

IoT SuperServer SYS-222HE-TN

X14 DP 2U short-depth rear I/O system with 6 hot-swap 2.5" NVMe/SAS/SATA bays and 4 PCIe 5.0 x16 slots + 2 PCIe 5.0 x16 AIOM slots



Key Applications

Virtualization, Software-defined Storage, AI Inference and Machine Learning, Cloud Computing, Enterprise Server, 5G Networking,

Key Features

- Intel® Xeon® 6700/6500 series processors with P-cores or 6700 series processors with E-cores;
- 32 DIMM slots supporting up to 8TB of memory;
- Optional PCIe slot configurations up to 8 PCIe 5.0 x8 (6FHFL + 2 FHHL) or 4 PCIe 5.0 x16 (3 FHFL + 1 FHHL) slots with support for double-width GPU/Accelerator cards;
- Flexible networking options with up to 2 AIOM networking slots (OCP NIC 3.0 compatible);
- 6 Front hot-swap 2.5" NVMe/SAS/SATA drive bays with optional configurations for additional 2 or 4 Rear hot-swap 2.5" NVMe drive bays (space share with PCIe slots); 2x internal M.2 NVMe drive slots; Optional RAID support via storage add-on card;



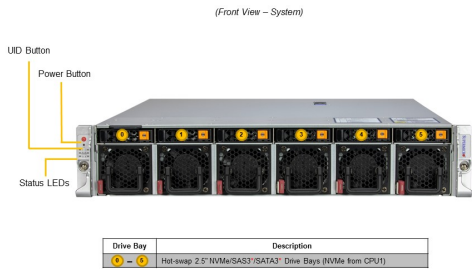
Form Factor	2U Rackmount Enclosure: 436.88 x 88.9 x 574mm (17.2" x 3.5" x 22.6") Package: 598 x 247 x 938mm (23.5" x 9.7" x 36.9")
Processor	Dual Socket E2 (LGA-4710) Intel® Xeon® 6700/6500 series processors with P-cores or 6700 series processors with E-cores P-cores: Up to 86C/172T; Up to 336MB Cache per CPU E-cores: Up to 144C/144T; Up to 108MB Cache per CPU
GPU	Max GPU Count: Up to 3 double-width or 4 single-width GPUs Supported GPU: NVIDIA PCIe: L4, NVIDIA RTX PRO™ 4000 Blackwell, NVIDIA RTX PRO™ 4500 Blackwell, NVIDIA RTX PRO™ 5000 Blackwell, NVIDIA RTX PRO™ 6000 Blackwell Max-Q Workstation Edition CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: PCIe
System Memory	Slot Count: 32 DIMM slots Max Memory (1DPC): Up to 4TB 6400MT/s ECC DDR5 RDIMM Max Memory (1DPC): Up to 4TB 8800MT/s ECC DDR5 MRDIMM (P-core only) Max Memory (2DPC): Up to 8TB 6000MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 6 bays • 6 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays Option A: Total 8 bays • 6 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays • 2 rear hot-swap 2.5" NVMe* drive bays Option B: Total 10 bays • 6 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays • 4 rear hot-swap 2.5" NVMe* drive bays (*NVMe/SAS/SATA support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 2 M.2 PCIe 5.0 x2 NVMe slots (M-key 2280/22110/25110)
Expansion Slots	PCI-Express (PCIe) Configuration: Option A* • 3 PCIe 5.0 x16 (in x16) FH/10.5"L double-width slots • 1 PCIe 5.0 x16 (in x16) FHHL slot • 2 PCIe 5.0 x16 AIOM slots (OCP 3.0 compatible) Option B*

- 6 PCIe 5.0 x8 (in x16) FH/10.5"L slots
- 2 PCIe 5.0 x8 (in x16) FHHL slots
- 2 PCIe 5.0 x16 AIOM slots (OCP 3.0 compatible)

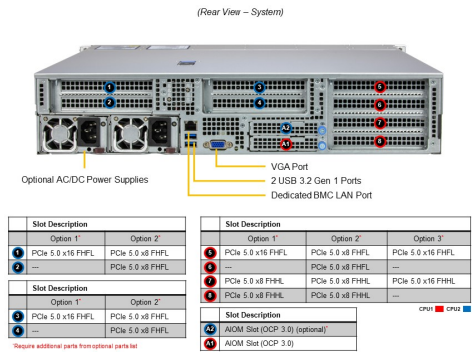
CXL Support: Up to 4 CXL 2.0 x16/x8 devices
M.2: 2 M.2 PCIe 5.0 x2 NVMe slots (M-key 2280/22110)

On-Board Devices	NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required) Network Connectivity: Via AIOM
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Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 3.0 ports (rear) Video: 1 VGA port
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*SAS/SATA3 support requires additional parts from the optional parts list



System Cooling	Fans: Up to 6 counter-rotating 60x60x56mm Fan(s) Air Shroud: 4 Air Shrouds Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)
Power Supply	2x 2000W Redundant (1 + 1) Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 64MB SPI Flash
Management	SuperCloud Composer® (SCC); Supermicro Server Manager (SSM); 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: 10°C to 35°C (50°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 X14DBM-SP
Chassis	CSE-HE211-R000NFP