Fujitsu recommends Windows 10 Pro for business.

# Data Sheet FUJITSU Workstation CELSIUS W5010

### Mini CAD Powerhouse

If you thought you would need to sacrifice performance, expandability, price or energy efficiency in a microtower design – think again. The FUJITSU CELSIUS W5010 desktop workstation goes far and beyond with its innovative design, featuring maximum graphic performance and dual slot full-length graphics card support. With its best-in-class low-noise emissions, it enables a quiet and efficient working environment.

No compromise in terms of performance, expandability and price

- Designed with CAD customers in mind: performance, reliability and flexibility at an affordable price Support of Windows 10 Pro for Workstations
- Choose between the latest 10th generation Intel<sup>®</sup> Core<sup>™</sup> processors or the powerful Intel<sup>®</sup> Xeon<sup>®</sup> W-1200 processors
- Up to 128 GB DDR4 2,933 MHz memory (incl. ECC)
- Dual slot full-length graphics cards (up to NVIDIA® Quadro RTX<sup>™</sup> 5000)
- Broad choice of processors and professional graphics cards
- Support of 24/7 operation with reliable high-endurance and business critical drives

### VR-ready desktop workstation

Enjoy a fully immersive and real-time VR experience

- 21-liter desktop microtower workstation
- Powered by professional VR-ready graphics from AMD and NVIDIA
- Optimized thermal management and cooling solutions
- Enjoy a silent workplace environment thanks to low noise emission

### The smartest microtower workstation

Ultimate usability, reliability and ease of use

- Clean, clutter-free interiors with less cables and cold-plug technology for HDDs inside
- Tool-less access to components for easy access and upgrade
- High-speed data transfer with SSD NVMe
- Supports massive amount of data storage with 4 storage slots

### Multiple application scenarios

Ideal for 3D CAD, CAE, design, multimedia, visualization and manufacturing

- Supports graphics-accelerated applications
- Advanced CPUs in combination with flash storage for best application performance
- Up to 8 monitors with the NVIDIA® Mosaic<sup>™</sup> technology









## Components

| Processor                      | Intol® Yoon® processor W/ 1200D (10 Coros / 20 Threads 2 70 CHz up to 5 2 CHz Intol® HHD Craphics D(20)  |  |  |  |
|--------------------------------|--|--|--|--|
| Processor                      | Intel® Xeon® processor W-1290P (10 Cores / 20 Threads, 3.70 GHz, up to 5.2 GHz, Intel® UHD Graphics P630)<br>Intel® Xeon® processor W-1290 (10 Cores / 20 Threads, 3.20 GHz, up to 5.1 GHz, Intel® UHD Graphics P630)                  |  |  |  |
|                                |  |  |  |  |
|                                | Intel® Xeon® processor W-1270P (8 Cores / 16 Threads, 3.80 GHz, up to 5.1 GHz, Intel® UHD Graphics P630)<br>Intel® Xeon® processor W-1270 (8 Cores / 16 Threads, 3.40 GHz, up to 5.0 GHz, Intel® UHD Graphics P630)                    |  |  |  |
|                                |  |  |  |  |
|                                | Intel® Xeon® processor W-1250P (6 Cores / 12 Threads, 4.10 GHz, up to 4.8 GHz, Intel® UHD Graphics P630)   |  |  |  |
|                                | Intel® Xeon® processor W-1250 (6 Cores / 12 Threads, 3.30 GHz, up to 4.7 GHz, Intel® UHD Graphics P630)  |  |  |  |
|                                | Intel® Core™ i9-10900 processor (10 Cores / 20 Threads, 2.80 GHz, 20 MB, Intel® UHD Graphics 630) **   |  |  |  |
|                                | Intel® Core™ i9-10900K processor (10 Cores / 20 Threads, 3.70 GHz, 20 MB, Intel® UHD Graphics 630) **<br>Intel® Core™ i7-10700 processor (8 Cores / 16 Threads, 2.90 GHz, 16 MB, Intel® UHD Graphics 630) **                           |  |  |  |
|                                |  |  |  |  |
|                                | Intel® Core™ i7-10700K processor (8 Cores / 16 Threads, 3.80 GHz, 16 MB, Intel® UHD Graphics 630) **   |  |  |  |
|                                | Intel® Core™ i5-10600 processor (6 Cores / 12 Threads, 3.30 GHz, 12 MB, Intel® UHD Graphics 630) *   |  |  |  |
|                                | Intel® Core™ i5-10500 processor (6 Cores / 12 Threads, 3.10 GHz, 12 MB, Intel® UHD Graphics 630) *   |  |  |  |
|                                | Intel® Core™ i3-10100 processor (4 Cores / 8 Threads, 3.60 GHz, 6 MB, Intel® UHD Graphics 630) *   |  |  |  |
|                                | Intel® vPro® Platform with all Intel® Xeon® processors<br>Intel® vPro® Platform Logo with Intel® Core™ i5, Intel® Core™ i7 and Intel® Core™ i9 processors  |  |  |  |
|                                | *with Intel® Turbo Boost Technology 2.0 (clock speed and performance will vary depending on workload and other   |  |  |  |
|                                | variables)   |  |  |  |
| Operating systems              |  |  |  |  |
| Operating system pre-installed | Windows 10 Pro for Workstations  |  |  |  |
|                                | Windows 10 Pro. Fujitsu recommends Windows 10 Pro for business.  |  |  |  |
|                                | Windows 10 Home  |  |  |  |
| Operating system notes         | For some configurations third party drivers are currently not available or configuration restrictions may apply.<br>Windows 10 Support: After the end of the product life FUJITSU will continue to test and support all upcoming Windo |  |  |  |
|                                | 10 releases for a period of maximum 5 years – depending on the available extension of hardware services through  |  |  |  |
|                                | FUJITSU Warranty top ups. For details please see "FUJITSU Service Statement for Windows 10 Semi-Annual-Channel   |  |  |  |
|                                | Support" at http://support.ts.fujitsu.com.   |  |  |  |
| Memory modules                 | 4 GB (1 module(s) 4 GB) DDR4, unbuffered, non-ECC, 2,933 MT/s, UDIMM   |  |  |  |
|                                | 8 GB (1 module(s) 8 GB) DDR4, unbuffered, ECC, 2,933 MT/s, UDIMM   |  |  |  |
|                                | 8 GB (1 module(s) 8 GB) DDR4, unbuffered, non-ECC, 2,933 MT/s, UDIMM   |  |  |  |
|                                | 16 GB (1 module(s) 16 GB) DDR4, unbuffered, ECC, 2,933 MT/s, UDIMM   |  |  |  |
|                                | 16 GB (1 module(s) 16 GB) DDR4, unbuffered, non-ECC, 2,933 MT/s, UDIMM   |  |  |  |
|                                | 32 GB (1 module(s) 32 GB) DDR4, unbuffered, ECC, 2,933 MT/s, UDIMM   |  |  |  |
|                                | 32 GB (1 module(s) 32 GB) DDR4, unbuffered, non-ECC, 2,933 MT/s, UDIMM   |  |  |  |
| Graphics                       | Ultra-high-end 3D: NVIDIA® Quadro® RTX 5000, 16 GB, PCIe x16, 4 x DisplayPort, 1 x Virtual Link  |  |  |  |
| Graphics                       | High-end 3D: NVIDIA® Quadro® RTX 4000, 8 GB, PCIe x16, 3 x DisplayPort, 1 x Virtual Link   |  |  |  |
|                                | Midrange 3D: NVIDIA® Quadro® P2200, 5 GB, PCle x16, 4 x DisplayPort  |  |  |  |
|                                | Midrange 3D: AMD Radeon™ Pro WX 5100, 8 GB, 320 stream processors, PCle x16, 4 x DisplayPort   |  |  |  |
|                                | Entry 3D: NVIDIA® Quadro® P1000, 4 GB, PCIe x16, 4 x miniDP  |  |  |  |
|                                | Entry 3D: NVIDIA® Quadro® P620, 2 GB, PCIe x16, 4 x miniDP   |  |  |  |
|                                | · · · · · · · · · · · · · · · · · · ·  |  |  |  |
|                                | Entry 3D: NVIDIA® Quadro® P400, 2 GB, PCIe x16, 3 x miniDP   |  |  |  |
|                                | Entry 3D: AMD Radeon™ Pro WX 3100, 4 GB, 320 stream processors, PCIe x16, 1 x DisplayPort, 2 x miniDP  |  |  |  |
|                                | Entry 3D: AMD Radeon™ Pro WX 2100, 2 GB, 320 stream processors, PCIe x16, 1 x DisplayPort, 2 x miniDP<br>Others: MiniDP to DP Adapter Cable  |  |  |  |
| Mass store so 2.5 is store     |  |  |  |  |
| Mass storage 2.5 inch size     | SSD SATA III, 512 GB, 2.5-inch   |  |  |  |
|                                | SSD SATA III, 256 GB, 2.5-inch   |  |  |  |

| Mass Storage M.2 technology  | SSD PCIe, 2048 GB M.2 NVMe module on carrier card   |  |  |  |
|--|---|--|--|--|
|  | SSD PCIe, 2048 GB M.2 NVMe module   |  |  |  |
|  | SSD PCIe, 1024 GB M.2 NVMe module, SED  |  |  |  |
|  | SSD PCIe, 1024 GB M.2 NVMe module on carrier card   |  |  |  |
|  | SSD PCIe, 1024 GB M.2 NVMe module   |  |  |  |
|  | SSD PCIe, 512 GB M.2 NVMe module, SED   |  |  |  |
|  | SSD PCIe, 512 GB M.2 NVMe module on carrier card  |  |  |  |
|  | SSD PCIe, 512 GB M.2 NVMe module  |  |  |  |
|  | SSD PCIe, 256 GB M.2 NVMe module, SED   |  |  |  |
|  | SSD PCIe, 256 GB M.2 NVMe module on carrier card  |  |  |  |
|  | SSD PCIe, 256 GB M.2 NVMe module  |  |  |  |
|  | RAID1 Bundle 2x512GB M.2 NVMe Highend   |  |  |  |
|  | RAID1 Bundle 2x256GB M.2 NVMe Highend   |  |  |  |
| Mass storage 3.5 inch size   | HDD SATA III, 7,200 rpm, 8000 GB, 3.5-inch, business critical   |  |  |  |
|  | HDD SATA III, 7,200 rpm, 4000 GB, 3.5-inch, business critical   |  |  |  |
|  | HDD SATA III, 7,200 rpm, 2000 GB, 3.5-inch, business critical   |  |  |  |
| Mass storage 2.5 inch size   | HDD SATA III, 7,200 rpm, 2,000 GB, 2.5-inch, business critical  |  |  |  |
| Mass storage 3.5 inch size   | HDD SATA III, 7,200 rpm, 1000 GB, 3.5-inch, business critical   |  |  |  |
| Mass storage 2.5 inch size   | HDD SATA III, 7,200 rpm, 1,000 GB, 2.5-inch, business critical  |  |  |  |
|  | SSD SATA III, 960 GB High Endurance, 1DWDP, 2.5-inch  |  |  |  |
|  | SSD SATA III, 480 GB High Endurance, 1DWDP, 2.5-inch  |  |  |  |
|  | SSD SATA III, 240 GB High Endurance, 1DWDP, 2.5-inch  |  |  |  |
| Hard disk notes  | One Gigabyte equals one billion bytes, when referring to hard disk drive capacity.  |  |  |  |
|  | SSD (Solid State Disk)  |  |  |  |
|  | SED (Self-Encrypting Drive)   |  |  |  |
| Drives (optional)  | BD Triple Writer SATA ultra slim (tray)   |  |  |  |
|  | DVD Super Multi   |  |  |  |
|  | DVD Super Multi ultra slim (tray)   |  |  |  |
|  | MultiCard Reader 15in1 USB 3.0 3.5"   |  |  |  |
| Interface add on cards/components  |   |  |  |  |
| meenace and on caras components  |   |  |  |  |
| (optional)   |   |  |  |  |
|  | Intel 2x1Gb Ethernet Adapter I350-T2  |  |  |  |
|  | Intel 2x1Gb Ethernet Adapter I350-T2<br>Gigabit Ethernet PCIe x1  |  |  |  |
|  |   |  |  |  |
| (optional)   | Gigabit Ethernet PCle x1<br>Dual serial card PCle x1  |  |  |  |
|  | Gigabit Ethernet PCle x1  |  |  |  |
| (optional)   | Gigabit Ethernet PCle x1<br>Dual serial card PCle x1  |  |  |  |
| (optional)<br>Drives   | Gigabit Ethernet PCle x1<br>Dual serial card PCle x1<br>SD-Card 4.0 reader in front   |  |  |  |
| (optional) Drives Base unit  | Gigabit Ethernet PCle x1<br>Dual serial card PCle x1<br>SD-Card 4.0 reader in front   |  |  |  |
| (optional)<br>Drives<br>Base unit<br>Mainboard   | Gigabit Ethernet PCle x1         Dual serial card PCle x1         SD-Card 4.0 reader in front         CELSIUS W5010   |  |  |  |
| (optional)<br>Drives<br>Base unit<br>Mainboard<br>Mainboard type   | Gigabit Ethernet PCle x1         Dual serial card PCle x1         SD-Card 4.0 reader in front         CELSIUS W5010         D3817   |  |  |  |
| (optional)<br>Drives<br>Base unit<br>Mainboard<br>Mainboard type<br>Formfactor   | Gigabit Ethernet PCle x1         Dual serial card PCle x1         SD-Card 4.0 reader in front         CELSIUS W5010         D3817         proprietary   |  |  |  |
| (optional)<br>Drives<br>Base unit<br>Mainboard<br>Mainboard type<br>Formfactor<br>Chipset<br>Processor socket  | Gigabit Ethernet PCle x1         Dual serial card PCle x1         SD-Card 4.0 reader in front         CELSIUS W5010         D3817         proprietary         Intel® W480   |  |  |  |
| (optional)<br>Drives<br>Base unit<br>Mainboard<br>Mainboard type<br>Formfactor<br>Chipset<br>Processor socket<br>Processor quantity maximum  | Gigabit Ethernet PCle x1         Dual serial card PCle x1         SD-Card 4.0 reader in front         CELSIUS W5010         D3817         proprietary         Intel® W480         LGA 1200  |  |  |  |
| (optional)<br>Drives<br>Base unit<br>Mainboard<br>Mainboard type<br>Formfactor<br>Chipset<br>Processor socket<br>Processor quantity maximum<br>Supported capacity RAM (max.)   | Gigabit Ethernet PCle x1         Dual serial card PCle x1         SD-Card 4.0 reader in front         CELSIUS W5010         D3817         proprietary         Intel® W480         LGA 1200         1         128 GB   |  |  |  |
| (optional)<br>Drives<br>Base unit<br>Mainboard<br>Mainboard type<br>Formfactor<br>Chipset<br>Processor socket<br>Processor quantity maximum<br>Supported capacity RAM (max.)<br>Memory slots   | Gigabit Ethernet PCle x1         Dual serial card PCle x1         SD-Card 4.0 reader in front         CELSIUS W5010         D3817         proprietary         Intel® W480         LGA 1200         1         128 GB         4 DIMM (DDR4) ECC/non-ECC   |  |  |  |
| (optional)<br>Drives<br>Base unit<br>Mainboard<br>Mainboard type<br>Formfactor<br>Chipset<br>Processor socket<br>Processor socket<br>Processor quantity maximum<br>Supported capacity RAM (max.)<br>Memory slots<br>Memory frequency | Gigabit Ethernet PCle x1         Dual serial card PCle x1         SD-Card 4.0 reader in front         CELSIUS W5010         D3817         proprietary         Intel® W480         LGA 1200         1         128 GB         4 DIMM (DDR4) ECC/non-ECC         2,933 MT/s  |  |  |  |
| (optional)<br>Drives<br>Base unit<br>Mainboard<br>Mainboard type<br>Formfactor<br>Chipset<br>Processor socket<br>Processor quantity maximum<br>Supported capacity RAM (max.)<br>Memory slots   | Gigabit Ethernet PCle x1         Dual serial card PCle x1         SD-Card 4.0 reader in front         CELSIUS W5010         D3817         proprietary         Intel® W480         LGA 1200         1         128 GB         4 DIMM (DDR4) ECC/non-ECC   |  |  |  |
| (optional)<br>Drives<br>Base unit<br>Mainboard<br>Mainboard type<br>Formfactor<br>Chipset<br>Processor socket<br>Processor socket<br>Processor quantity maximum<br>Supported capacity RAM (max.)<br>Memory slots<br>Memory frequency | Gigabit Ethernet PCle x1         Dual serial card PCle x1         SD-Card 4.0 reader in front         CELSIUS W5010         D3817         proprietary         Intel® W480         LGA 1200         1         128 GB         4 DIMM (DDR4) ECC/non-ECC         2,933 MT/s         Dual channel support         For dual channel performance, 2 memory modules have to be ordered. Capacity per channel has to be the same. |  |  |  |

| and power delivery (PD) up to 15W or 60W (occupies PCle x16 slot)       USB internal     1x USB 2.0 Type A       VGA     optional       USB internal     2       DVI     optional (DVI-D)       Serial (R5-232)     optional: serial port (9pin, 16 byte FIFO, 16550 compatible)       Mouse / Keyboard (PS/2)     2 (optional)       Ethernet (RI-45)     1       Parallel     1 (optional) (25pin with EPP and ECP)       eSATA     1 (optional)       Interface Module notes     Anytime USB charge functionality       Input device / components     Keyboard       Input devices (optional)     Keyboard       Drive bays total     6       2.5-Inch internal bays     1       2.5-Inch external bays     1       2.5-Inch external bays     2       2.5-Inch external bays     2       2.52*Days: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5* bays: 3.5* drive (screwels) or 2.5* drive (screws);       M2-2280     2 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/S)<br>thereof 1x supporting M.2-2280 only       Slots     E       PCI-Express 3.0 x1     2 x (10 mm and 270 mm / 4.33 inch and 10.63 inch) Full height   |                                |  |  |  |  |
|--|--------------------------------|--|--|--|--|
| UEF Specification 2.6           BIOS Fastures         BIOS Estable Firmware Interface (UEF)           Audio tope         On board           Audio code         Reatewny BIOS           Victorization of the audio sound         Controller of the audio sound           Victorization of the audio sound         Controller of the audio sound           Victorization of the audio sound         Controller functions           Serial ATA III (G GbIC)         Serial ATA III (G GbIC)           AUD ON SOUND         NCO           AUD ON SOUND         RCO           AUD ON SOUND         1           Controller functions         Serial ATA III (G GbIC)           NCO         AUD ON SOUND           Reatewny BIOS Sound Sound         NCO           AUD ON SOUND         1           Sound Instrains provide sound Soun  | Mainboard                      |  |  |  |  |
| Become PIOS           Audio topic         On board           Audio topic         Reatek ALC623           Audio features         Internal speaker supports audio playback (optional), High Definition audio, 5.1 surround sound           IV concilier on board         Serial ATA total           6         Concilier on board           Serial ATA total         6           Mercel SATA III (6 Goit)         NCO           NCO         AHC           AHC         Realbox (1000)           State Sector (1000)         Sand 1 optional           USB 32 Cen 11 S Clopis total         3           USB 32 Cen 12 Clopis total         3           USB 32 Cen 13 Clopis total         3 </td <td>BIOS version</td> <td colspan="3"></td>  | BIOS version                   |  |  |  |  |
| Addie type     On baard       Addie type     Realtek ALG623       Addie foctures     Internal speaker supports audio playback (optional), High Definition audio, 5.1 surround sound       VIC controller on baard     6       Serial ATA total     6       Homerof STA III     6       Controller functions     Serial ATA III (6 Gbit)       NCQ     AHC       AHC     RAID 0/15/10       Internal speakers     1       Addie: Inte-out     1       Total charter     1       Addie: Inte-out     1       Internal speakers     1       USB 3.2 Gen 1 (5 Gbpt) total     3       USB 1.2 Gotal     4       USB 3.2 Gen 1 (5 Gbpt) total     3       USB 1.2 Gotal     4       USB 3.2 Gen 1 (5 Gbpt) total     4       USB 1.2 Gotal     4       USB 1.2 Gen 1 (5 Gbpt) total     5       USB 1.2 Gen 1 (5 Gbpt) total     5       USB 1.2 Gotal     1 <td>BIOS features</td> <td colspan="3">Recovery BIOS</td>   | BIOS features                  | Recovery BIOS  |  |  |  |
| Audio codec     Realtek ALC623       Audio features     Internal speaker supports audio playback (optional), High Definition audio, 5.1 surround sound       Vic controller on board     Serial ATA total       Serial ATA total     6       Controller functions     Serial ATA III (6 Gbit)<br>NCO<br>ANDIO       NCO<br>Audio: line-in     1       Audio: line-in     1       Mudio: line-in     2       Mudio: line-in     2       Mudio: line-in     2       Mudio: line-in     2       Mu   | Audio type                     |  |  |  |  |
| VC controller on board         Serial ATA total       6         Horeord SATA IIII       6         Controller functions       Serial ATA III (6 Gbt)<br>NCQ<br>AAPCI<br>RAD OV15/10         Interfaces       Audio: line-in         Audio: line-in       1         USB 20 Cottal       Sature 1         Store audio: haddet       1         Internal speakers       1         USB 32 Cottal       Sature 1         USB fort       2x USB 22, 2x USB 32 Gen 2; 1x USB 32 Gen 2; 1y USB 32 Gen 12; 1y USB 32 Gen 2; 1y USB 32 Gen 2   |                                |  |  |  |  |
| Serial ATA total     6       thereof SATA III     6       Controller functions     Serial ATA III (6 Gbit)<br>NCQ<br>AHCI<br>RAID 0/1/5/10       Interfaces  | Audio features                 |  |  |  |  |
| thereof SATA III 6 Gontroller functions Serial ATA III (6 Gbit) NCQ AHCI RAID 071/5/10 Interfaces  Audio: line-out 1 Audio: line-out 1 Audio: line-out 1 Control adub: headset 1 Internal speakers 1 USB 32 Gen 1 (6 Gbps) total 4 USB 32 Gen 1 (6 Gbps) total 5 and 1 optional USB 32 Gen 1 (6 Gbps) total 5 and 1 optional USB 32 Gen 1 (6 Gbps) total 5 and 1 optional USB 7 ard 1 optional USB 7 ard 1 optional 1 Su USB 32 Gen 1 (1 Gbps) total 5 and 1 optional USB 7 brow Audio: line-out 1 Su USB 32 Gen 1 (1 Gbps) total 5 and 1 optional USB 7 brow Audio: line-out 1 Su USB 2.0; zu USB 32 Gen 2 (1 USB 32 Gen 2 Type-C (supports up to 1 SW) USB 7 brow Audio: line-out 1 Su USB 2.0; zu USB 32 Gen 2; zu USB 32 Gen 2; optional: additional 1 x USB 32 Gen 2 Type-C (supports DisplayP and power delivery (PD) up to 1 SW or 60W (accupies PCle x16 slot) USB fremal 1 x USB 2.0; zu USB 32 Gen 1; zu USB 32 Gen 2; optional: additional 1 x USB 32 Gen 2 Type-C (supports DisplayP and power delivery (PD) up to 1 SW or 60W (accupies PCle x16 slot) USB fremal 1 x USB 2.0; zu USB 32 Gen 1; du USB 2.0; zu USB 32 Gen 2; optional: additional 1 x USB 32 Gen 2 Type-C (supports DisplayP and power delivery (PD) up to 1 SW or 60W (accupies PCle x16 slot) USB fremal 1 x USB 2.0; zu USB 2.0; zu USB 2.0; zu USB 2.2; du USB 2.2; d | I/O controller on board        |  |  |  |  |
| Controller functions         Serial ATA III (6 Gbit)<br>NCQ<br>AHCI<br>RAD 07/5/10           Interfaces  | Serial ATA total               | 6  |  |  |  |
| NCQ<br>AHC<br>RAID 0/1/5/10           Interfaces           Audio: line-in         1           Audio: line-out         1           Front audio: headset         1           Interfaces         1           Statulo: line-out         1           Internal speakers         1           Statulo: line-out         4           USB 3.2 Gen 1 (5 Gbps) total         5 and 1 optional           USB 3.2 Gen 1 (5 Gbps) total         5 and 1 optional           USB from         2x USB 2.0 zot USB 3.2 Gen 2.1 x USB 3.2 Gen 2.Type-C (supports up to 15W)           USB fremant         2x USB 2.0 zot USB 3.2 Gen 2.1 x USB 3.2 Gen 2. optional: additional 1x USB 3.2 Gen 2.Type-C (supports DisplayPa-<br>and power delivery (PD) up to 15W or 60W (occupies PCIe x16 slot)           USB Internal         1x USB 2.0 Type A           VGA         optional           DisplayPort         2           2         2           DW         optional (DVI-D)           Serial (RS-232)         optional (DVI-D)           Serial (RS-232)         optional (DVI-D)           Serial (PS/2)         2 (optional)           Interface Module notes         Arytime USB charge functionality           Interface Module notes         Arytime USB charge functionality           Intefface Module no  | thereof SATA III               | 6  |  |  |  |
| Audio: line-in1Audio: line-out1Front audio: headset1Internal speakers1USB 2.0 total4USB 2.0 total3USB 3.2 Gen 1 (5 Gbps) total3USB 3.2 Gen 2 (10 Gbps) total5 and 1 optionalUSB 3.2 Gen 2 (10 Gbps) total5 and 1 optionalUSB 7 Gen 2 (10 Gbps) total2 and 1 optionalUSB 7 Gen 2 (10 Gbps) total5 and 1 optionalUSB 8 area2x USB 2.0; 2x USB 3.2 Gen 1; 2x USB 3.2 Gen 2; optional: additional 1x USB 3.2 Gen 2 Type-C (supports DisplayPa<br>and power delivery (PD) up to 15W or 60W (occupies PCIe x16 slot)USB internal1x USB 2.0 Type AVGAoptionalDisplayPort222DVoptional (DV-D)Serial (RS-232)optional: serial port (Ppin, 16 byte FIFO, 16550 compatible)Mouse / Keyboard (PS/2)2 (optional)Ehernet (RJ-45)1Parallel1 (optional)Input device / componentsAnytime USB charge functionalityInput device / components1Input device s (optional)Keyboard<br>MouseDrive bays total62.5-inch internal bays13.5-inch internal bays13.5-inch internal bays22.5-inch external bays13.5-inch internal bays22.5-inch internal bays22.5-inch internal bays22.5-inch internal bays23.5-inch internal bays22.5-inch internal bays2  | Controller functions           | NCQ<br>AHCI  |  |  |  |
| Audio: line-out     1       Front audio: headset     1       Internal speakers     1       USB 22 Octal     4       USB 22 Gen 1 (5 Gbps) total     3       USB 22 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     5 and 1 optional       USB 72 Gen 2 (10 Gbps) total     1 tots 6 and 1 optional       USB 72 Gen 2 (10 Gbps) total     1 optional       Dive 72 Gen 2 (10 Gbps)     1       Police (10 Gbps)     1 (optional)       Reveoard     Anytime USB charge functionality       Input device / components     Input device / components       Input devic   | Interfaces                     |  |  |  |  |
| Front audio: headset1Internal speakers1USB 2.0 total4USB 3.2 Gen 1 (5 Gbps) total3 and 1 optionalUSB 3.2 Gen 1 (5 Gbps) total5 and 1 optionalUSB 70 tot2x USB 2.0; 2x USB 3.2 Gen 2; 1x USB 3.2 Gen 2; optional: additional 1x USB 3.2 Gen 2 Type-C (supports up to 15W)USB rear2x USB 2.0; 2x USB 3.2 Gen 1; 2x USB 3.2 Gen 2; optional: additional 1x USB 3.2 Gen 2 Type-C (supports DisplayPa and power delivery (PD) up to 15W or 60W (occupies PCle x16 slot)USB internal1x USB 2.0 Type AVGAoptionalDisplayPort2DVIoptional (DVI-D)Serial (R5-232)optional (DVI-D)Serial (R5-232)optional (DVI-D)Serial (R5-232)optional (DVI-D)Serial (R5-232)optional (DVI-D)Interface Module notesAnytime USB charge functionalityInterface Module notesAnytime USB charge functionalityInterface Module notesAnytime USB charge functionalityInput devices (optional)KeyboardDrive bays0Drive bays1Drive bays total62.5-inch internal bays12.5-inch internal bays12.5-inch external bays12.5-inch external bays22.5-inch  | Audio: line-in                 | 1  |  |  |  |
| Internal speakers 1 USB 2.0 total 4 USB 2.2 Gen 1 (5 Gbps) total 3 USB 3.2 Gen 2 (10 Gbps) total 2 SUSB 3.2 Gen 2 (10 Gbps) total 2 SUSB 2.0; 2x USB 3.2 Gen 2; 1x USB 3.2 Gen 2 Type-C (supports up to 15W) USB front 2x USB 2.0; 2x USB 3.2 Gen 1; 2x USB 3.2 Gen 2; optional: additional 1x USB 3.2 Gen 2 Type-C (supports DisplayR and power delivery (PD) up to 15W or 60W (occupies PCle x16 slot) USB internal 1x USB 2.0 Type A VGA optional DisplayPort 2 DVI optional (DVI-D) Serial (K5-232) optional: serial port (9pin, 16 byte FIPO, 16550 compatible) Mouse / Keyboard (P5/2) 2 (optional) Ethernet (RJ-45) 1 Parallel 1 (optional) Interface Module notes Anytime USB charge functionality Input devices (optional) Keyboard (Mouse Drive bays total 6 2.5-inch internal bays 2 2.5.25' bays: one bay in HH format, one bay for slim optical disc drive only; internal bays 3. 2.5.25' bays: one bay in HH format, one bay for slim optical disc drive only; internal bays 3.5' drive (screws); M2-2280 NL 2-2280 only thereof 1x supporting M2-2280 on | Audio: line-out                | 1  |  |  |  |
| USB 2.0 total4USB 2.2 Gen 1 (5 Gbps) total3USB 2.2 Gen 2 (10 Gbps) total5 and 1 optionalUSB 3.2 Gen 2 (10 Gbps) total5 and 1 optionalUSB front2x USB 2.0; 2x USB 3.2 Gen 2; 1x USB 3.2 Gen 2; toptional: additional 1x USB 3.2 Gen 2 Type-C (supports up to 15W)USB rear2x USB 2.0; 2x USB 3.2 Gen 1; 2x USB 3.2 Gen 2; optional: additional 1x USB 3.2 Gen 2 Type-C (supports DisplayPa<br>and power delivery (PD) up to 15W or 60W (occupies PCIe x16 slot)USB internal1x USB 2.0 Type AVGAoptionalDisplayPort2DV1optional (DVI-D)Serial (R5-232)optional: serial port (9pin, 16 byte FIFO, 16550 compatible)Mouse / Keyboard (PS/2)2 (optional)Ethernet (RJ-45)1Parallel1 (optional)Input devices (optional)KeyboardMouse / KeyboardKeyboardProte bays1Drive bays1Drive bays total62.5-inch external bays13.5-inch external bays13.5-inch external bays23.5-inch external bays22.52' bays: one bay in HI format, one bay for slim optical disc drive only;<br>internal 3.5' drive (screwless) or 2.5' drive (screws);M2-22802 x on mainboard for SSD NUWe (PCIe 3.0.4; up to 32.6jtr(s)<br>thereof 1x supporting M.2-2280 onlyStotsTPCI-Express 3.0 x12 x (110 mm and 270 mm /4.33 inch and 10.63 inch) Full height   | Front audio: headset           | 1  |  |  |  |
| USB 3.2 Gen 1 (5 Gbps) total3USB 3.2 Gen 2 (10 Gbps) total5 and 1 optionalUSB 70nt2x USB 2.0; 2x USB 3.2 Gen 2; 1x USB 3.2 Gen 2; poptional: additional 1x USB 3.2 Gen 2 Type-C (supports DisplayPa<br>and power delivery (PD) up to 1SW or 60W (occupies PCle x16 slot)USB internal1x USB 2.0; 2x USB 3.2 Gen 1; 2x USB 3.2 Gen 2; poptional: additional 1x USB 3.2 Gen 2 Type-C (supports DisplayPa<br>and power delivery (PD) up to 1SW or 60W (occupies PCle x16 slot)USB internal1x USB 2.0 Type AVGAoptionalDisplayPort2DVIoptional (DVI-D)Serial (RS-232)optional: serial port (9pin, 16 byte FIFO, 16550 compatible)Mouse / Keyboard (PS/2)2 (optional)Ethernet (RJ-45)1Parallel1 (optional) (25pin with EPP and ECP)eSATA1 (optional)Input devices (optional)Keyboard<br>MouseDrive bays6Cystopatible2Drive bays1Si-inch internal bays13.5-inch internal bays23.5-inch internal bays23.5-inch internal bays22.52r bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5* Grive (screwels) or 2.5* drive (screwels) in 2.5* drive (screwels) in 2.5% drive   | Internal speakers              | 1  |  |  |  |
| USB 3.2 Gen 2 (10 Gbps) total5 and 1 optionalUSB front2x USB 2.0; 2x USB 3.2 Gen 2; 1x USB 3.2 Gen 2; ty USB 3.2 Gen 2; optional: additional 1x USB 3.2 Gen 2; Type-C (supports DisplayP<br>and power delivery (PD) up to 1SW or 60W (occupies PCle x16 slot)USB internal1x USB 2.0; 2x USB 3.2 Gen 1; 2x USB 3.2 Gen 2; optional: additional 1x USB 3.2 Gen 2; Type-C (supports DisplayP<br>and power delivery (PD) up to 1SW or 60W (occupies PCle x16 slot)USB internal1x USB 2.0 Type AVGAoptionalDisplayPort2Serial (RS-232)optional: serial port (9pin, 16 byte FIFO, 16550 compatible)Mouse / Keyboard (P5/2)2 (optional: serial port (9pin, 16 byte FIFO, 16550 compatible)Mouse / Keyboard (P5/2)2 (optional)Ethernet (RJ-45)1Parallel1 (optional)1 (optional)(2spin with EPP and ECP)eSATA1 (optional)Input device / componentsKeyboard<br>MouseDrive baysKeyboard<br>MouseDrive bays62.5-inch internal bays13.5-inch internal bays23.5-inch external bays23.5-inch external bays23.5-inch external bays23.5-inch external bays2.52" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: Striw (screwiss) or 2.5" drive (screwiss);M2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M2-2280 only<br>thereof 1x sup   | USB 2.0 total                  | 4  |  |  |  |
| USB front2x USB 2.0; 2x USB 3.2 Gen 2; 1x USB 3.2 Gen 2; pytional: additional 1x USB 3.2 Gen 2; Type-C (supports DisplayPe<br>and power delivery (PD) up 15W or 60W (occupies PCIe x16 slot)USB internal1x USB 3.2 Gen 1; 2x USB 3.2 Gen 2; optional: additional 1x USB 3.2 Gen 2; Type-C (supports DisplayPe<br>and power delivery (PD) up 15W or 60W (occupies PCIe x16 slot)USB internal1x USB 2.0 Type AOptionaloptionalDisplayPort2OPtionaloptional (DVI-D)Serial (RS-232)optional: serial port (9pin, 16 byte FIFO, 16550 compatible)Mouse / Keyboard (PS/2)2 (optional)Ethernet (RJ-45)1Parallel1 (optional) (25pin with EPP and ECP)Ethernet (RJ-45)1Interface Module notesAnyome USB charge functionalityInput device / componentsInput device / componentsInput device s(optional)Keyboard<br>MouseSi-inch internal bays12.5-inch internal bays12.5-inch internal bays22.5-inch external bays12.5-inch internal bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screws);M2-22802 x on mainboard for SSD NVMe (PCIe 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M2-2280 only<br>thereof 1x supporting M2-2  | USB 3.2 Gen 1 (5 Gbps) total   | 3  |  |  |  |
| USB rear2x USB 2.0; 2x USB 3.2 Gen 1; 2x USB 3.2 Gen 2; optional: additional 1x USB 3.2 Gen 2 Type-C (supports DisplayPr<br>and power delivery (PD) up to 15W or 60W (occupies PCIe x16 slot)USB internal1x USB 2.0 Type AVGAoptionalDisplayPort2DVIoptional (DVI-D)Serial (RS-232)optional: serial port (9pin, 16 byte FIFO, 16550 compatible)Mouse / Keyboard (P5/2)2 (optional)Ethernet (RJ-45)1Parallel1 (optional) (25pin with EPP and ECP)eSATA1 (optional) (25pin with EPP and ECP)eSATA1 (optional)Input devices (optional)KeyboardMouseMouseDrive bays total625-inch internal bays13.5-inch external bays13.5-inch external bays22.257 bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal bays2Drive bays total5.257 bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5° bays: 3.5° drive (screwis);M2-22802 x on mainboard for SSD NVMe (PCIe 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, N.2-22110, INF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)SlotsPCI-Express 3.0 x12 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height   | USB 3.2 Gen 2 (10 Gbps) total  | 5 and 1 optional   |  |  |  |
| and power delivery (PD) up to 15W or 60W (occupies PCIe x16 slot)           USB internal         tx USB 2.0 Type A           VGA         optional           DiplayPort         2           DVI         optional (DVI-D)           Serial (R5-232)         optional: serial port (9pin, 16 byte FIFO, 16550 compatible)           Mouse / Keyboard (PS/2)         2 (optional)           Ethernet (RJ-45)         1 (optional) (25pin with EPP and ECP)           esATA         1 (optional)           Interface Module notes         1 (optional)           Interface Kodule notes         Anytime USB charge functionality           Input devices (optional)         Keyboard           Drive bays total         6           2.5-inch internal bays         1           3.5-inch external bays         1           3.5-inch external bays         2           Drive bay notes         2           Drive bays context         2.52*Says: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5* bays: 3.5* drive (screwes) or 2.5* drive (screwes);           M2-2280         X on mainboard for SSD NWMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M2-2280 only           Slote         Everemes 30.0 x1  | USB front                      | 2x USB 2.0; 2x USB 3.2 Gen 2; 1x USB 3.2 Gen 2 Type-C (supports up to 15W)   |  |  |  |
| VGA         optional           DisplayPort         2           DisplayPort         optional (DVI-D)           Serial (R5-232)         optional: serial port (9pin, 16 byte FIFO, 16550 compatible)           Mouse / Keyboard (P5/2)         2 (optional)           Ethernet (RJ-45)         1           Parallel         1 (optional) (25pin with EPP and ECP)           eSATA         1 (optional)           Interface Module notes         Anytime USB charge functionality           Input device / components         Mouse           Input devices (optional)         Keyboard<br>Mouse           Drive bays         6           2.5-inch internal bays         1           3.5-inch external bays         1           3.5-inch external bays         2           3.5-inch external bays         1           2.5-inch internal bays         2           3.5-inch external bays         1           3.5-inch external bays         2           3.5-inch external bays         2 <td>USB rear</td> <td colspan="3">2x USB 2.0; 2x USB 3.2 Gen 1; 2x USB 3.2 Gen 2; optional: additional 1x USB 3.2 Gen 2 Type-C (supports DisplayPort 1.4 and power delivery (PD) up to 15W or 60W (occupies PCIe x16 slot)</td>  | USB rear                       | 2x USB 2.0; 2x USB 3.2 Gen 1; 2x USB 3.2 Gen 2; optional: additional 1x USB 3.2 Gen 2 Type-C (supports DisplayPort 1.4 and power delivery (PD) up to 15W or 60W (occupies PCIe x16 slot) |  |  |  |
| DisplayPort2DVIoptional (DVI-D)Serial (RS-232)optional: serial port (9pin, 16 byte FIFO, 16550 compatible)Mouse (Keyboard (PS/2)2 (optional)Ethernet (RI-45)1Parallel1 (optional) (25pin with EPP and ECP)esATA1 (optional) (25pin with EPP and ECP)Interface Module notesAnytime USB charge functionalityInput device / componentsInput devices (optional)Keyboard<br>MouseDrive bays62.5-inch internal bays13.5-inch internal bays22.5-inch internal bays22.5-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwles) or 2.5" drive (screwls);M2-22802 x on mainboard for SSD NVMe (PCI e3.0 x4; up to 326bit/s)<br>thereof 1x supporting M2-2280 only<br>thereof 1x supporting M2-2280 onlySlots2PCI-Express 3.0 x12 x (110 mm and 270 mm /4.33 inch and 10.63 inch) Full height   | USB internal                   | 1x USB 2.0 Type A  |  |  |  |
| DVIoptional (DVI-D)Serial (RS-232)optional: serial port (9pin, 16 byte FIFQ, 16550 compatible)Mouse / Keyboard (PS/2)2 (optional)Ethernet (RJ-45)1Parallel1 (optional) (25pin with EPP and ECP)esATA1 (optional) (25pin with EPP and ECP)Interface Module notesAnytime USB charge functionalityInput device / componentsKeyboard<br>MouseInput devices (optional)Keyboard<br>MouseDrive bays62.5-inch internal bays13.5-inch internal bays13.5-inch external bays12.52-inch external bays2Drive bay notes5,25" one bay in HH format, one bay for slim optical disc drive only;<br>internal .5" bays: 3.5" drive (screwles) or 2.5" drive (screws);M2-2280Xa on mainboard for SSD NVMe (PCIe 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280 onlySlots2PCI-Express 3.0 x12 x (110 mm and 270 mm /4.33 inch and 10.63 inch) Full height   | VGA                            | optional   |  |  |  |
| Serial (RS-232)optional: serial port (9pin, 16 byte FIFO, 16550 compatible)Mouse / Keyboard (PS/2)2 (optional)Ethernet (RJ-45)1Parallel1 (optional) (25pin with EPP and ECP)eSATA1 (optional)Interface Module notesAnytime USB charge functionalityInput device / componentsInput devices (optional)Keyboard<br>MouseDrive bays62.5-inch internal bays13.5-inch internal bays13.5-inch external bays15.25' inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screws);M2-22802 x on mainboard for SSD NVMe (PCIe 3.0 x4; up to 32Gbit/s)<br>thereof 1 x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)Slots2x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height   | DisplayPort                    | 2  |  |  |  |
| Mouse / Keyboard (PS/2)2 (optional)Ethernet (RJ-45)1Parallel1 (optional) (25pin with EPP and ECP)eSATA1 (optional)Interface Module notesAnytime USB charge functionalityInput device / componentsInput devices (optional)Input devices (optional)Keyboard<br>MouseDrive bays62.5-inch internal bays13.5-inch internal bays13.5-inch external bays15.25-inch external bays15.25-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);M2-22802 x on mainboard for SSD NVMe (PCIe 3.0 x4; up to 326bit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280 only   | DVI                            | optional (DVI-D)   |  |  |  |
| Ethernet (RJ-45)1Parallel1 (optional) (25pin with EPP and ECP)eSATA1 (optional)Interface Module notesAnytime USB charge functionalityInput device / componentsKeyboard<br>MouseInput devices (optional)Keyboard<br>MouseDrive bays62.5-inch internal bays13.5-inch internal bays23.5-inch external bays15.25-inch external bays2Drive bay notes2Drive bay notes2Drive bay notes2Drive bay notes2Starternal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)Slots2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height   | Serial (RS-232)                | optional: serial port (9pin, 16 byte FIFO, 16550 compatible)   |  |  |  |
| Parallel1 (optional) (25pin with EPP and ECP)eSATA1 (optional)Interface Module notesAnytime USB charge functionalityInput device / componentsInput device / componentsInput devices (optional)Keyboard<br>MouseDrive bays62.5-inch internal bays13.5-inch external bays22.5-inch external bays15.25-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)Slots2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height   | Mouse / Keyboard (PS/2)        | 2 (optional)   |  |  |  |
| eSATA1 (optional)Interface Module notesAnytime USB charge functionalityInput device / componentsKeyboard<br>MouseInput devices (optional)Keyboard<br>MouseDrive bays62.5-inch internal bays13.5-inch external bays23.5-inch external bays12.5-sinch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)Slots2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height  | Ethernet (RJ-45)               | 1  |  |  |  |
| Interface Module notesAnytime USB charge functionalityInput device / componentsInput devices (optional)Keyboard<br>MouseDrive baysDrive bays total62.5-inch internal bays13.5-inch internal bays23.5-inch external bays15.25-inch external bays15.25-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280 onlySlotsPCI-Express 3.0 x1PCI-Express 3.0 x12 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height   | Parallel                       | 1 (optional) (25pin with EPP and ECP)  |  |  |  |
| Input device / componentsInput devices (optional)Keyboard<br>MouseDrive bays62.5-inch internal bays13.5-inch internal bays23.5-inch external bays15.25-inch external bays15.25-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)Slots2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height  | eSATA                          | 1 (optional)   |  |  |  |
| Input devices (optional)Keyboard<br>MouseDrive baysDrive bays total62.5-inch internal bays13.5-inch internal bays23.5-inch external bays15.25-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)SlotsPCI-Express 3.0 x12 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height  | Interface Module notes         | Anytime USB charge functionality   |  |  |  |
| MouseDrive baysDrive bays total62.5-inch internal bays13.5-inch internal bays23.5-inch external bays15.25-inch external bays15.25-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280 onlySlots2PCI-Express 3.0 x12 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height  | Input device / components      |  |  |  |  |
| Drive bays total62.5-inch internal bays13.5-inch internal bays23.5-inch external bays15.25-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)Slots2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height  | Input devices (optional)       |  |  |  |  |
| Drive bays total62.5-inch internal bays13.5-inch internal bays23.5-inch external bays15.25-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)Slots2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height  | Drive bays                     |  |  |  |  |
| 2.5-inch internal bays13.5-inch internal bays23.5-inch external bays15.25-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)Slots2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height   |                                | 6  |  |  |  |
| 3.5-inch internal bays23.5-inch external bays15.25-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)SlotsPCI-Express 3.0 x12 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height   |                                | 1  |  |  |  |
| 3.5-inch external bays15.25-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)Slots2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height  |                                | 2  |  |  |  |
| 5.25-inch external bays2Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)Slots2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height   | •                              |  |  |  |  |
| Drive bay notes5,25" bays: one bay in HH format, one bay for slim optical disc drive only;<br>internal 3.5" bays: 3.5" drive (screwless) or 2.5" drive (screws);M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)Slots2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height   | -                              | 2  |  |  |  |
| M.2-22802 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only<br>thereof 1x supporting M.2-2280, M.2-22110, NF1 SSDs (dimensions 30.5mm x 110mm; also known as NGFF)SlotsPCI-Express 3.0 x12 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height   | •                              | 5,25" bays: one bay in HH format, one bay for slim optical disc drive only;  |  |  |  |
| PCI-Express 3.0 x1 2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height  | M.2-2280                       | 2 x on mainboard for SSD NVMe (PCle 3.0 x4; up to 32Gbit/s)<br>thereof 1x supporting M.2-2280 only   |  |  |  |
| · · · · · · · · · · · · · · · · · · ·  | Slots                          |  |  |  |  |
| · · · · · · · · · · · · · · · · · · ·  |                                | 2 x (110 mm and 270 mm / 4.33 inch and 10.63 inch) Full height   |  |  |  |
|  | PCI-Express 3.0 x4 (mech. x16) | 1 x (270 mm / 10.63 inch)  |  |  |  |

| Slots  |  |  |  |  |
|--|--|--|--|--|
| PCI-Express 3.0 x16                            | 1 x (270 mm / 10.63 inch) Full height  |  |  |  |
| M.2-2230                                       | on mainboard for WLAN/Bluetooth module   |  |  |  |
| Graphics on board                              |  |  |  |  |
| Graphics brand name                            | Intel® LIHD Graphics P630 Intel® LIHD Graphics 630   |  |  |  |
| Shared video memory                            | Intel® UHD Graphics P630, Intel® UHD Graphics 630  |  |  |  |
| TFT resolution (VGA)                           | Up to half size of total system memory   |  |  |  |
| TFT resolution (DVI)                           | Up to 1,920 x 1,080 pixel<br>up to 1,920 x 1,200 pixel   |  |  |  |
| TFT resolution (DisplayPort)                   | Up to 4,096 x 2,304 pixel  |  |  |  |
| TFT resolution (HDMI)                          | Up to 4,096 x 2,160 pixel (30 Hz)  |  |  |  |
| Graphics features<br>Graphics notes            | Support for up to three independent displays<br>DirectX® 12<br>HDCP support<br>OpenCL™ 2.1<br>OpenGL® 4.5<br>For multi monitoring mode, graphics card and integrated graphics run in parallel<br>DisplayPort interface supports Ver. 1.4 incl. Multi-Stream<br>Digital audio formats are supported, including Dolby Digital Plus (7.1 channels)<br>DVI-D interface supports audio output if connected to the HDMI interface of a display via suitable adapter cables (not<br>included)<br>Additional I/O connectors configurable, choice of<br>DVI-D<br>HDMI™<br>VGA<br>USB Type-C™ (supports DisplayPort™ 1.4 and power delivery (PD) up to 15W)<br>USB Type-C™ (supports DisplayPort™ 1.4 and power delivery (PD) up to 60W. Occupies PCIe x16 slot)<br>up to 1 GB dedicated video memory (main memory owned and locked for graphics use)<br>Tested resolutions, depending on display type additional resolutions and frequencies possible<br>Shared memory depending on main memory size and operating system |  |  |  |
|  | Resolution (color depth up to 32 Bit/pixel)<br>For TFT we recommend using 60Hz   |  |  |  |
| Electrical values                              | Deveryought off signed in 0( at 100( / 200( / 500( / 1000) load  |  |  |  |
| Power efficiency note                          | Power supply efficiency in % at 10% / 20% / 50% / 100% load<br>80Plus PLATINUM<br>for 230V ; tbd<br>for 115V ; tbd   |  |  |  |
| 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             | 680 W  |  |  |  |
| Power factor correction/active power           | active   |  |  |  |
| Power supply output                            | 2 graphics power rails (6 pin- and 8 pin connectors)   |  |  |  |
| Noise emission                                 |  |  |  |  |
| Related Processors for noise                   | Intel® Xeon™ W-1250 processor  |  |  |  |
| Standard noise emission                        | NVIDIA® Quadro® P1000<br>16 GB, ODD, Windows 10<br>According to ISO 7779:2010, ECMA-74   |  |  |  |
| Standard noise notes / description             | A-weighted sound power level Lwad (in B) / Workplace related A-weighted sound pressure level LpAm (in dB(A))   |  |  |  |
| Standard noise operation mode: CPU<br>50% load | for 300W PLATINUM PSU:<br>2.8 B / 18 dB(A) Bystander; 23 dB(A) Operator position (SSD M.2)   |  |  |  |
| Standard noise operation mode: HDD load        | for 300W PLATINUM PSU:<br>2.8 B / 18 dB(A) Bystander; 23 dB(A) Operator position (SSD M.2)   |  |  |  |
| Standard noise operation mode: Idle mode       | for 300W PLATINUM PSU:<br>2.8 B / 18 dB(A) Bystander; 22 dB(A) Operator position (SSD M.2)   |  |  |  |
| Standard noise operation mode: ODD load        | <ul> <li>for 300W PLATINUM PSU:</li> <li>4.5 B / 36 dB(A) Bystander; 42 dB(A) Operator position (SSD M.2)</li> </ul>   |  |  |  |
|  |  |  |  |  |

| Noise emission   |   |  |  |  |  |
|--|---|--|--|--|--|
| Standard noise operation mode: Office  | for 300W PLATINUM PSU:  |  |  |  |  |
| applications 2.0   | 2.8 B / 18 dB(A) Bystander; 22 dB(A) Operator position (SSD M.2)  |  |  |  |  |
| Dimensions / Weight / Environmental  |   |  |  |  |  |
| Dimensions (W x D x H)   | 180 x 304 x 375 mm  |  |  |  |  |
|  | 7.09 x 11.97 x 14.76 inch   |  |  |  |  |
| Operating position   | Vertical  |  |  |  |  |
| Weight   | approx. 10 kg   |  |  |  |  |
| Weight (lbs)   | approx. 30.86 lbs   |  |  |  |  |
| Weight notes   | Actual weight may vary depending on configuration   |  |  |  |  |
| Operating ambient temperature  | 10 - 35 °C (50 - 95 °F)   |  |  |  |  |
| Operating relative humidity  | 5 - 85 % (relative humidity)  |  |  |  |  |
| Compliance   |   |  |  |  |  |
| Product  | CELSIUS W5010   |  |  |  |  |
| Model  | MI7W  |  |  |  |  |
| Germany  | TÜV GS  |  |  |  |  |
| Europe   | CE  |  |  |  |  |
| USA/Canada   | FCC Class B   |  |  |  |  |
|  | cTUVus  |  |  |  |  |
| Global   | RoHS (Restriction of hazardous substances)<br>WEEE (Waste electrical and electronic equipment)<br>Microsoft Operating Systems (HCT / HCL entry / WHQL)<br>Microsoft Secured-core PC certification (for selected configurations)<br>ENERGY STAR® 8.0 compliant, depending on configuration<br>TCO Certified 8.0 (depending on configuration)<br>ENERGY STAR® compliance is an order option. Non ENERGY STAR/ TCO/ EPEAT compliant products are marked at brand<br>name with additional suffix "n".<br>EPEAT® in progress (dedicated regions) |  |  |  |  |
| China  | CCC (planned)<br>CCC (depending on configuration)<br>CEL (Chinese energy label)<br>TPM 2.0 for China (optional)   |  |  |  |  |
| Compliance link  | https://sp.ts.fujitsu.com/sites/certificates  |  |  |  |  |
| Additional Software  |   |  |  |  |  |
| Additional software (preinstalled)   | Adobe® Reader® (pdf reader)<br>McAfee® LiveSafe™ (provides award-winning antivirus protection for your PC and much more. 30 days trial pre-<br>installed)<br>Microsoft Office (1 month trial for new Microsoft® Office 365 customers. Buy Microsoft Office.)  |  |  |  |  |
| Additional software (optional)   | Recovery DVD for Windows®<br>Drivers & Utilities DVD (DUDVD)<br>CyberLink PowerDVD BD (playback software for Blu-ray Disc™)<br>CyberLink PowerDVD DVD (playback software for DVD)<br>Nero Essentials XL<br>Microsoft® Office Professional 2019<br>Microsoft® Office Home and Business 2019<br>(A Microsoft Account is required to activate each copy of these products. For purchase and activation only in the region<br>in which it was acquired.)  |  |  |  |  |
| Security   |   |  |  |  |  |
| Physical Security<br>Eye for padlock<br>Integrated cabinet lock (optional)<br>Cable Cover (optional; covers and secures the ports and cables on rear side) |   |  |  |  |  |

| Security   |  |  |  |
|--|--|--|--|
| System and BIOS Security   | Embedded security (TPM 2.0)<br>EraseDisk   |  |  |
|  | Credential Guard Ready and Device Guard Capable (requires 8 GB or more system RAM and SSD PCIe NVME)<br>Modern Standby ready (for configurations with NVMe SSD and w/o PCIe cards) |  |  |
|  | Write protect option for the Flash EPROM   |  |  |
|  | Control of all USB interfaces  |  |  |
|  | External USB ports can be disabled separately<br>Control of external interfaces  |  |  |
| User Security  | User and supervisor BIOS password  |  |  |
| Jsel Security  | Hard disk password   |  |  |
|  | Access protection via external SmartCard reader (optional)   |  |  |
|  | Access protection via internal SmartCard reader (optional)   |  |  |
|  | AuthConductor Client Basic (secure authentication solution)  |  |  |
| Manageability  |  |  |  |
| Manageability technology   | DeskUpdate Driver management   |  |  |
|  | PXE 2.1 Boot code<br>Wake up from S5 (off mode)  |  |  |
|  | Intrusion switch (optional)  |  |  |
|  | WoL (Wake on LAN)  |  |  |
|  | iAMT 14.0 (depending on processor)   |  |  |
| Manageability software   | DeskView Client  |  |  |
|  | DeskView Instant BIOS Management   |  |  |
| DeskView components  | BIOS Management incl. Security Inventory Management  |  |  |
|  | Driver Management  |  |  |
|  | Alarm Management   |  |  |
| Supported standards  | DMI (Desktop Management Interface)   |  |  |
|  | SMBIOS (System Management BIOS)  |  |  |
|  | PXE (Preboot Execution Environment)<br>WMI (Windows Management Instrumentation)  |  |  |
|  | WBEM (Web Based Enterprise Management)   |  |  |
|  | CIM (Common Information Model)   |  |  |
| Manageability link   | http://www.fujitsu.com/fts/manageability   |  |  |
| Miscellaneous  |  |  |  |
|  | Keyboard on (Special Fujitsu keyboard required)  |  |  |
|  | Keyboard on with one key (KBPX Eco, KB521)   |  |  |
|  | Keyboard on with 2 keys (CTRL+CTRL) with PS2 or special USB keyboards<br>Keyboard on with any key (USB)  |  |  |
|  | Thermal management   |  |  |
|  | Extended lifetime 24/7 (limited configurations)  |  |  |
| Packaging dimension (mm)   |  |  |  |
| Packaging notes  | printed user documentation is bleached in chlorine free process;   |  |  |
|  | Bulk packagaging for projects (optional)   |  |  |
| Warranty   |  |  |  |
| Warranty period  | 3 years (depending on country)   |  |  |
| Warranty type  | Bring-In / Onsite Service (for countries within region EMEIA, for all other countries depending on local regulations)  |  |  |
| Warranty Terms & Conditions<br>Product Support Services - the peri | http://www.fujitsu.com/warranty<br>fect 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/emeia/products/product-support-services/  |  |  |

### **Recommended Accessories**

| Blue LED Mouse M960 | The Blue LED Mouse M960 comes in a slim design with proven Fujitsu<br>engineering quality. The track on glass Blue LED sensor enables ultra<br>precise switchable resolution at 1,000, 1,600 and 2,000 dpi. Blue LED<br>Mouse M960 makes your life easier because it's tailor-made for right<br>handed users. It just feels great in your hand.   | Order Code:<br>S26381-K470-L100                      |
|---------------------|---|--|
| SpaceMouse Pro      | Using the SpaceMouse <sup>™</sup> Pro 3D mouse to navigate 3D models or<br>environments is as simple as holding them in your hand. A slight<br>movement of the controller cap delivers easy and precise control.<br>SpaceMouse <sup>™</sup> Pro is a companion to the traditional mouse and is operated<br>with the free hand. Your traditional mouse hand is free to select, create and<br>edit. | Order Code:<br>S26381-K459-L100                      |
| Keyboard KB955      | The KB955 is a very flat keyboard with extra low keys and spill-resistant protection. The elegant design and top-quality construction makes the KB955 the ideal input device for any PC or Notebook user. If you accidently   | S26381-K955-L4** (**:<br>Country specific variation) |

helps the liquid to flow away.

spill some water or coffee onto the keyboard, this special construction

### More information

#### Fujitsu products, solutions & services

In addition to the FUJITSU Workstation CELSIUS W5010, 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 the FUJITSU Workstation CELSIUS W5010, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. www.fujitsu.com/emeia/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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