

IoT SuperServer SYS-220HE-TNR

X12 DP 2U Short-depth rear I/O System with 6 NVMe/SATA bays and redundant AC PSU



More details here

Key Applications

Telecom Micro Data Center, AI Inference and Machine Learning, Cloud Computing, Network Function Virtualization (NFV), 5G Networking,

Key Features

- Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable Processors;
- 32 DIMM Slots; Up to 8TB DRAM; Up to 8TB Intel® Optane™ Persistent Memory (up to 12TB with DRAM); 3200/2933/2666 ECC DDR4 LRDIMM; RDIMM; Intel® Optane™ Persistent Memory 200 series;
- 3 PCIe 4.0 x16 slots with GPU/Accelerator support (Default); 1 PCIe 4.0 x16 expansion slots (Optional);
- Flexible networking options with 2 AIOM networking slots (OCP NIC 3.0 compatible);
- Up to 6x 2.5" hot-swap drive bays with options to support NVMe/SATA drives;
- 6 heavy duty hot-swap fans with optimal fan speed control Rear I/O, tool-less design;
- Redundant 2000W redundant AC power supplies;



Form Factor

2U Rackmount
Enclosure: 436.88 x 88.9 x 574mm (17.2" x 3.5" x 22.6")
Package: 598 x 247 x 938mm (23.5" x 9.7" x 36.9")

Processor

Dual Socket P+ (LGA-4189)
3rd Gen Intel® Xeon® Scalable processors

GPU

Max GPU Count: Up to 3 double-width or 3 single-width GPUs
Supported GPU: NVIDIA PCIe: A10, A100, A40, T4
CPU-GPU Interconnect: PCIe 4.0 x16 CPU-to-GPU Interconnect
GPU-GPU Interconnect: PCIe

System Memory

Slot Count: 32 DIMM slots
Max Memory (2DPC): Up to 8TB 3200MT/s ECC DDR4 RDIMM/LRDIMM

Drive Bays Configuration

Default: Total 6 bays
• 6 front hot-swap 2.5" NVMe/SAS*/SATA drive bays
(*SAS support may require additional storage controller and/or cables, please see the optional parts list for details)
M.2: 2 M.2 NVMe/SATA slots (M-key 2280/22110)

Expansion Slots

Default
• 2 PCIe 4.0 x8 FH/10.5"L slots
• 2 PCIe 4.0 x8 FHH slots
• 2 PCIe 4.0 x16 AIOM slots (OCP 3.0 compatible)
Option A
• 1 PCIe 4.0 x16 FH/10.5"L slot
• 1 PCIe 4.0 x16 FHH slot
• 2 PCIe 4.0 x16 AIOM slots (OCP 3.0 compatible)
Option B
• 6 PCIe 4.0 x8 FH/10.5"L slots
• 2 PCIe 4.0 x8 FHH slots
• 2 PCIe 4.0 x16 AIOM slots (OCP 3.0 compatible)
Option C
• 3 PCIe 4.0 x16 FH/10.5"L slots
• 1 PCIe 4.0 x16 FHH slot
• 2 PCIe 4.0 x16 AIOM slots (OCP 3.0 compatible)

On-Board Devices

SATA: SATA (6Gbps) ; RAID 0/1/5/10 support

NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required)
Network Connectivity: Via AIOM

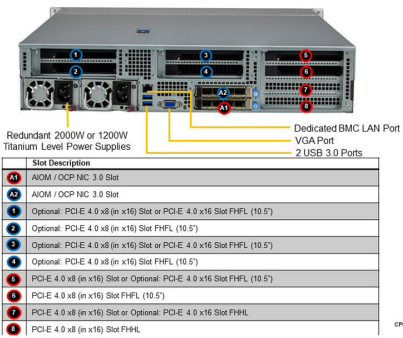
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 2.0 ports (front) Video: 1 VGA port
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(Rear View – System)

Slot	Description
1	2.5" Hot-swap NVMe/SAS3*/SATA3 Drive Bays (NVMe from CPU1)**
2	2.5" Hot-swap NVMe/SAS3*/SATA3 Drive Bays (NVMe from CPU2)**

*SAS3 support requires additional parts in optional parts list



Redundant 2000W or 1200W Titanium Level Power Supplies

Slot	Description
1	AIOM / OCP M2 3.0 Slot
2	AIOM / OCP M2 3.0 Slot
3	Optional: PCIe 4.0 x8 (in x16) Slot or PCIe 4.0 x16 Slot FHFL (10.5")
4	Optional: PCIe 4.0 x8 (in x16) Slot FHFL (10.5")
5	Optional: PCIe 4.0 x8 (in x16) Slot or PCIe 4.0 x16 Slot FHFL (10.5")
6	Optional: PCIe 4.0 x8 (in x16) Slot FHFL (10.5")
7	PCI-E 4.0 x8 (in x16) Slot or Optional: PCIe 4.0 x16 Slot FHFL (10.5")
8	PCI-E 4.0 x8 (in x16) Slot FHFL (10.5")
9	PCI-E 4.0 x8 (in x16) Slot or Optional: PCIe 4.0 x16 Slot FHFL (10.5")
10	PCI-E 4.0 x8 (in x16) Slot FHFL

Dedicated BMC LAN Port
VGA Port
2 USB 3.0 Ports

CPU1 CPU2

System Cooling	Fans: Up to 6 Hot-swappable 60x60x56mm Fan(s) Air Shroud: 4 Air Shrouds
Power Supply	1x 2000W Redundant Titanium Level (96%) power supply
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: 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 Thermal Control for fan connectors
Dimensions and Weight	Weight: Gross Weight: 47.4 lbs (21.5 kg) Net Weight: 34.4 lbs (15.6 kg) Available Color: Silver
Operating Environment	Operating Temperature: 5°C to 35°C (41°F to 95°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
Motherboard	Super X12DHM-6
Chassis	CSE-HE211-R000NFP