

# SuperWorkstation SYS-542AW-TR

4U UP rackmount workstation with 8 hot-swap NVMe/SAS/SATA drive bays and PCIe 5.0



## Key Applications

High Performance Computing, VDI, AI/Deep Learning Training, Media/Video Streaming, Cloud Gaming, Animation and Modeling, Design & Visualization, 3D Rendering, Diagnostic Imaging, AI Training,

## Key Features

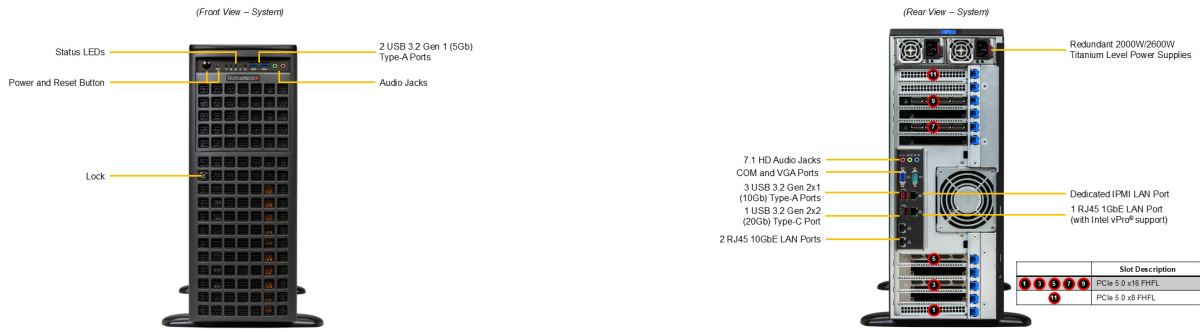
- Single Intel® Xeon® 600 Series processor (LGA 4710-2/Socket E2), with up to 86 cores/350W TDP;
- 8 DDR5 ECC Registered RDIMM/3DS RDIMM, DDR5-6400MT/s Up to total 2TB;
- Support for up to 4 double-width PCIe GPU cards or 2 triple-width PCIe GPU cards;
- 1 Dedicated LAN for IPMI  
Dual 10GbE LAN with Intel E610-XAT2 + 1 GbE LAN with Intel I219-LM;
- 8 Hot-swap 3.5" NVMe/SAS/SATA drive bays  
4 M.2 (support 2280/22110, M-socket, 2x PCIe 5.0 x4 attached to CPU and 2x PCIe 4.0 x4 attached to PCH);
- 5 PCIe 5.0 x16 slots + 1 PCIe 5.0 x8 slot;
- Dual 2000W / 2600W Redundant Titanium Level power supplies  
(Power supply full redundancy based on configuration and application load);



<b>Form Factor</b>	4U Rackmount Enclosure: 177 x 465.4 x 678.5mm (6.96" x 18.32" x 26.71") Package: 682 x 320 x 964mm (26.85" x 12.59" x 37.95")
<b>Processor</b>	Single E2 (LGA 4710-2) Intel® Xeon® 600 Processor for Workstation Up to 86C/172T; Up to 336MB Cache
<b>GPU</b>	Max GPU Count: Up to 2 triple-width or 4 double-width GPUs 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 CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect
<b>System Memory</b>	Slot Count: 8 DIMM slots Max Memory (1DPC): Up to 2TB 6400MT/s ECC DDR5 RDIMM
<b>Drive Bays Configuration</b>	Default: Total 8 bays <ul style="list-style-type: none"> <li>• 8 front hot-swap 3.5" NVMe/SAS*/SATA drive bays</li> </ul> Option A: Total 8 bays <ul style="list-style-type: none"> <li>• 8 front hot-swap 2.5" NVMe/SAS*/SATA drive bays</li> </ul> (*SAS support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 2 M.2 PCIe 4.0 x4 NVMe slots (M-key 22110(default)/2280) 2 M.2 PCIe 5.0 x4 NVMe slots (M-key 22110(default)/2280) Peripheral Bays: 3 5.25" peripheral bays
<b>Expansion Slots</b>	Default <ul style="list-style-type: none"> <li>• 5 PCIe 5.0 x16 FHFL slots</li> <li>• 1 PCIe 5.0 x8 FHFL slot</li> </ul>
<b>On-Board Devices</b>	SATA: SATA (6Gbps) via Intel® W890; RAID 0/1/5/10 support(Intel® VROC RAID key required) Chipset: intel® W890 Network Connectivity: 2 RJ45 10GbE with Intel® E610 1 RJ45 1GbE with Intel® I219-LM 1 RJ45 1GbE with ASPEED AST2600
<b>Input / Output</b>	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port (ASPEED AST2600) 1 RJ45 1 GbE LAN port (Intel® I219-LM)

2 RJ45 10 GbE LAN ports (Intel® E610)  
USB: 2 USB 3.2 Gen1 Type-A ports(front)  
      3 USB 3.2 Gen2 Type-A ports(Rear)  
      1 USB 3.2 Gen2x2 Type-C port(Rear)  
Video: 1 VGA port(Rear)  
Serial: 1 COM port(rear)  
Audio: 7.1 HD Audio  
TPM: 1 TPM Onboard TPM & TPM Header

---



<b>System Cooling</b>	Fans: Up to 5 heavy duty fans with optimal fan speed control Air Shroud: 1 Air Shroud
<b>Power Supply</b>	2x 2000W Redundant (1 + 1) Titanium Level (96%) power supplies
<b>System BIOS</b>	BIOS Type: AMI 64MB SPI Flash EEPROM
<b>Management</b>	SuperCloud Composer® (SCC); Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!
<b>PC Health Monitoring</b>	Fan: Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors Voltage: System temperature, Memory temperature, CPU temperature, 3.3V standby, +5V standby, +5V, +3.3V, +12V, CPU thermal trip support
<b>Dimensions and Weight</b>	Weight: Gross Weight: 62 lbs (28.1 kg) Net Weight: 46 lbs (20.9 kg) Available Color: Black
<b>Operating Environment</b>	RoHS Compliant Operating Temperature: 10°C to 35°C (50°F to 95°F) Non-operating Temperature: -30°C to 60°C (-22°F to 140°F) Operating Relative Humidity: 8% to 80% (non-condensing) Non-operating Relative Humidity: 8% to 90% (non-condensing)
<b>Motherboard</b>	<a href="#"><u>Super X14SRG-TF</u></a>
<b>Chassis</b>	<b>CSE-749TS-R000NBP</b>