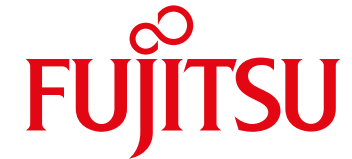


FUJITSU Workstation CELSIUS

Choose the right hardware to accelerate your software application



Mobile Workstation

Elegant. Mobile. Powerful.

CELSIUS H: H7510 - 15.6-inch
H5511 - 15.6-inch



Desktop Workstation

Develop, Simulate, Calculate and Visualize your Ideas

CELSIUS J: J5010
CELSIUS W: W5011, W5010, W5010/L
CELSIUS M: M7010, M7010X
CELSIUS R: R970 (dual-processor)



Rack Workstation

Ideal for a 1:1 remote access solution

CELSIUS C: C780 (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 (Geomedia)
• 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 11 Pro.



	MOBILE WORKSTATIONS		RACK WORKSTATION	DESKTOP WORKSTATIONS	
Series	CELSIUS H		CELSIUS C	CELSIUS W	
Model	H5511	H7510	C780	W5011	W5010
Form Factor	39.6 cm (15.6-inch), Full HD	39.6 cm (15.6-inch) Full HD,	1U	Micro Tower	Micro Tower
Weight / liter	Weight: 1.9 kg	Weight: 2.7 kg	Single processor	21 liter - single processor	21 liter - single processor
Noise emission	-	-	-		
Processor (incl. cores & frequency)	Intel® Core™ i7-1185G7 processor (max. 4 Cores / 4.8 GHz) Intel® Core™ i7-1165G7 processor (max. 4 Cores / 4.7 GHz) Intel® Core™ i5-1145G7 processor (max. 4 Cores / 4.4 GHz) Intel® Core™ i5-1135G7 processor (max. 4 Cores / 4.2 GHz)	Intel® Xeon® W-10885M with vPro™ (max. 8 cores / 5.30 GHz) Intel® Xeon® W-10855M vPro™ (max. 6 cores / 5.10 GHz) 10th Gen Intel® Core™ i9-10885H with vPro™ (max. 8 cores / 5.30 GHz) 10th Gen Intel® Core™ i7-10875H with vPro™ (max. 8 cores / 5.10 GHz) 10th Gen Intel® Core™ i7-10850H with vPro™ (max. 6 cores / 5.10 GHz) 10th Gen Intel® Core™ i5-10400H vPro® processor (max. 4 cores / 4.60 GHz)	Intel® Xeon® processor E-2200 (max. 8 cores / 5.0 GHz) Intel® Core™ i9 processor (max. 8 cores / 5.0 GHz) Intel® Core™ i7 processor (max. 6 cores / 4.7 GHz) Intel® Core™ i5 processor (max. 6 cores / 4.1 GHz) Intel® Core™ i3 processor (max. 4 cores / 3.6 GHz)	Intel® Xeon® processor W-1390P (max. 8 Cores / 5.1 GHz) Intel® Xeon® processor W-1370 (max. 8 Cores / 5.0 GHz) Intel® Xeon® processor W-1350 (max. 6 Cores / 5.0 GHz) Intel® Core™ i9-11900K processor (max. 8 Cores / 3.5 GHz) Intel® Core™ i9-11900 processor (max. 8 Cores / 2.5 GHz) Intel® Core™ i7-11700K processor (max. 8 Cores / 3.6 GHz) Intel® Core™ i7-11700 processor (8 Cores / 2.5 GHz) Intel® Core™ i5-11500 processor (6 Cores / 2.70 GHz)	Intel® Xeon® processor W-1290P (max. 10 cores / 5.2 GHz) Intel® Xeon® processor W-1290 (max. 10 cores / 5.1 GHz) Intel® Xeon® processor W-1270P (max. 8 cores / 5.1 GHz) Intel® Xeon® processor W-1270 (max. 8 cores / 5.0 GHz) Intel® Xeon® processor W-1250P (max. 6 cores / 4.8 GHz) Intel® Xeon® processor W-1250 (max. 6 cores / 4.7 GHz) Intel® Core™ i9-10900 processor (max. 10 cores / 2.80 GHz) Intel® Core™ i9-10900K processor (max. 10 cores / 3.70 GHz) Intel® Core™ i7-10700 processor (max. 8 cores / 2.90 GHz) Intel® Core™ i7-10700K processor (max. 8 cores / 3.80 GHz) Intel® Core™ i5-10600 processor (max. 6 cores / 3.30 GHz) Intel® Core™ i5-10500 processor (max. 6 cores / 3.10 GHz) Intel® Core™ i3-10100 processor (max. 4 cores / 3.60 GHz)
Operating System (pre-installed)	Windows 11 Pro. Fujitsu recommends Windows 11 Pro. Windows 10 Pro	Windows 10 Pro for Workstations Windows 10 Pro High End Windows 10 Pro	Windows 10 Pro. Fujitsu recommends Windows 10 Pro. Windows 10 Pro for Workstations	Windows 10 Pro for Workstations Windows 10 Pro. Fujitsu recommends Windows 10 Pro for business. Windows 10 Home	Windows 10 Pro for Workstations Windows 10 Pro. Fujitsu recommends Windows 10 Pro for business. Windows 10 Home
Memory	Up to 64 GB DDR4, 3,200 MT/s, SO DIMM	Up to 128 GB, 4 SO DIMM memory slots, DDR4 - 2,666 MHz; based on Intel® design, systems built with four DIMM slots run at 2,400 MT/s	Up to 128 GB DDR4, 4 DIMM memory slots non-ECC/ECC, DDR4 - 2,666 MHz	Up to 128 GB, DIMM memory slot, ECC/non-ECC, DDR4 - 3,200 MHz	Up to 128 GB, 4 DIMM memory slots, ECC/non-ECC, DDR4 - 2,933 MHz
Graphics Cards	NVIDIA® T500 (4 GB)	NVIDIA® Quadro® P620 – 4GB (512 CUDA cores) NVIDIA® Quadro® T1000 – 4GB (896 CUDA cores) NVIDIA® Quadro® T2000 – 4GB (1024 CUDA cores) NVIDIA® Quadro RTX™ 3000 – 6GB (1920 CUDA cores)	1x graphic card (double width) or 2x graphics cards (single width): Up to NVIDIA RTX™ A5000 (24 GB) or up to NVIDIA® Quadro RTX™ 8000 (48 GB) or up to AMD Radeon™ Pro WX 3200 (4 GB)	Up to 1x high-end 3D graphic card: up to NVIDIA RTX™ A5000 (24 GB) or up to NVIDIA® Quadro RTX™ 4000 (16 GB) or up to AMD Radeon™ Pro WX 3200 (4 GB)	Up to 1x high-end 3D graphic card: up to NVIDIA RTX™ A5000 (24 GB) or up to NVIDIA® Quadro RTX™ 4000 (16 GB) or up to AMD Radeon™ Pro WX 3200 (4 GB)
Storage	2x M.2 NVMe PCIe slots (incl. RAID support) with up to 2 TB SSD PCIe M.2 NVMe - (SED) per slot	SSD PCIe NVMe (Standard, Highend, SED) HDD SATA	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 SSD SATA HDD SATA	SSD PCIe M.2 NVMe SSD SATA HDD SATA RAID 1 Bundle M.2 NVMe Highend
Drive bays	-	-	5 in total	6 in total	6 in total
Slots	1x RJ-45, 2x USB Type-C™ TBT4 (with 15 W Power Delivery), 1x SIM card slot, 1x SmartCard, 1x SD Card Reader, 1x Audio Combo Jack, 2x USB 3.2 Gen1, 1x HDMI, 1x Kensington Lock	1x DC-in, 1x Audio Combo, 1x USB 3.1 Gen1, 2x USB 3.1 Gen2, 2x USB Type-C™, 1x VGA, 1x HDMI, 1x RJ-45, 1x SmartCard slot, 1x SIM card slot, SDCardReader, 1x Kensington Lock.	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. x16) - single slot density	4 in total: 2x PCI-Express 3.0 x1 1x PCI-Express 3.0 x4 (mech. x16) 1x PCI-Express 4.0 x16 M.2-2230	4 in total: 2x PCI-Express 3.0 x1 1x PCI-Express 3.0 x4 (mech. x16) 1x PCI-Express 3.0 x16
USB	4 in total (USB 3.2 Gen1 (5 Gbps) total 2xType-A; 2 x Intel® Thunderbolt™ 4 USB Type-C™)	5 in total (1x USB 3.1 Gen1, 2x USB 3.1 Gen2, 2x USB Type-C™)	5 in total (2x USB 2.0, 3x USB 3.1 Gen1)	12 in total (4x USB 2.0, 3x USB 3.2 Gen 1 (5 Gbps); USB 3.2 Gen 2 (10 Gbps) total 4 and 1 optional; USB 3.2 Gen2x2 (20 Gbps) total 1)	12 in total (4x USB 2.0, 3x USB 3.2 Gen 1 (5 Gbps); USB 3.2 Gen 2 (10 Gbps) total 5 and 1 optional)
Serial ATA	-	-	5	4	6
Power Supply	Li-Ion battery 4-cell, 69.7 Wh, 4515 mAh up to 10 hours (depending on configuration)	230 W 8-cell, 96 Wh battery - up to 12 hours	C780: 450W - max. 94% efficiency C780power: 800W - max. 94% efficiency	300W or 680 W (depending on PSU)	300W or 680 W (depending on PSU)

Fujitsu recommends Windows 11 Pro.



	DESKTOP WORKSTATIONS									
Series	CELSIUS W		CELSIUS J		CELSIUS M		CELSIUS R			
Model	W5010/ L		J5010		M7010		M7010X		R970	
Form Factor	Micro Tower		Small Form Factor (SFF)		Midi Tower		Midi Tower		Big Tower	
Weight / liter	21 liter - single processor		8.3 liter - single processor		38 liter - single processor		38 liter - single processor		49 liter - dual processor	
Noise emission					Whisper quiet: 20 dB(A)		Whisper quiet: 20 dB(A)		Whisper quiet: 24 dB(A)	
Processor (incl. cores & frequency)	Intel® Xeon® processor W-1290 (max. 10 cores / 5.1 GHz) Intel® Xeon® processor W-1270 (max. 8 cores / 5.0 GHz) Intel® Xeon® processor W-1250 (max. 6 cores / 4.7 GHz) Intel® Core™ i9-10900 processor (max. 10 cores / 2.80 GHz) Intel® Core™ i7-10700 processor (max. 8 cores / 2.90 GHz) Intel® Core™ i5-10500 processor (max. 6 cores / 3.10 GHz) Intel® Core™ i3-10100 processor (max. 4 cores / 3.60 GHz)		Intel® Xeon® processor W-1290 (max. 10 cores / 5.10 GHz) Intel® Xeon® processor W-1270 (max. 8 cores / 5.0 GHz) Intel® Xeon® processor W-1250 (max. 6 cores / 4.70 GHz) Intel® Core™ i9-10900 processor (max. 10 cores / 2.80 GHz) Intel® Core™ i7-10700 processor (max. 8 cores / 2.90 GHz) Intel® Core™ i5-10600 processor (max. 6 cores / 3.30 GHz) Intel® Core™ i5-10500 processor (max. 6 cores / 3.10 GHz) Intel® Core™ i3-10100 processor (max. 4 cores / 3.60 GHz)		Intel® Xeon® processor W-2223 (max. 4 cores / 3.90 GHz) Intel® Xeon® processor W-2225 (max. 4 cores / 4.60 GHz) Intel® Xeon® processor W-2235 (max. 6 cores / 4.60 GHz) Intel® Xeon® processor W-2245 (max. 8 cores / 4.50 GHz) Intel® Xeon® processor W-2255 (max. 10 cores / 4.50 GHz) Intel® Xeon® processor W-2265 (max. 12 cores / 4.60 GHz) Intel® Xeon® processor W-2275 (max. 14 cores / 4.60 GHz) Intel® Xeon® processor W-2295 (max. 18 cores / 4.60 GHz)		Intel® Core™ i9-10980XE Extreme processor (max. 18 cores / 4.60 GHz) Intel® Core™ i9-10900X processor (max. 10 cores / 4.50 GHz) Intel® Core™ i9-10920X processor (max. 12C/24T / 4.60 GHz) Intel® Core™ i9-10940X processor (max. 14 cores / 4.60 GHz)		Intel® Xeon® Platinum processor 8200 family (max. 2x28 cores / 4.0 GHz) Intel® Xeon® Gold processor 5200 and 6200 family (max. 2x24 cores / 4.4 GHz) Intel® Xeon® Silver processor 4200 family (max. 2x12 cores / 4.0 GHz)	
Operating System (pre-installed)	Windows 10 Pro for Workstations Windows 10 Home		Windows 10 Pro for Workstations Windows 10 Pro. Fujitsu recommends Windows 10 Pro for business. Windows 10 Home		Windows 10 Pro for Workstations		Windows 10 Pro High End Windows 10 Pro		Windows 10 Pro for Workstations	
Memory	Up to 128 GB, 4 DIMM memory slots, ECC/non-ECC, DDR4 - 2,933 MT/s		Up to 128 GB, 4 DIMM memory slots, ECC/non-ECC, DDR4 - 2,933 MHz		Up to 512 GB, 8 DIMM memory slots ECC, DDR4 - 2,933 MT/s		Up to 256 GB, 8 DIMM memory slots DDR4 - 2,933 MT/s		Up to 1024 GB, 16 DIMM memory slots (8 per processor), ECC, DDR4 - 2,933 MHz	
Graphics Cards	Up to 1x high-end 3D graphic card: up to NVIDIA RTX™ A5000 (24 GB) or up to NVIDIA® Quadro RTX™ 4000 (16 GB) or up to AMD Radeon™ Pro WX 3200 (4 GB)		Full-height graphics cards: up to NVIDIA® Quadro® P2200 (5 GB) or up to AMD Radeon™ Pro WX 3200 (4 GB)		Ultra-high-end 3D graphics cards: up to NVIDIA RTX™ A6000 (24 GB) or up to 2x NVIDIA® Quadro RTX™ 8000 (48 GB) or up to AMD Radeon™ Pro WX 3200 (4 GB)		Ultra-high-end 3D graphics cards: up to NVIDIA RTX™ A6000 (24 GB) or up to 2x NVIDIA® Quadro RTX™ 8000 (48 GB) or up to AMD Radeon™ Pro WX 3200 (4 GB)		Ultra-high-end 3D graphics cards: up to 2x NVIDIA RTX™ A6000 (24 GB) or up to 2x NVIDIA® Quadro RTX™ 8000 (48 GB) or up to AMD Radeon™ Pro WX 3200 (4 GB)	
Storage	SSD PCIe M.2 NVMe SSD SATA HDD SATA RAID 1 Bundle M.2 NVMe Highend		SSD PCIe M.2 NVMe SSD SATA HDD SATA RAID 1 Bundle M.2 NVMe Highend		SSD PCIe M.2 NVMe (module, card, Highend) SSD SATA (Standard, High Endurance, SED) HDD SAS HDD SATA (Standard, Business Critical)		SSD PCIe M.2 NVMe (module, card, Highend) SSD SATA (Standard, High Endurance, SED) HDD SATA (Standard, 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)	
Drive bays	6 in total		3 in total		7 in total		7 in total		12 in total	
Slots	4 in total: 2x PCI-Express 3.0 x1 1x PCI-Express 3.0 x4 (mech. x16) 1x PCI-Express 3.0 x16		1x PCIe 3.0 x4 (mech. x16) 1x PCIe 3.0 x16 - Low Profile - Full Height via optional Riser card		7 in total: 2 x PCI-Express 3.0 x1 2 x PCI-Express 3.0 x4 1 x PCI-Express 3.0 x8 2 x PCI-Express 3.0 x16		7 in total: 2 x PCI-Express 3.0 x1 2 x PCI-Express 3.0 x4 PCI-Express 3.0 x4 (mech. x8) 2 x PCI-Express 3.0 x16		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	
USB	12 in total (4x USB 2.0, 3x USB 3.2 Gen 1 (5 Gbps); USB 3.2 Gen 2 (10 Gbps) total 5 and 1 optional)		12 in total (4x USB 2.0, 3x USB 3.2 Gen 1 (5 Gbps); USB 3.2 Gen 2 (10 Gbps) total 5 and 1 optional)		10 in total (2x USB 2.0, 6x USB 3.1 Gen1, 2x USB 3.1 Gen2 optional)		10 in total (2x USB 2.0, 6x USB 3.1 Gen1, 2x USB 3.1 Gen2 optional)		14 in total (9x USB 2.0, 4x USB 3.1 Gen1, 1x USB 3.1 Gen 2 optional)	
Serial ATA	6		4		8		8		10	
Power Supply	max. 680 W		300 W		M7010 : 450 W max. - 90% efficiency M7010power: 800 W - max. 90% efficiency		M7010X: 450 W max. - 90% efficiency M7010Xpower: 800 W - max. 90% efficiency		R970: 1000 W - max. 90% efficiency R970power: 1300 W - max. 90% efficiency	
Others	Minimum 36 months lifecycle				VR-ready		VR-ready		VR-ready Intel VROC HW key: Standard M.2, Premium U.2	