MP SuperServer SYS-242B-NR

2U 4-socket system with 64 DIMMs and 24 NVMe/SAS/SATA drive bays

Key Applications

Business Intelligence, ERP, CRM, Scientific Virtualization, In-Memory Database, HCI, SAP HANA,
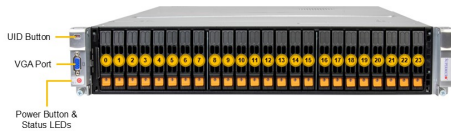
Key Features

- Quad Intel® Xeon® 6700-Series Processors with P-cores up to 270W with air cooling;
- Support for up to 2 double-width PCIe GPU accelerator cards;
- Up to 64 DIMMs supporting up to 8TB DDR5 in 2DPC;
- Flexible networking with up to 2 OCP 3.0 compatible AIOM slots;
- Up to 2 PCIe 5.0 x8 FHHL + 4 PCIe 5.0 x16 FHHL + 2 PCIe 5.0 x16 AIOM;
- Up to 24 front hot-swap 2.5" NVMe/SATA/SAS drive bays;
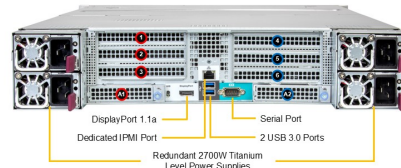- 4 Redundant 2700W Titanium Level power supplies;

Form Factor	2U Rackmount Enclosure: 438.4 x 88 x 848.7mm (17.3" x 3.5" x 33.4") Package: 672 x 250 x 1100mm (26.5" x 9.75" x 43.5")
Processor	Quad E2 (LGA-4710) Intel® Xeon® 6700 series processors with P-cores (4S/8S) Up to 32C/64T; Up to 144MB Cache per CPU
GPU	Max GPU Count: Up to 2 double-width GPUs CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: PCIe
System Memory	Slot Count: 64 DIMM slots Max Memory (1DPC): Up to 4TB 6400MT/s ECC DDR5 RDIMM Max Memory (2DPC): Up to 8TB 5200MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: 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) M.2: 1 M.2 PCIe 4.0 x4 NVMe slot (M-key 2280/22110; VROC required for RAID) 1 M.2 PCIe 4.0 x4 NVMe slot (M-key 22110; VROC required for RAID)
Expansion Slots	Default • 2 PCIe 5.0 x8 FHHL slots • 4 PCIe 5.0 x16 FHHL slots • 2 PCIe 5.0 x16 AIOM slots (OCP 3.0 compatible) Option A* • 2 PCIe 5.0 x16 FHFL double-width slots • 2 PCIe 5.0 x16 FHHL slots • 2 PCIe 5.0 x16 AIOM slots (OCP 3.0 compatible)
On-Board Devices	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) Video: 1 VGA port(Front) 1 DisplayPort port(Rear) Serial: 1 COM port(Rear)

(Front View – System)

- UID Button
- VGA Port
- Power Button & Status LEDs

Drive Bay	Description
0 – 23	24 Hot-swap 2.5" NVMe/SAS/SATA Hybrid Drive Bays (SAS/SATA requires optional RAID controller)

(Rear View – System)

- DisplayPort 1.1a
- Dedicated IPMI Port
- Serial Port
- 2 USB 3.0 Ports
- Redundant 2700W Titanium Level Power Supplies

Slot Description		
1	5	PCIe 5.0 x8 (in x16) FHHL*
2	4	PCIe 5.0 x16 FHHL*
3		PCIe 5.0 x16 FHHL
A1	A2	PCIe 5.0 x16 AIOM (OCP 3.0)

*Supports FHFL with lower TDP CPUs   CPU1 ■   CPU2 ■

System Cooling

Fans: 4 Direct to Chip (D2C) Cold Plate Fan(s) (optional)
      6 Heavy duty counter-rotating 6cm Fan(s)
Air Shroud: 4 Air Shrouds

Power Supply

4x 2700W Redundant (2 + 2) Titanium Level (96%) Hot-plug power supplies

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System BIOS

BIOS Type: AMI 32MB SPI Flash EEPROM

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
     8 Phase-switching voltage regulator
FAN: Fans with tachometer monitoring
     Status monitor for speed control
     Pulse Width Modulated (PWM) fan connectors
Temperature: Monitoring for CPU and chassis environment
        Thermal Control for fan connectors

Dimensions and Weight

Weight: Gross Weight: 99.7 lbs (45.2 kg)
     Net Weight: 72.1 lbs (32.7 kg)
Available Color: Silver

Operating Environment

RoHS Compliant
Operating Temperature: 10°C to 35°C (50°F to 95°F)
Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)
Operating Relative Humidity: 8% to 90% (Non-Condensing)
Non-operating Relative Humidity: 5% to 95% (Non-Condensing)

Motherboard

Super X14QBH+

Chassis

CSE-218HTS-R5K4AWP