



SuperWorkstation A+ Server AS -531AW-TC

UP workstation for AI, design, simulation and media

Key Applications

2D/3D Content Creation, VR Content Development, AI Inference / Training, 3D Rendering, Product Design and Engineering Simulation,

Key Features

- AMD Ryzen™ Threadripper™ PRO 9000WX/7000WX series and Ryzen™ Threadripper™ 9000/7000 series up to 350W TDP Processors
Supports optional CPU closed-looped liquid cooling kit
CPU and Memory Overclocking supported;
- 4 DDR5 ECC Registered RDIMM/3DS RDIMM, DDR5-6400MHz Up to total 512GB;
- 2 PCIe 5.0 x16 slots and 2 PCIe 5.0 x8 slots, 2 PCIe 4.0 x4 M.2 slots (RAID 0, 1) and 1 MCIO connector (PCIe 4.0 x8) to support 2 NVMe PCIe drives;
- 6 internal fixed 2.5" SATA drive bays and 2 internal fixed 3.5" SATA drive bays;
- 1 Dedicated LAN for IPMI
Dual 10Gb LAN with Broadcom BCM57416;
- 1000W, 1300W and 2000W Power Supply Options;



Form Factor	Mid-Tower Enclosure: 205 x 450 x 470mm (8.07" x 17.72" x 18.5") Package: 325 x 617 x 590mm (12.8" x 24.29" x 23.23")
Processor	Single Socket sTR5 (LGA-4844) AMD Ryzen™ Threadripper™ PRO 9000/7000 WX-Series and Ryzen™ Threadripper™ 9000/7000 Series Processors Up to 96C/192T; Up to 384MB Cache
GPU	Max GPU Count: Up to 1 quad-width or 2 triple-width or 2 double-width or 2 single-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, RTX 4500 Ada, RTX 5000 Ada, RTX 6000 Ada Generation NVIDIA: GeForce RTX 5070, GeForce RTX 5080, GeForce RTX 5090 AMD PCIe: Radeon™ AI PRO R9700
System Memory	Slot Count: 4 DIMM slots/4 Channels Max Memory (1DPC): Up to 512GB 6400MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 8 bays • 2 internal fixed 3.5" SATA* drive bays • 6 internal fixed 2.5" SATA* drive bays Option A: Total 8 bays • 2 internal fixed 3.5" SATA drive bays • 4 internal fixed 2.5" SATA drive bays • 2 internal fixed 2.5" PCIe 4.0 NVMe* drive bays (*NVMe/SATA 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)
Expansion Slots	PCI-Express (PCIe) Configuration: Default • 2 PCIe 5.0 x16 (in x16) FHFL slots • 2 PCIe 5.0 x8 (in x8) FHFL slots M.2: 2 M.2 PCIe 4.0 x4 NVMe slots (M-key 22110(default)/2280)
On-Board Devices	Chipset: System on Chip Network Connectivity: 2 RJ45 10GbE with Broadcom® BCM57416 1 RJ45 1GbE with ASPEED AST2600 IPMI: Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support

Input / Output

LAN: 2 RJ45 10 GBASE-T LAN ports (Broadcom® BCM57416)
1 RJ45 1 GbE Dedicated BMC LAN port (ASPEED AST2600)
USB: 2 USB 3.2 Gen1 Type-A ports(front)
4 USB 3.2 Gen2 Type-A ports(Rear)
1 USB 3.2 Gen2 Type-C port(Rear)
1 USB 3.2 Gen2 Type-C port(Front)
Video: 1 VGA port
Serial: 1 COM port(rear)
Audio: 7.1 HD Audio
TPM: 1 TPM header



System Cooling	Fans: Up to 1 Rear Exhaust Fan 120mm Fan(s) Up to 3 Front Intake 120mm Fan(s) Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)
Power Supply	1x 1000W Gold Level (90%) power supply
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	Supermicro Server Manager (SSM); Supermicro Power Manager (SPM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); Super Diagnostics Offline (SDO); SuperServer Automation Assistant (SAA) New!; IPMICFG; SMCIPMITool; IPMIView
PC Health Monitoring	FAN: Status monitor for speed control Temperature: Monitoring for CPU and chassis environment; CPU Thermal Trip Support; I ² C Temperature Sensing Logic Voltage: Monitors CPU Core Voltages, +3.3V, +12V, +3.3Vstb, +5Vstb, Vcore, Vmem
Dimensions and Weight	Weight: Gross Weight: 19.2 lbs (8.7 kg) Net Weight: 14.1 lbs (6.4 kg) Available Color: Black
Operating Environment	RoHS Compliant Operating Temperature: 10°C to 30°C (50°F to 86°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 H13SRA-TF
Chassis	CSE-GS3A-000NBP