

# BigTwin SuperServer SYS-221BT-HNC9R

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



More details here

## Key Applications

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

## Key Features

- 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-Rotating;
- 3000W Redundant Power Supplies Titanium Level (96%+); Shared Power



## Form Factor

2U Rackmount

- Four **hot-pluggable** systems (nodes) in a 2U form factor. Each node supports the following;;  
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 bay(s)  

- 2 front hot-swap 2.5" PCIe 5.0 NVMe/SAS drive bay(s)
- 4 front hot-swap 2.5" PCIe 4.0 NVMe/SAS drive bay(s)

M.2: 2 M.2 PCIe 4.0 x4 NVMe slot(s) (M-key 22110(default); VROC required for RAID)

## Expansion Slots

Default  

- 1 PCIe 5.0 x16 LP slot(s)

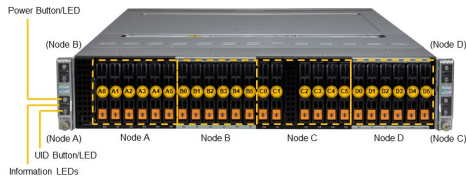
## On-Board Devices

SAS: SAS (12Gbps) via Broadcom® 3908; RAID 0/1/5/6/10/50 support  
Chipset: Intel® C741  
Network Connectivity: Via AIOM

## Input / Output

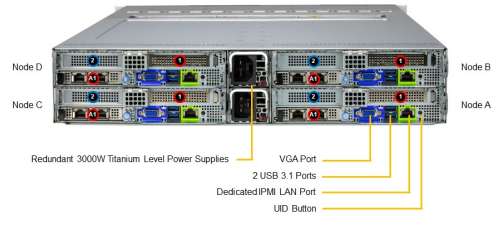
LAN: 1 RJ45 1 GbE Dedicated BMC LAN port(s)  
USB: 2 USB 3.0 Gen2 Type-A port(s) (Rear)  
Video: 1 VGA port(s)

(Front View – System)



Drive Bay (Node A-D)	Description
1 - 11	2x 2.5" Hot-Swap NVMe Gen5 (CPU1)/SAS Drive Bays
12 - 23	4x 2.5" Hot-Swap NVMe Gen4 (CPU2)/SAS Drive Bays

(Rear View – System)



Slot (Node A-D)	Description
1	PCIe 5.0 x16 AOM Slot
2	RAID Controller Card
3	PCIe 5.0 x16 (LP) Slot

CPU1 CPU2

System Cooling	Fans: 4x 16K RPM Counter Rotating 8cm Fan(s) 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; 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	FAN: Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors Temperature: Monitoring for CPU and chassis environment CPU: Monitors for CPU Cores, Chipset Voltages, Memory. 8+4 Phase-switching voltage regulator
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 ~ 35°C (50°F ~ 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	<a href="#">Super X13DET-B</a>
Chassis	CSE-217BQ2-R3K04P