

BigTwin SuperServer SYS-221BT-DNTR

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



Key Applications

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

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; 2 PCIe 5.0 x8 (LP) slot; Tool-less support
 Optional M.2 (22x80) HW RAID1 NVMe Boot Controller via SCC-A2NM2241G3-R1.
- Network connectivity via AIOM (OCP 3.0 compliant);
- 12 hot-Swap 2.5" drive bays (2x PCle 5.0 NVMe/SATA and 10x PCle 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 Design:
- Two hot-pluggable systems (nodes) in a 2U form factor. Each node supports

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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(s)

System Memory Slot Count: 16 DIMM slots

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

Drive Bays Configuration Default: Total 12 bay(s)

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

2 PCIe 5.0 x8 LP slot(s)1 PCIe 5.0 x16 LP slot(s)

On-Board Devices Chipset: Intel® C741

Network Connectivity: Via AIOM

IPMI: Support for Intelligent Platform Management Interface v.2.0
IPMI 2.0 with virtual media over LAN and KVM-over-LAN support

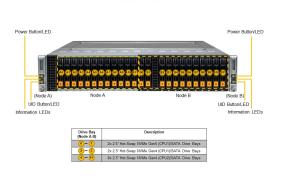
Input / Output LAN: 1 RJ45 1 GbE Dedicated BMC LAN port(s)

USB: 2 USB 3.0 Gen2 Type-A port(s) (Rear)

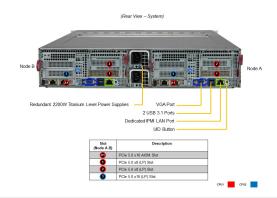
Video: 1 VGA port(s)







(Front View - System)



System Cooling	Fans: 4x 16.5K RPM Heavy Duty 8cm Fan(s) Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)
Power Supply	2200W Redundant Titanium Level power supplies
System BIOS	BIOS Type: AMI 32MB Flash ROM
Management	Redfish API; Supermicro Server Manager (SSM); Supermicro Power Manager (SPM); Supermicro Update Manager (SUM); SuperDoctor® 5; Super Diagnostics Offline; KVM with dedicated LAN; IPMI 2.0
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: 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 ~ 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	Super X13DET-B
Chassis	CSE-217BD2-R2K22P