Storage SuperServer SSG-122B-NE316R

1U front-loading all-flash storage server with 16 E3.S NVMe drives and PCIe 5.0
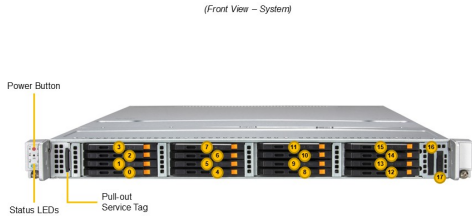
Key Applications

Software-defined Storage, In-Memory Computing, Scale Out All-Flash NVMe Storage, Data Intensive HPC, Private & Hybrid Cloud, NVMe Over Fabrics Solution, Enhanced Graphics&AI, Generative AI,
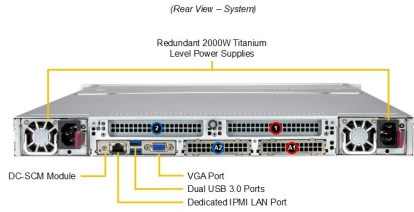
Key Features

- Dual Socket E2 (LGA-4710) Intel® Xeon® 6 6700 series processors with P-cores
  Support CPU TDP up to 270W with air cooling;
- Supports up to 4 TB of ECC DDR5 RDIMM/RDIMM 3DS/MRDIMM memory with speeds of up to 6400 MT/s (1DPC) or up to 5200 MT/s (2DPC) in 32 DIMM slots;
- Flexible networking with up to 2 OCP 3.0 compatible AIOM slots;
- Up to 2 PCIe 5.0 x16 FHHL + 2 PCIe 5.0 x16 AIOM slots;
- Up to 16 front hot-swap E3.S 1T NVMe drive bays;

Form Factor	1U Rackmount Enclosure: 438.4 x 43.6 x 772.15mm (17.2" x 1.7" x 30.4") Package: 672 x 224 x 1100mm (26.46" x 8.82" x 43.31")
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 128C/256T; Up to 108MB Cache per CPU E-cores: Up to 144C/144T; Up to 108MB Cache per CPU
System Memory	Slot Count: 32 DIMM slots/2 Channels Max Memory (1DPC): Up to 4TB 6400MT/s ECC DDR5 RDIMM/LRDIMM Max Memory (1DPC): Up to 4TB 8000MT/s ECC DDR5 MRDIMM Max Memory (2DPC): Up to 4TB 5200MT/s ECC DDR5 RDIMM/LRDIMM
Drive Bays Configuration	Default: Total 16 bays • 16 front hot-swap E3.S 1T NVMe drive bays M.2: 2 M.2 NVMe slots (M-key 2280/22110)

Expansion Slots	Default
	  • 2 PCIe 5.0 x16 FHHL slots
	  • 2 PCIe 5.0 x16 AIOM slots (OCP 3.0 compatible)

On-Board Devices	NVMe: NVMe; RAID 0/1/5/10 support(VROC HW 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) Video: 1 VGA port

(Front View – System)

Power Button

Status LEDs

Pull-out
Service Tag

(Rear View – System)

Redundant 2000W Titanium
Level Power Supplies

DC-SCM Module

VGA Port
Dual USB 3.0 Ports
Dedicated IPMI LAN Port

Drive Bay	Description
0 — 15	16 E3.S (7.5mm) Drive Bays
16 — 17	2 Hot-swap M.2 NVMe Drive Bays (2280; optional)

Slot Description	
1 2	PCIe 5.0 x16 FHHL
A1 A2	PCIe 5.0 x16 AIOM
CPU1 CPU2	

System Cooling

Fans: 8x 4cm heavy duty fans with optimal fan speed control
Air Shroud: 1 Air Shroud

Power Supply

2x 2000W Redundant (1 + 1) Titanium Level (96%) 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
    7 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: 66.8 lbs (30.3 kg)
    Net Weight: 43.6 lbs (19.8 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: 8% to 95% (Non-condensing)

Motherboard

Super X14DBHM

Chassis

CSE-146E32-R2K09P