

# BigTwin SuperServer SYS-221BT-HNR

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



More details here

## Key Applications

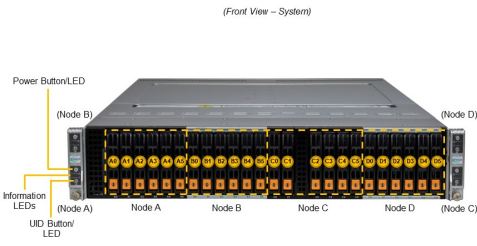
All-Flash NVMe Hyperconverged Infrastructure, Container-as-a-Service; Application Accelerator, High-Performance File System, Diskless HPC Clusters,

## Key Features

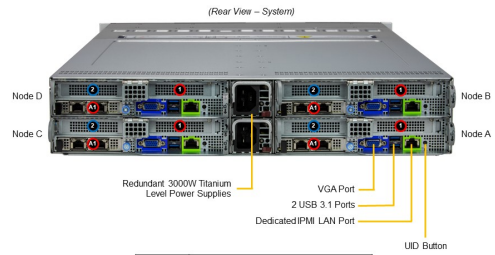
- Four **hot-pluggable** systems (nodes) in a 2U form factor. Each node supports the following;;
- Socket E (LGA 4677) support 5th/4th Gen Intel® Xeon® Scalable processors;
- Intel® C741;
- 16 DIMM Slots supporting up to 4TB of memory; ECC RDIMMs up to DDR5-5600;
- 2 PCIe 5.0 x16 (LP) slot; Tool-less 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



|                                 |   |
|---------------------------------|---|
| <b>Form Factor</b>              | 2U Rackmount<br>Enclosure: 449 x 88 x 730mm (17.68" x 3.47" x 28.75")<br>Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28")  |
| <b>Processor</b>                | Dual Socket E (LGA-4677)<br>5th Gen Intel® Xeon®/4th Gen Intel® Xeon® Scalable processors<br>Supports Intel Xeon CPU Max Series with high bandwidth memory (HBM)<br>Up to 64C/128T; Up to 320MB Cache per CPU |
| <b>System Memory</b>            | Slot Count: 16 DIMM slots<br>Max Memory (1DPC): Up to 4TB 5600MT/s ECC DDR5 RDIMM   |
| <b>Drive Bays Configuration</b> | Default: Total 6 bays<br>• 6 front hot-swap 2.5" PCIe 5.0 NVMe drive bays<br>M.2: 2 M.2 PCIe 4.0 x4 NVMe slots (M-key 22110(default); VROC required for RAID)   |
| <b>Expansion Slots</b>          | Default<br>• 2 PCIe 5.0 x16 LP slots<br>• 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)   |
| <b>On-Board Devices</b>         | Via AIOM  |
| <b>Input / Output</b>           | LAN: 1 RJ45 1 GbE Dedicated BMC LAN port<br>USB: 2 USB 3.0 Gen2 Type-A ports(Rear)<br>Video: 1 VGA port   |



| Drive Bay (Node A-B) | Description                                     |
|----------------------|---|
| 0 - 1                | 2 Hot-swap 2.5" PCIe 5.0 NVMe Drive Bays (CPU1) |
| 2 - 5                | 4 Hot-swap 2.5" PCIe 5.0 NVMe Drive Bays (CPU2) |



| Slot (Node A-B) | Description        |
|-----------------|--------------------|
| 0               | PCIe 5.0 x16 A1OM  |
| 1               | PCIe 5.0 x16 (LP1) |
| 2               | PCIe 5.0 x16 (LP1) |

CPU1 CPU2

|                       |  |
|-----------------------|--|
| System Cooling        | Fans: Up to 4x 16K RPM Counter Rotating 8cm Fan(s)<br>Air Shroud: 4 Air Shrouds<br>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<br>Monitors for CPU Cores, Chipset Voltages, Memory.<br>Fan: Fans with tachometer monitoring<br>Pulse Width Modulated (PWM) fan connectors<br>Status monitor for speed control<br>Temperature: Monitoring for CPU and chassis environment |
| Dimensions and Weight | Weight: Gross Weight: 96.6 lbs (43.8 kg)<br>Net Weight: 66.1 lbs (30 kg)<br>Available Color: Black front & silver body   |
| Operating Environment | RoHS Compliant<br>Operating Temperature: 10°C to 35°C (50°F to 95°F)<br>Non-operating Temperature: -30°C to 60°C (-22°F to 140°F)<br>Operating Relative Humidity: 8% to 80% (non-condensing)<br>Non-operating Relative Humidity: 8% to 90% (non-condensing)                          |
| Motherboard           | <a href="#">Super X13DET-B</a>   |
| Chassis               | <b>CSE-217BQ2-R3K04P</b>   |