br>1600 x 1200 pixel<br>1680 x 1050 pixel<br>1920 x 1080 pixel<br>1920 x 1200 pixel |
| TFT resolution (DVI) | 1360 x 768 pixel<br>1440 x 900 pixel<br>1600 x 900 pixel<br>1680 x 1050 pixel<br>1920 x 1080 pixel<br>1920 x 1200 pixel |
| TFT resolution (DisplayPort) | 1360 x 768 pixel<br>1440 x 900 pixel<br>1600 x 900 pixel<br>1680 x 1050 pixel<br>1920 x 1080 pixel<br>1920 x 1200 pixel<br>2560 x 1440 pixel<br>2560 x 1600 pixel |

## Graphics on board

| | |
|---|---|
| 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 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 - 35°C |
| Operating relative humidity | 5 - 85 % (relative humidity) |

## Compliance

| | |
|---|---|
| Product | CELSIUS W410 |
| Model | MI5W-D3062 |
| Germany | 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/ |

## Security

| System protection | Kensington Lock support<br>Eye for padlock<br>Optional: Integrated cabinet lock<br>Optional: Intrusion switch |
|---|---|
| Audit proof protection | Boot sector virus protection<br>Write protect option for the Flash EPROM<br>Embedded security (TPM 1.2)<br>Control of all USB interfaces<br>External USB ports can be disabled separately<br>Control of external interfaces |
| Access protection | User and supervisor BIOS password<br>Hard disk password<br>Optional: Access protection via external SmartCard reader<br>Optional: Access protection via internal SmartCard reader |

## Additional Software

| Additional software (preinstalled) | Nero Essentials S (burning software)<br>Fujitsu Recovery (Hard Disk Based Recovery)<br>Norton Internet Security (incl. Firewall) 60 days version<br>Microsoft® Office Starter: reduced-functionality Word and Excel® only, with advertising. No PowerPoint® or Outlook®. Buy Office 2010 to use the full-featured software. |
|---|---|
| Additional software (optional) | Recovery DVD for Windows®<br>Drivers & Utilities DVD (DUDVD)<br>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)<br>Thermal management<br>Extended lifetime |
|---|---|

## Manageability

| Manageability technology | DeskUpdate Driver management<br>PXE 2.1 Boot code<br>Wake up from S5 (off mode)<br>Intrusion switch (optional)<br>iAMT 7.0 |
|---|---|
| Manageability software | DeskView 10.x client management including: |
| DeskView components | On/Offline remote client management<br>Detailed system inventory management and reports<br>BIOS Management<br>Remote power management<br>System notifications<br>Advanced alerts (ASF implementation)<br>Security Remote Control<br>DeskView Helpdesk Integration<br>WoL (Wake on LAN) |
| Manageability link | http://ts.fujitsu.com/manageability<br>http://www.altiris.com/fujitsu |

## Input device / components

| | Optical USB tilt wheel mouse |
|---|---|
| Input devices (optional) | Optical USB/PS2 tilt wheel mouse<br>KBPC PX ECO<br>Mouse M440 ECO |

## Warranty

| Standard Warranty | 3 years (depending on country) |
|---|---|
| Service level | On-site Service (depending on country) |

Fujitsu recommends Windows® 7.

## Warranty
### Maintenance and Support Services - the perfect extension

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

## Warranty
### Maintenance and Support Services - the perfect extension

| | |
|---|---|
| **Recommended Service** | 5x9, Response Time: Next Business Day |

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# 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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