



BigTwin SuperServer SYS-221BT-HNC9R

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

Key Applications

Mission Critical HPC, Virtualized Big Data Analytics, High-Density Storage RAID Array,

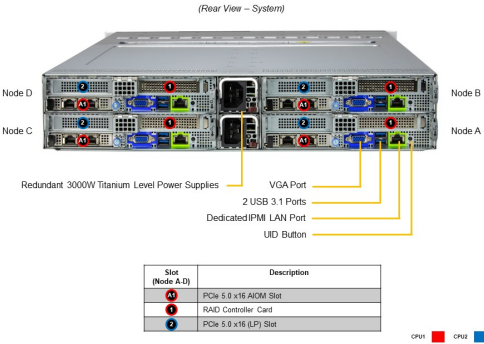
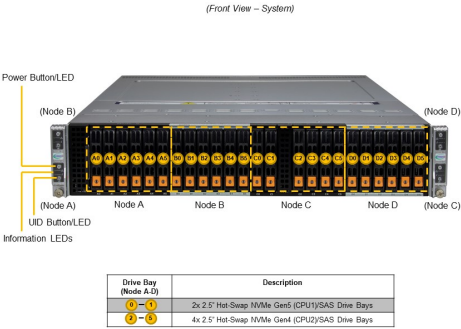
Key Features

- 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;
- Internal PCIe 4.0 x8 for 2 M.2 NVMe support onboard
1 PCIe 5.0 x16 (LP) slot; Tool-less support
Optional M.2 (22x80) HW RAID1 NVMe Boot Controller via SCC-A2NM2241G3-B1;
- Network connectivity via AIOM (OCP 3.0 compliant);
- 6 hot-swap 2.5" drive bays (2x PCIe 5.0 NVMe/SAS and 4x PCIe 4.0 NVMe/SAS)
Built-in SAS3 Support via Broadcom 3908; IR Mode;
- Liquid Cooling Support
4 cooling fans per 2U enclosure, 16K RPM; Shared Cooling Design, Counter-



Form Factor: 2U Rackmount
Dimensions: 449 x 68 x 730mm (17.68" x 3.47" x 28.75")
Weight: 14.9 kg (33 lb)
Power: 3000W Redundant Power Supplies (Maximum Level (96%)); Shared Power Design;
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 • 2 front hot-swap 2.5" PCIe 5.0 NVMe/SAS drive bays • 4 front hot-swap 2.5" PCIe 4.0 NVMe/SAS drive bays M.2: 2 M.2 PCIe 4.0 x4 NVMe slots (M-key 22110(default); VROC required for RAID)
Expansion Slots	Default • 1 PCIe 5.0 x16 LP slot • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)
On-Board Devices	SAS: SAS (12Gbps) via Broadcom® 3908; RAID 0/1/5/6/10/50 support 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	Fans: Up to 4x 16K RPM Counter Rotating 8cm Fan(s) Air Shroud: 4 Air Shrouds Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)
Power Supply	2x 3000W Redundant (1 + 1) Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 32MB Flash ROM
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: 8+4 Phase-switching voltage regulator Monitors for CPU Cores, Chipset Voltages, Memory. Fan: Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control Temperature: Monitoring for CPU and chassis environment
Dimensions and Weight	Weight: Gross Weight: 96.6 lbs (43.8 kg) Net Weight: 66.1 lbs (30 kg) Available Color: Black front & silver body
Operating Environment	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)
Motherboard	Super X13DET-B
Chassis	CSE-217BQ2-R3K04P