

BigTwin SuperServer SYS-221BT-DNTR

2U 2-Node BigTwin with 12 hot-swap 2.5" NVMe/SATA drives per node



More details here

Key Applications

High-Performance File System, Diskless HPC Clusters, Scale Out All-Flash NVMe Storage, Big Data Analytics and AI,

Key Features

- Two **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; 2 PCIe 5.0 x8 (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);
- 12 hot-Swap 2.5" drive bays (2x PCIe 5.0 NVMe/SATA and 10x PCIe 4.0 NVMe/SATA);
- Liquid Cooling Support
4 cooling fans per 2U enclosure, 16.5K RPM; Shared Cooling Design;
- 2200W 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

GPU

Up to 1 double-width or 1 single-width GPU

System Memory

Slot Count: 16 DIMM slots

Max Memory (1DPC): Up to 4TB 5600MT/s ECC DDR5 RDIMM

Drive Bays Configuration

Default: Total 12 bays

- 2 front hot-swap 2.5" PCIe 5.0 NVMe/SATA drive bays
- 10 front hot-swap 2.5" PCIe 4.0 NVMe/SATA drive bays

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

Expansion Slots

Default

- 2 PCIe 5.0 x8 LP slots
- 1 PCIe 5.0 x16 LP slot
- 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)

Option A

- 1 PCIe 4.0 x16 FHFL slot
- 1 PCIe 5.0 x16 LP slot

On-Board Devices

Chipset: Intel® C741

Network Connectivity: Via AIOM

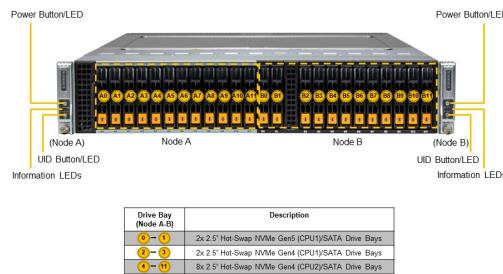
Input / Output

LAN: 1 RJ45 1 GbE Dedicated BMC LAN port

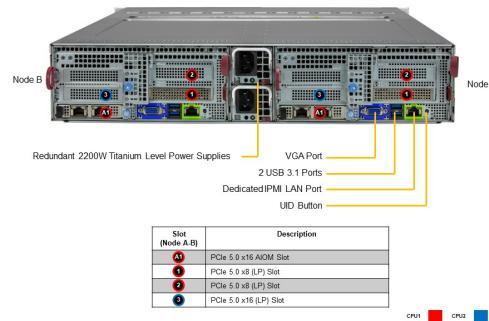
USB: 2 USB 3.0 Gen2 Type-A ports(Rear)

Video: 1 VGA port

(Front View – System)



(Rear View – System)

**System Cooling**

Fans: Up to 4x 16.5K RPM Heavy Duty 8cm Fan(s)
 Air Shroud: 2 Air Shrouds
 Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)

Power Supply

2x 2200W 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

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: 80.7 lbs (36.6 kg)
 Net Weight: 55.1 lbs (25 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-217BD2-R2K22P