

BigTwin SuperServer SYS-221BT-HNR

2U 4-Node BigTwin with 6 hot-swap 2.5" NVMe drives per node



Key Applications

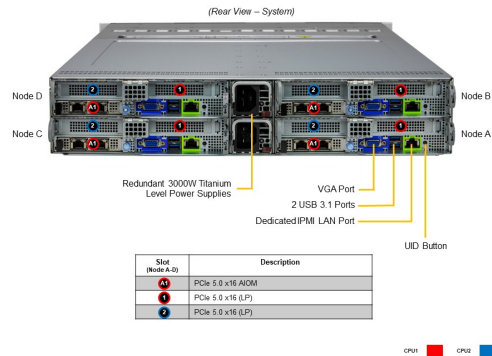
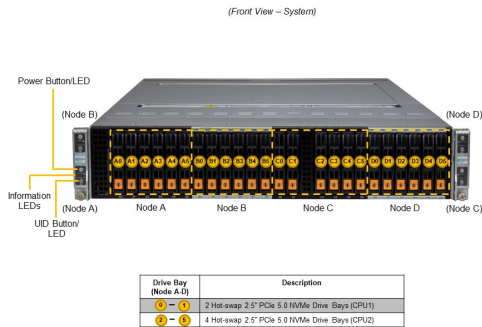
All-Flash NVMe Hyperconverged Infrastructure, Container-as-a-Service;
Application Accelerator, High-Performance File System, Diskless HPC Clusters,

Key Features

- Four **hot-pluggable** systems (nodes) in a 2U form factor. Each node supports the following;;
- Socket E (LGA 4677) support 5th/4th Gen Intel® Xeon® Scalable processors;
- Intel® C741;
- 16 DIMM Slots supporting up to 4TB of memory; ECC RDIMMs up to DDR5-5600;
- 2 PCIe 5.0 x16 (LP) slot; Tool-less support
Internal PCIe 4.0 for 2 x4 M.2 NVMe support onboard
Optional M.2 (22x80) HW RAID1 NVMe Boot Controller via SCC-A2NM2241G3-B1;
- Network connectivity via AIOM (OCP 3.0 compliant);
- 6 hot-swap PCIe 5.0 NVMe 2.5" drives; All Flash NVMe;
- Liquid Cooling Support
4 cooling fans per 2U enclosure, 16K RPM; Shared Cooling Design, Counter-Rotating;
- 3000W Redundant Power Supplies Titanium Level (96%+); Shared Power



Form Factor	2U Rackmount Enclosure: 449 x 88 x 730mm (17.68" x 3.47" x 28.75") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28")
Processor	Dual Socket E (LGA-4677) 5th Gen Intel® Xeon® / 4th Gen Intel® Xeon® Scalable processors Supports Intel Xeon CPU Max Series with high bandwidth memory (HBM) Up to 64C/128T; Up to 320MB Cache per CPU
System Memory	Slot Count: 16 DIMM slots Max Memory (1DPC): Up to 4TB 5600MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 6 bays <ul style="list-style-type: none"> • 6 front hot-swap 2.5" PCIe 5.0 NVMe drive bays M.2: 2 M.2 PCIe 4.0 x4 NVMe slots (M-key 22110(default); VROC required for RAID)
Expansion Slots	Default <ul style="list-style-type: none"> • 2 PCIe 5.0 x16 LP slots • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)
On-Board Devices	Chipset: Intel® C741 Network Connectivity: Via AIOM
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 3.0 Gen2 Type-A ports(Rear) Video: 1 VGA port



System Cooling	<p>Fans: Up to 4x 16K RPM Counter Rotating 8cm Fan(s)</p> <p>Air Shroud: 4 Air Shrouds</p> <p>Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)</p>
Power Supply	2x 3000W Redundant (1 + 1) Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 32MB Flash ROM
Management	<p>SuperCloud Composer®; 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!</p>
PC Health Monitoring	<p>FAN: Fans with tachometer monitoring</p> <p>Status monitor for speed control</p> <p>Pulse Width Modulated (PWM) fan connectors</p> <p>Temperature: Monitoring for CPU and chassis environment</p> <p>CPU: Monitors for CPU Cores, Chipset Voltages, Memory.</p> <p>8+4 Phase-switching voltage regulator</p>
Dimensions and Weight	<p>Weight: Gross Weight: 96.6 lbs (43.8 kg)</p> <p>Net Weight: 66.1 lbs (30 kg)</p> <p>Available Color: Black front & silver body</p>
Operating Environment	<p>RoHS Compliant</p> <p>Operating Temperature: 10°C to 35°C (50°F to 95°F)</p> <p>Non-operating Temperature: -30°C to 60°C (-22°F to 140°F)</p> <p>Operating Relative Humidity: 8% to 80% (non-condensing)</p> <p>Non-operating Relative Humidity: 8% to 90% (non-condensing)</p>
Motherboard	Super X13DET-B
Chassis	CSE-217BQ2-R3K04P