

Hyper SuperServer SYS-212H-TN

2U UP Hyper supporting up to 24 hot-swap 2.5" NVMe/SAS/SATA bays and up to 8 PCIe 5.0 + 2 PCIe 5.0 AIOM slots



Key Applications

Virtualization, Software-defined Storage, AI Inference and Machine Learning,
Cloud Computing, Enterprise Server, Data Center Optimized, Database
Processing and High Density Storage,

Key Features

- Hyper is a flagship performance rackmount server designed for scale-out cloud workloads.;
- Single Intel® Xeon® 6 Processor.;
- 16 DIMM slots support RDIMM / MRDIMM(1DPC);
- Double width add-on card support.;
- Flexible networking options with 1 AIOM networking slot (OCP NIC 3.0 compatible).;
- Breeze through high throughput workloads with PCIe 5.0 NVMe drive support.;
- Trusted Platform Module (TPM) 2.0 onboard.;
- Modularized and Tool-less design for easy serviceability.;



Form Factor	2U Rackmount Enclosure: 437 x 88.9 x 806.2mm (17.2" x 3.5" x 31.74") Package: 672 x 253 x 1100mm (26.46" x 9.96" x 43.31")
Processor	Single 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 E-cores: Up to 144C/144T; Up to 108MB Cache
GPU	Max GPU Count: Up to 4 double-width or 8 single-width GPUs Supported GPU: NVIDIA PCIe: H100 NVL, A10, H200 NVL (141GB), L4, L40S, NVIDIA RTX PRO™ 4500 Blackwell, NVIDIA RTX PRO™ 6000 Blackwell Max-Q Workstation Edition, RTX 4000 Ada Generation Intel PCIe: Intel Data Center GPU Flex 170 CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect
System Memory	Slot Count: 16 DIMM slots Max Memory (1DPC): Up to 2TB 6400MT/s ECC DDR5 RDIMM Max Memory (1DPC): Up to 512GB 8000MT/s ECC DDR5 MRDIMM Max Memory (2DPC): Up to 4TB 5200MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 8 bays • 8 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays Option A: Total 16 bays • 16 front hot-swap 2.5" NVMe*/SAS*/SATA* drive bays Option B: Total 24 bays • 24 front hot-swap 2.5" NVMe*/SAS*/SATA* 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 NVMe slots (M-key 2280/22110/25110; VROC required for RAID)
Expansion Slots	Option A* • 1 PCIe 5.0 x16 FHFL double-width slot • 1 PCIe 5.0 x16 FH/10.5"L double-width slot • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option B* • 1 PCIe 5.0 x16 FHFL double-width slot • 2 PCIe 5.0 x8 FH/10.5"L slots • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option C* • 4 PCIe 5.0 x16 (in x16) FHFL double-width slots • 1 PCIe 5.0 x16 (in x16) AIOM slot (OCP 3.0 compatible)

- Option D*
- 3 PCIe 5.0 x16 (in x16) FHFL double-width slots
 - 2 PCIe 5.0 x8 (in x16) FHFL slots
 - 1 PCIe 5.0 x16 (in x16) AIOM slot (OCP 3.0 compatible)

- Option E*
- 3 PCIe 5.0 x16 (in x16) FHFL double-width slots
 - 1 PCIe 5.0 x16 (in x16) AIOM slot (OCP 3.0 compatible)

- Option F*
- 1 PCIe 5.0 x16 (in x16) FHFL double-width slot
 - 1 PCIe 5.0 x16 (in x16) AIOM slot (OCP 3.0 compatible)

On-Board Devices	NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required) Chipset: System on Chip Network Connectivity: Via AIOM
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Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 3.2 Gen1 ports(Rear) Video: 1 VGA port
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(Front View – System)



Drive Bay	Description
8	Hot-swap 2.5" NVMe/SAS/SATA Drive Bays*

*NVMe, SAS, or SATA support requires additional parts from the optional parts list

(Front View – System)



Drive Bay	Description
16	Hot-swap 2.5" NVMe/SAS/SATA Drive Bays*

*NVMe, SAS, or SATA support requires additional parts from the optional parts list

System Cooling	Fans: Up to 6 counter-rotating 60x60x56mm Fan(s) Air Shroud: 1 CPU Air Shroud
Power Supply	2x 1200W Redundant (1 + 1) Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 64MB SPI Flash
Management	SuperCloud Composer®; 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: 75 lbs (34 kg) Net Weight: 45 lbs (20.5 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 X14SBH
Chassis	CSE-HS201-R000NFP