

SuperWorkstation SYS-542T-2R

UP full rackmount tower workstation for media/video live-streaming, broadcasting, and CDN applications



Key Applications

CDN, Edge Nodes, CDN Optimized, Media/Video Streaming, Cloud Video Streaming, Video-on-Demand, Web Cache, CDN, Video Streaming, Video processing & streaming, Content Delivery Network (CDN), Video and Music Production,

Key Features

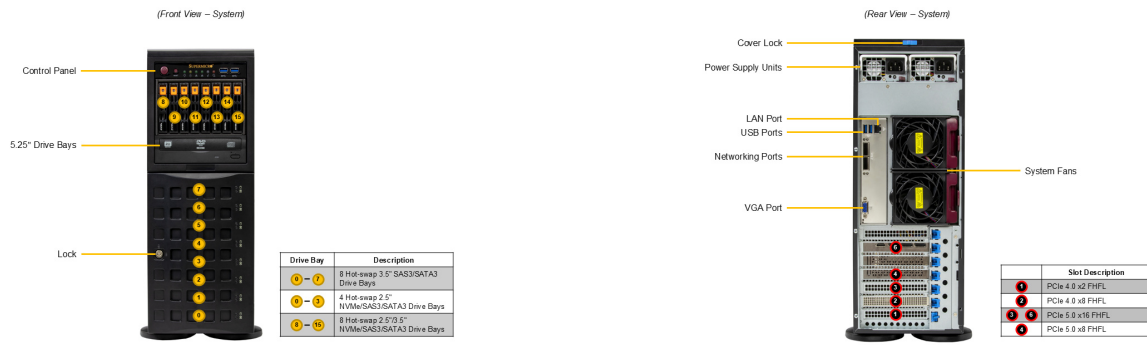
- Intel Xeon 6 SoC with P-Cores, 36C, Media Transcoding Accelerator at 235W;
- Support for up to 1 triple-width PCIe GPU or 2 double-width PCIe GPU accelerator cards;
- Up to 4 DIMMs supporting up to 256GB DDR5-6400 MT/s;
- 2x 100GbE QSFP28 +1x IPMI shared LAN 1x GbE RJ45;
- Up to 1x PCIe 5.0 x16 FHFL + 1x PCIe 5.0 x 16 FHFL or 2x PCIe 5.0 x8 FHFL + 1x PCIe 4.0 x8 FHFL + 1x PCIe4.0 x2 (physical x4);
- Up to 16 front fixed 3.5"/2.5" NVMe/SAS/SATA drive bays. Support for RAID.;
- 2 Redundant 1200W Titanium Level Hot-plug power supplies;



Form Factor	4U Rackmount Enclosure: 178 x 452 x 647mm (7" x 17.8" x 25.5") Package: 356 x 625 x 795mm (14" x 24.6" x 31.3")
Processor	Intel® Xeon® 6 SoC 36C/72T; 144MB Cache
GPU	Max GPU Count: Up to 1 triple-width GPU Supported GPU: NVIDIA PCIe: NVIDIA RTX PRO™ 4000 Blackwell, NVIDIA RTX PRO™ 5000 Blackwell, NVIDIA RTX PRO™ 6000 Blackwell Max-Q Workstation Edition, NVIDIA RTX PRO™ 6000 Blackwell Workstation Edition NVIDIA: GeForce RTX 5080, GeForce RTX 5090 Intel: Arc™ Pro B50 Graphics, Arc™ Pro B60 Graphics (DW)
System Memory	Slot Count: 4 DIMM slots Max Memory (1DPC): 2TB 6400MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 8 bays <ul style="list-style-type: none"> • 8 front fixed 3.5"/2.5" 24G SAS*/NVMe*/SAS*/SATA drive bays Option A: Total 16 bays <ul style="list-style-type: none"> • 8 front fixed 3.5"/2.5" 24G SAS*/SAS/SATA drive bays • 8 front fixed 2.5" 24G SAS*/NVMe*/SAS/SATA drive bays (*24G SAS/NVMe/SAS support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 2 M.2 NVMe slots (M-key 2280/22110; VROC required for RAID) Peripheral Bays: 1 DVD bay
Expansion Slots	PCI-Express (PCIe) Configuration: Default <ul style="list-style-type: none"> • 2 PCIe 5.0 x16 FHFL slots • 1 PCIe 4.0 x8 FHFL slot • 1 PCIe 4.0 x2 (in x4) FHFL slot M.2: 1 M.2 PCIe 4.0 x2 slot (M-key 2280/22110)
On-Board Devices	SATA: SATA (6Gbps) SAS: SAS (12Gbps) ; RAID 0/1/5/6/10/50/60 support Network Connectivity: 2 QSFP28 100GbE with Intel® SoC 1 RJ45 1GbE with Intel® I210-IT

Input / Output

LAN: 1 RJ45 1 GbE LAN port (Intel® I210-IT) (IPMI shared on LAN port 1)
2 QSFP28 100 GbE LAN ports (Intel® SOC)
USB: 2 USB 3.2 Gen1 Type-A ports(rear)
2 USB 3.2 Gen1 Type-A ports(front)
Video: 1 VGA port



System Cooling	Fans: 1 Exterior 80mm Fan(s) (optional) 5 Acoustic Optimized Hot Swap 80mm Fan(s) 5 Heavy Duty Hot Swap 80mm Fan(s) (optional)
Power Supply	2x 1200W Redundant (1 + 1) Titanium Level (96%) Hot-plug power supplies
Management	SuperCloud Composer® (SCC); Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory. Fan: Pulse Width Modulated (PWM) fan connectors Status monitor for speed control Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors
Dimensions and Weight	Weight: Gross Weight: 62 lbs (28.12 kg) Net Weight: 59 lbs (26.76 kg) Available Color: Black
Operating Environment	Operating Temperature: 10°C to 35°C (50°F to 95°F) Non-operating Temperature: -40°C to 60°C (-40°F to 140°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
Motherboard	Super X14SDI-36C-SP3F
Chassis	CSE-745BTS-R000NDBP2