Storage SuperServer SSG-121E-NE3X12R

1U front-loading all-flash storage server with 8 E3.S NVMe drives and 4 E3.S 2T CXL bays

Key Applications

Software-defined Storage, In-Memory Computing, Data Intensive HPC, Private
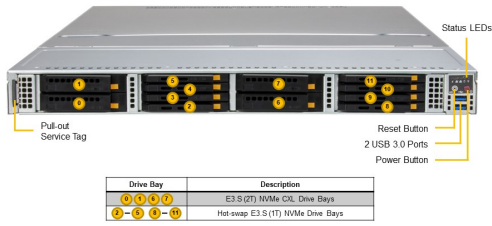& Hybrid Cloud, NVMe Over Fabrics Solution,

Key Features

- Dual Socket E (LGA-4677) 5th Generation Intel® Xeon® Scalable processors. Up to 270W TDP.;
- Supports 32 DIMMs with 2DPC, up to 8TB memory capacity with 32 DIMMs of 256GB 3DS RDIMM DDR5-4800 ECC memory;
- Two PCIe 5.0 x16 slots & two AIOM connectors (OCP 3.0 SFF compliant);
- 8x hot-swap E3.S (1T) NVMe drive bays, 4x E3.S(2T) CXL bays;
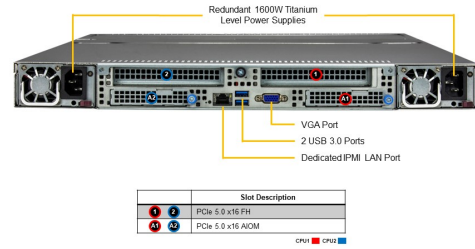- Redundant Titanium 1600W Power Supplies;

Form Factor	1U Rackmount Enclosure: 438.4 x 43.6 x 773.25mm (17.2" x 1.7" x 30.4") Package: 604.774 x 199.898 x 1029.97mm (23.81" x 7.87" x 40.55")
Processor	Dual processor(s)
System Memory	Slot Count: 32 DIMM slots
Drive Bays Configuration	Default: Total 12 bay(s) • 8 front hot-swap E3.S 1T NVMe drive bay(s) • 4 front fixed E3.S 2T CXL Type 3 drive bay(s) M.2: 2 M.2 NVMe/SATA slot(s) (M-key 2280/22110)
Expansion Slots	Default • 2 PCIe 5.0 x16 FHHL slot(s) • 2 PCIe 5.0 x16 AIOM slot(s) (OCP 3.0 compatible)
On-Board Devices	Chipset: Intel® C741 Network Connectivity: Via AIOM
Input / Output	LAN: 1 RJ45 1 GbE Dedicated IPMI LAN port(s) USB: 2 USB 3.0 port(s) (rear) 2 USB 3.0 port(s) (front) Video: 1 VGA port(s)

(Front View – System)

(Rear View – System)

Status LEDs

Pull-out
Service Tag

Reset Button
2 USB 3.0 Ports
Power Button

Redundant 1600W Titanium
Level Power Supplies

VGA Port
2 USB 3.0 Ports
Dedicated IPMI LAN Port

Drive Bay	Description
4 1 8 7	E3.S (2T) NVMe CXL Drive Bays
2 - 5 9 - 11	Hot-swap E3.S (1T) NVMe Drive Bays

	Slot Description
1 2	PCIe 5.0 x16 FH
A1 A2	PCIe 5.0 x16 AIOM

CPU1 ■ CPU2 ■

System Cooling	Fans: 8 Heavy Duty 4cm Fan(s)
Power Supply	2x 1600W Redundant (1 + 1) Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	SuperCloud Composer; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); 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: 68.74 lbs (31.2 kg) Net Weight: 48 lbs (21.8 kg) Available Color: Silver
Operating Environment	RoHS Compliant Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F) Non-operating Temperature: -40°C to 60°C (-40°F to 140°F) Operating Relative Humidity: 8% to 90% () Non-operating Relative Humidity: 8% to 95% ()
Motherboard	**Super X13DSF-A**
Chassis	**CSE-126E32-R1K62P**