

Fujitsu recommends Windows 10 Pro.

FUJITSU Workstation CELSIUS

Choose the right hardware to accelerate the software application



Mobile Workstation

Elegant. Mobile. Power.

CELSIUS H: H780 - 15.6-inch
H980 - 17.3-inch
H970 - 17.3-inch



Desktop Workstation

Develop, Simulate, Calculate and Visualize your Ideas

CELSIUS J: J580, J550/2 Long Lifecycle
CELSIUS W: W580, W580power+, W550 Long Lifecycle
CELSIUS M: M770, M740 Long Lifecycle
CELSIUS R: R970 (dual-processor)



Rack Workstation

Ideal for a 1:1 remote access solution

CELSIUS C: C780, C740 (1U rack workstation)

APPLICATION FIELDS



CAD
Computer Aided Design



CAE, SIM
Computer Aided Engineering & Simulation



AEC
Architecture, Engineering and Construction



M&E
Media & Entertainment



GIS, O&G
Geographic Information System & Oil and Gas



Healthcare

USAGE SCENARIO

2D and 3D technical drawing of physical objects, parts and assemblies (Product design, industrial design, modelling, model analysis)

Mechanical, thermal and fluid simulations
Electronic design simulation

2D and 3D planning and construction (incl. BIM) of buildings, factories and infrastructure

Content creation, video editing, animation, photo retouching, special effects, design and photorealistic renderings

Geo data collection, processing and visualisation

Visualize and simulate biological and chemical systems
Electronic Health & Medical Record (EHR, EMR), Personal Health Record (PHR)

TYPICAL INDUSTRIES

All manufacturers:
• Automotive, Aerospace, etc.

All industries

• Plants
• Shipbuilding & Offshore industries
• Tunnels and bridges
• Urban planning

• Broadcasting
• Film and animation studios
• Agencies
• Marketing

• Defense and government
• Science and research
• Cartography
• Transportation

• Medical product vendors
• Chemistry and Pharmacology
• Hospitals
• Biotechnology and Laboratory Diagnostics

SOFTWARE

• Autodesk (AutoCAD, Inventor)
• Dassault Systèmes (CATIA, 3DEXCITE, DeltaGen, SOLIDWORKS)
• Siemens PLM (NX, Teamcenter)
• PTC (Creo Parametric)

• ANSYS (Fluent, CFX, Mechanical)
• Autodesk (Revit, Moldflow)
• Dassault Systèmes (SIMULIA)
• MSC Software (Nastran, Patran)
• Siemens PLM (Tecnomatix, FiberSIM)

• Autodesk (AutoCAD, Revit)
• AVEVA
• Bentley (Microstation)
• Hexagon (Geosystems, Metrology)
• Nemetschek (Allplan)
• Trimble (Sketchup Pro, Tekla BIMsight)

• Adobe (Premiere Pro, After Effects, Photoshop)
• Autodesk (Maya, 3ds Max, VRED)
• Avid (Media Composer)
• Chaos Group (V-Ray)
• Dassault Systèmes (ICEM Surf Design)

• ESRI (ArcGIS)
• Intergraph (Geomeia)
• Halliburton (Landmark, Pinnacle)
• Paradigm (Echos RTM, Tech)
• Schlumberger (Petrel, ECLIPSE, Omega)

Mostly in-house developed software like Syngo (Siemens Healthcare)
Dassault Systèmes: Simulia

TOP REQUIREMENTS

• Single-threaded app => high processor frequencies
• Fast flash drives
• Moderate storage capacity
• Open GL graphics

• Multi-threaded app => high number of cores
• Fast flash drives
• Maximum memory
• High storage capacity
• Compute GPUs & 3D graphics

• Single-threaded app => high numbers of cores
• Fast flash drives
• Moderate storage capacity
• Open GL graphics

• Multi-threaded app => high number of cores
• Fast flash drives
• High storage capacity
• Graphics: 2D and 3D

• Multi-threaded app => high number of cores
• Fast flash drives
• Maximum memory
• High storage capacity
• Compute GPUs & 3D graphics

• Long lifecycle models
• Whisper quiet
• Customization (Made4You)

PRODUCTS

CELSIUS H
CELSIUS J, W, M
CELSIUS C

CELSIUS M & R

CELSIUS H
CELSIUS J & W

CELSIUS H
CELSIUS W & M
CELSIUS C

CELSIUS R

CELSIUS
Long Lifecycle products

Fujitsu recommends Windows 10 Pro.



MOBILE WORKSTATIONS

Series	CELSIUS H		
Model	H780	H980	H970
Form Factor	39,6 cm (15.6-inch) Full HD, Full HD Premium, Full HD Premium Toch, UHD/4K	43,9 cm (17.3-inch) Full HD	43,9 cm (17.3-inch) Full HD
Weight / liter	Weight: 2.7 kg	Weight: 3.5 kg	Weight: 3.3 kg
Noise emission	-	-	-
Processor (incl. cores & frequency)	Intel® Xeon® processor E-2100M family (max. 6 cores / 4.6 GHz) Intel® Core™ i7 processor (max. 6 cores / 4.3 GHz)	Intel® Xeon® processor E-2100M family (max. 6 cores / 4.6 GHz) Intel® Core™ i7 processor (max. 6 cores / 4.3 GHz)	Intel® Xeon® processor E3-1500 v6 family (max. 4.2 GHz) Intel® Core™ i7 processor (max. 3.9 GHz) Intel® Core™ i5 processor (max. 3.8 GHz)
Operating System (pre-installed)	Windows 10. Fujitsu recommend Windows 10 Pro Windows 10 Pro for Workstations	Windows 10. Fujitsu recommend Windows 10 Pro Windows 10 Pro for Workstations	Windows 10 Pro
Memory	Up to 64 GB, 4 SO DIMM memory slots, DDR4 - 2,400 MHz	Up to 64 GB, 4 SO DIMM memory slots, DDR4 - 2,400 MHz	Up to 64 GB, 4 SO DIMM memory slots, DDR4 - 2,400 MHz
Professional Graphics Cards	NVIDIA® Quadro® P600: 384 CUDA Cores NVIDIA® Quadro® P1000: 512 CUDA Cores NVIDIA® Quadro® P2000: 768 CUDA Cores NVIDIA® Quadro® P3200: 1792 CUDA Cores (VR-ready)	NVIDIA® Quadro® P3200: 1792 CUDA Cores (VR-ready) NVIDIA® Quadro® P4200: 2304 CUDA Cores (VR-ready) NVIDIA® Quadro® P5200: 2560 CUDA Cores (VR-ready)	NVIDIA® Quadro® P3000: 1280 CUDA Cores NVIDIA® Quadro® P4000: 1792 CUDA Cores (VR-ready) NVIDIA® Quadro® P5000: 2048 CUDA Cores (VR-ready)
Compute Cards	-	-	-
Storage	SSD PCIe NVMe (Standard, Highend, SED) SSD SATA	SSD PCIe NVMe (Standard, Highend, SED) SSD SATA	SSD PCIe NVMe M.2 module (Standard, SED) SSD SATA M.2 module (Standard, SED) HDD SATA
Drive bays	-	-	Up to 9 hours of battery life
Slots	1x DC-in, 2 digital array microphones, 2 internal speakers, 1x USB 3.1 Gen1, 4x USB 3.1 Gen2, 2x USB Type-C™, 1x VGA, 1x HDMI, 1x RJ-45, 1x SmartCard slot, 1x SIM card slot, MultiCardReader, 1x Kensington Lock.	1x DC-in, 2x digital array microphones, 2x internal speakers, 3x USB 3.1 Gen2, 2x USB Type-C™, 1x VGA, 1x DisplayPort, 1x RJ-45, 1x SmartCard slot, x SIM card slot, MultiCardReader, 1x Kensington Lock	1x DC-in, 1x combo in/out, 2x digital array microphones, 3x USB 3.1 Gen 1, 2x USB Type-C™, 1x VGA, 1xw DisplayPort, 1x RJ-45, 1x SmartCard slot, x SIM card slot, MultiCardReader, 1x Kensington Lock
USB	5 in total (1x USB 3.1 Gen1, 2x USB 3.1 Gen2, 2x USB Type-C™)	5 in total (3x USB 3.1 Gen2, 2 x USB Type-C™)	5 in total (3x USB 3.1 Gen1, 2 x USB Type-C™)
Serial ATA	-	-	-
Power Supply	230 W 8-cell, 96 Wh battery - up to 9 hours	330 W 8-cell, 96 WH battery - up to 9 hours	250 W
Others	VR-ready Display: anti-glare, magnesium, 250 and 300 cd/ m ² PalmSecure™: optional, palm vein technology Port Replicator: Thunderbolt or mechanical	VR-ready Display: anti-glare, magnesium, 300 cd/ m ² Thunderbolt 3 port replicator	VR-ready Display: anti-glare, magnesium, 300 cd/ m ² Thunderbolt 3 port replicator

Fujitsu recommends Windows 10 Pro.



DESKTOP WORKSTATIONS

Series	CELSIUS J		CELSIUS W	
Model	J580	J550/2 Long Lifecycle	W580 und W580power+	W550 Long Lifecycle
Form Factor	Small Form Factor (SFF)	Small Form Factor (SFF)	Micro Tower	Micro Tower
Weight / liter	10 liter - single processor	10 liter - single processor	21 liter - single processor	29 liter - single processor
Noise emission	Whisper quiet: 21 dB(A)	Whisper quiet: 21 dB(A)	Whisper quiet: 20 dB(A)	Whisper quiet: 20 dB(A)
Processor (incl. cores & frequency)	Intel® Xeon® processor E-2100G (max. 6 cores / 4.7 GHz) Intel® Xeon® processor E-2100 (max. 4 cores / 5.5 GHz) Intel® Core™ i7 processor (max. 6 cores / 4.6GHz) Intel® Core™ i5 processor (max. 6 cores / 4.3 GHz) Intel® Core™ i3 processor (max. 4 cores / 3.6 GHz)	Intel® Xeon® processor E3-1200 v5 and v6 family (max. 4 cores / 4.2 GHz) Intel® Core™ i7 processor (max. 4 cores / 3.6 GHz) Intel® Core™ i5 processor (max. 4 cores / 3.5 GHz) Intel® Core™ i3 processor (max. 2 cores / 3.9 GHz)	Intel® Xeon® processor E-2100G (max. 6 cores / 4.7 GHz) Intel® Xeon® processor E-2100 (max. 4 cores / 4.5 GHz) Intel® Core™ i7 processor (max. 6 cores / 4.7 GHz) Intel® Core™ i5 processor (max. 6 cores / 4.3 GHz) Intel® Core™ i3 processor (max. 4 cores / 3.6 GHz)	Intel® Xeon® processor E3-1200 v5 family (max. 4 cores / 3.6 GHz) Intel® Core™ i3 processor (max. 2 cores / 3.7 GHz)
Operating System (pre-installed)	Windows 10 Pro. Fujitsu recommend Windows 10 Pro. Windows 10 Pro for Workstations	Windows 10 Pro. Fujitsu recommends Windows 10 Pro.	Windows 10 Pro. Fujitsu recommend Windows 10 Pro. Windows 10 Pro for Workstations	Windows 10 Pro. Fujitsu recommend Windows 10 Pro.
Memory	Up to 64 GB, 4 UDIMM memory slots, non-ECC/ECC, DDR4 - 2,666 MHz	Up to 64 GB, 4 UDIMM memory slots, non-ECC/ECC, DDR4 - 2,400 MHz	Up to 64 GB, 4 UDIMM memory slots, non-ECC/ECC, DDR4 - 2,666 MHz	Up to 64 GB, 4 UDIMM memory slots, non-ECC/ECC, DDR4 - 2,133 MHz
Professional Graphics Cards	Full height graphics cards: NVIDIA® Quadro®: up to P2000 AMD Radeon™ Pro WX: up to 5100	Full height graphics cards: NVIDIA® Quadro®: up to P2000 AMD Radeon™ Pro WX: up to 5100	Up to 1x high-end 3D graphic card: NVIDIA® Quadro®: up to RTX 4000 (VR-ready) AMD Radeon™ Pro WX: up to 7100	Up to 1x high-end 3D graphic card: NVIDIA® NVS®: up to 510 NVIDIA® Quadro®: up to RTX 4000 AMD FirePro™: up to 7100
Compute Cards	-	-	-	-
Storage	Intel Optane Memory SSD PCIe M.2 NVMe, card or module SSD PCIe M.2 NVMe (Card, Highend, module, SED) SSD SATA (Standard, High Endurance) HDD SATA (Standard, Business Critical) RAID 1 Bundle M.2 NVMe Highend	Intel Optane Memory SSD PCIe M.2 NVMe, card or module SSD PCIe M.2 NVMe Highend, card or module SSD SATA (Standard, High Endurance, SED) HDD SATA (Standard, Business Critical)	Intel Optane Memory SSD PCIe M.2 NVMe (Card, Highend, module) SSD SATA (Standard, High Endurance, SED) HDD SATA (Standard, Business Critical)	SSD PCIe M.2 NVMe (Card, Highend, module) SSD SATA (Standard, SED) HDD SATA (Standard, Business Critical)
Drive bays	3 in total	3 in total	W580: 5 in total W580power+: 9 in total	W550power: 9 in total
Slots	Riser cards - 2 in total: 1x PCIe 3.0 x16, 1x PCIe 3.0 x4 (mech. x16) or 1x PCIe 3.0 x16 and 1x PCI	Riser cards - 2 in total: 1x PCIe 3.0 x16, 1x PCIe 3.0 x4 (mech. x16) or 1x PCIe 3.0 x16 and 1x PCI	4 in total: 2x PCIe 3.0 x1 1x PCIe 3.0 x4 (mech. x16) 1x PCIe 3.0 x16	4 in total: 2x PCIe 3.0 x1 1x PCIe 3.0 x4 (mech. x16) 1x PCIe 3.0 x16
USB	12 in total (2x USB 2.0, 9x USB 3.1 Gen1; optional USB 3.1 Gen2 via add on card)	12 in total (2x USB 2.0, 9x USB 3.1 Gen1; optional USB 3.1 Gen2 via add on card)	14 in total (6x USB 2.0, 7x USB 3.1 Gen1; optional USB 3.1 Gen2 via add on card)	13 in total (6x USB 2.0, 7x USB 3.0)
Serial ATA	5	5	8	6
Power Supply	280 W - max. 92% efficiency	280 W - max. 92% efficiency	W580: max. 280 W and 400 W - max 85% efficiency W580power+: 400W - efficiency (to be confirmed)	W550power: max. 500 W - max. 93% efficiency
Others		Minimum 36 months lifecycle	400 W: VR-ready	Minimum 36 months lifecycle

Fujitsu recommends Windows 10 Pro.



DESKTOP WORKSTATIONS

RACK WORKSTATIONS

Series	CELSIUS M			CELSIUS R	CELSIUS C	
Model	M770	M740 Long Lifecycle	R970	C780	C740	
Form Factor	Midi Tower	Midi Tower	Big Tower	1U	1U	
Weight / liter	38 liter - single processor	38 liter - single processor	49 liter - dual processor	Single processor	Single processor	
Noise emission	Whisper quiet: 20 dB(A)	Whisper quiet: 21 dB(A)	Whisper quiet: 24 dB(A)	-	-	
Processor (incl. cores & frequency)	Intel® Xeon® processor W-2100 family (max. 10 cores / 4.0 GHz) Intel® Core™ i9-7900X processor family (max. 10 cores / 4.3 GHz) Intel® Core™ i7-7800X processor family (max. 8 cores / 4.3 GHz)	Intel® Xeon® processor E5-2600 v4 family (max. 14 cores / 2.4 GHz)	Intel® Xeon® Platinum processor 8100 family (max. 2x28 cores / 2.8 GHz) Intel® Xeon® Gold processor 5100 and 6100 family (max. 2x18 cores / 4.1 GHz) Intel® Xeon® Silver processor 4100 family (max. 2x10 cores / 3.0 GHz)	Intel® Xeon® processor E-2100 (max. 6 cores / 4.5 GHz) Intel® Core™ i7 processor (max. 6 cores / 4.7 GHz) Intel® Core™ i5 processor (max. 6 cores / 4.3 GHz) Intel® Core™ i3 processor (max. 4 cores / 3.6 GHz)	Intel® Xeon® processor E5-2600 v4 family (max. 22 cores / 3.50 GHz) Intel® Xeon® processor E5-1600 v4 family (max. 8 cores / 3.70 GHz)	
Operating System (pre-installed)	Windows 10 Pro for Workstations	Windows 10 Pro	Windows 10 Pro for Workstations	Windows 10 Pro. Fujitsu recommends Windows 10 Pro. Windows 10 Pro for Workstations	Windows 10 Pro	
Memory	Up to 256 GB, 8 UDIMM memory slots non-ECC/ECC, DDR4 - 2,666 MHz non-ECC/ECC, DDR4 - 2,133 MHz DDR4 - 2,666 MHz	Up to 256 GB, 8 DIMM memory slots ECC, DDR4 - 2,400 MHz	Up to 1024 GB, 16 DIMM memory slots (8 per processor), ECC, DDR4 - 2,666 MHz	Up to 128 GB DDR4, 4 DIMM memory slots non-ECC/ECC, DDR4 - 2,666 MHz	Up to 512 GB, 8 DIMM memory slots ECC, DDR4 - 2,400 MHz	
Professional Graphics Cards	Up to 2x ultra-high-end 3D graphics cards: NVIDIA® Quadro®: up to RTX 6000 (VR-ready) AMD Radeon™ Pro WX: up to 8100	Up to 2x ultra-high-end 3D graphics cards: NVIDIA® Quadro®: up to RTX 6000 (VR-ready)	Up to 3x ultra-high-end 3D graphics cards: NVIDIA® Quadro® GV100 (VR-ready) NVIDIA® Quadro®: up to RTX 6000 (VR-ready) AMD Radeon™ Pro WX: up to W7100	1x graphic card (double width) or 2x graphics cards (single width): NVIDIA® Quadro®: up to RTX 6000 (VR-ready) AMD Radeon™ Pro WX: up to W7100	1x graphic card (double-height) or 2x graphics cards (single height): NVIDIA® Quadro®: up to RTX 6000 (VR-ready) AMD Radeon™ Pro WX: up to W7100	
Compute Cards	-	-	NVIDIA® Tesla® M60	-	NVIDIA® Tesla® M60	
Storage	SSD PCIe U.2 Business Critical SSD PCIe M.2 NVMe (Highend, card or module) SSD PCIe M.2 NVMe, card or module SSD SATA (Standard, High Endurance, SED) HDD SAS HDD SATA (Standard, High Endurance, Business Critical)	SSD PCIe M.2 NVMe (Standard, Highend card) SSD SATA (Standard, High Endurance, SED) HDD SAS HDD SATA (Standard, Business Critical)	SSD PCIe U.2 Business Critical SSD PCIe M.2 NVMe (Highend, card or module) SSD PCIe M.2 NVMe, card or module SSD SATA (Standard, High Endurance, SED) HDD SAS HDD SATA (Standard, Business Critical)	SSD PCIe M.2 NVMe Highend, card or module SSD PCIe M.2 NVMe, card or module (SED) SSD SATA (Standard, High Endurance, SED) HDD SAS HDD SATA (Business Critical)	SSD PCIe M.2 NVMe Highend, card or module SSD PCIe M.2 NVMe, card or module (SED) SSD SATA (Standard, High Endurance, SED) HDD SAS HDD SATA (Business Critical)	
Drive bays	7 in total	12 in total	12 in total	5 in total	5 in total	
Slots	7 in total: 2 x PCI-Express 3.0 x16 1 x PCI-Express 3.0 x8 2 x PCI-Express 3.0 x4 2 x PCI-Express 3.0 x1	7 in total: 2 x PCI-Express 3.0 x16w1 x PCI-Express 3.0 x4 (mech. x16) 1 x PCI-Express 3.0 x4 (mech. x8) 1 x PCI-Express 2.0 x4 (mech. x16) 2 x PCI-Express 2.0 x1 (mech. x8)	8 in total: 4 x PCI-Express 3.0 x16 2 x PCI-Express 3.0 x8 1 x PCI-Express 3.0 x8 (Internal) 1 x PCI 1 x PCI	3 in total: 1 x PCI-Express 3.0 x16 - 1 x double slot density or 2 x single slot density 1 x PCI-Express 3.0 x4 (mech. x 16) - single slot density	3 in total: 1 x PCI-Express 3.0 x16 - 1 x double slot density or 2 x single slot density 1 x PCI-Express 3.0 x8 (mech. x 16) - single slot density	
USB	10 in total (2x USB 2.0 optional, 6x USB 3.1 Gen1, 2x USB 3.1 Gen2 optional)	13 in total (9x USB 2.0, 4x USB 3.1 Gen1)	14 in total (9x USB 2.0, 4x USB 3.1 Gen1, 1x USB 3.1 Gen 2 optional)	5 in total (2x USB 2.0, 3x USB 3.1 Gen1)	4 in total (2 x USB 2.0, 2 x USB 3.1 Gen1)	
Serial ATA	8	10	10	5	6	
Power Supply	M770 : 450 W max. - 90% efficiency M770power: 800 W - max. 90% efficiency	600 W - max. 90% efficiency	R970: 1000 W - max. 90% efficiency R970power: 1300 W - max. 90% efficiency	C780: 450W - max. 94% efficiency C780power: 800W - max. 94% efficiency	800 W - max. 94% efficiency	
Others	Minimum lifecycle of 36 months VR-ready	VR-ready Cold-plug technology (Power supply, storage) Intel VROC HW key: Standard M.2, Premium U.2	VR-ready Intel VROC HW key: Standard M.2, Premium U.2	VR-ready	VR-ready	