Hyper SuperServer SYS-122H-TN

1U Hyper with 8 hot-swap 2.5" NVMe/SAS/SATA bays and 3 PCIe 5.0 x16 + 1 PCIe 5.0 x16 AIOM slot

Key Applications

Virtualization, Software-defined Storage, High Performance Computing, Cloud Computing, Enterprise Server,
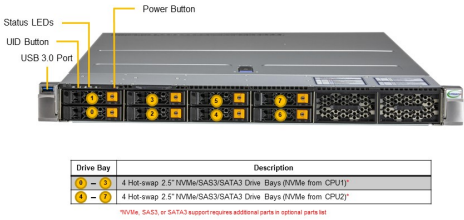
Key Features

- 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;
- 3 PCIe 5.0 x16 slots with support for Network/Storage/GPU/Accelerator cards;
- Flexible networking options with 1 AIOM networking slot (OCP NIC 3.0 compatible);
- 8x 2.5" hot-swap NVMe/SATA/SAS drive bays; Optional 4x 2.5" hot-swap NVMe/SAS/SATA drive bays; 2x internal M.2 NVMe drive slots; Optional RAID support via storage add-on card;
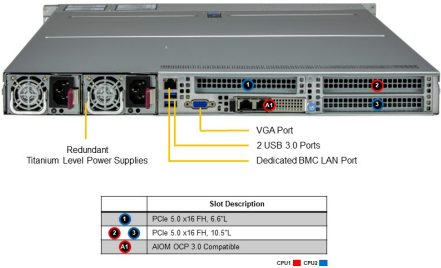
Form Factor	1U Rackmount Enclosure: 438.4 x 43.6 x 743.38mm (17.3" x 1.71" x 29.27") Package: 604.8 x 203 x 950mm (23.81" x 7.99" x 37.4")
Processor	Dual Socket E2 (LGA-4710) Intel® Xeon® 6700/6500 series processors with P-cores or 6700 series processors with E-cores P-cores: Up to 86C/172T; Up to 336MB Cache per CPU E-cores: Up to 144C/144T; Up to 108MB Cache per CPU
GPU	Up to 1 double-width or 3 single-width GPUs
System Memory	Slot Count: 32 DIMM slots Max Memory (1DPC): Up to 4TB 6400MT/s ECC DDR5 RDIMM Max Memory (1DPC): Up to 1TB 8000MT/s ECC DDR5 MRDIMM (P-core only) Max Memory (2DPC): Up to 8TB 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 12 bays
	  • 12 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 PCIe 5.0 x2 NVMe slots (M-key 2280/22110)

Expansion Slots	Default
	  • 1 PCIe 5.0 x16 FHHL slot
	  • 2 PCIe 5.0 x16 FH/10.5"L slots
	  • 1 PCIe 5.0 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
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 3.0 ports(rear) 1 USB 3.0 port(front) Video: 1 VGA port

(Front View – System)

(Rear View – System)

Power Button
Status LEDs
UID Button
USB 3.0 Port

Drive Bay	Description
0 – 3	4 Hot-swap 2.5" NVMe/SAS3/SATA3 Drive Bays (NVMe from CPU1)*
4 – 7	4 Hot-swap 2.5" NVMe/SAS3/SATA3 Drive Bays (NVMe from CPU2)*

*NVMe, SAS3, or SATA3 support requires additional parts in optional parts list

VGA Port
2 USB 3.0 Ports
Dedicated BMC LAN Port

Redundant
Titanium Level Power Supplies

	Slot Description
1	PCIe 5.0 x16 FH, 6.6"L
2 3	PCIe 5.0 x16 FH, 10.5"L
A1	AIOM OCP 3.0 Compatible

CPU1 CPU2

System Cooling

Fans: Up to 8 counter-rotating 40x40x56mm Fan(s)
Air Shroud: 2 Air Shrouds
Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)

Power Supply

2x 1200W Redundant (1 + 1) Titanium Level (96%) Hot-plug power supplies

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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: 41 lbs (18.6 kg)
        Net Weight: 18.7 lbs (8.5 kg)
Available Color: Silver

Operating Environment

Name: A2
Operating Temperature: 10°C to 35°C (50°F to 95°F)
Non-operating Temperature: -30°C to 60°C (-40°F to 140°F)
Operating Relative Humidity: 8% to 80% (max 21° DP; non-condensing)
Non-operating Relative Humidity: 8% to 90% (max 38° DP; non-condensing)

Motherboard

Super X14DBM-SP

Chassis

CSE-HS119-R000NP2