Storage SuperServer SSG-521E-E1CR24H

2U front/top-loading storage server with 24 hot-swap 3.5" SAS/SATA bays (SAS hardware RAID) and PCIe 5.0

Key Applications

Enterprise Server, iSCSI SAN, HPC, Data Center, Database Processing & Storage, Corporate Database, Appliance Optimized Storage Building Blocks,

Key Features

- Single Socket E (LGA-4677) 5th/4th Gen Intel® Xeon® Scalable processor. Up to 300W TDP.;
- 16 ECC DDR5-5600: LRDIMM/RDIMM;
- Two Dedicated PCIe 5.0 x16 AIOM slots (OCP 3.0 SFF compliant) Up to 6x PCIe 5.0 Slots (Slot #2 populated by 3908 controller by default);
- Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN per node;
- 24 3.5" Hot-swap SAS3/SATA3 drives, 2x Rear SATA Slots, 4x Optional Rear NVMe Slots, 2x NVMe/SATA M.2 (form factor: 2280);
- 4x 8cm hot-swap counter-rotate redundant PWM cooling fans;
- 1600W Redundant Power Supplies Titanium Level (96%);
- HW RAID support via Broadcom® 3908;

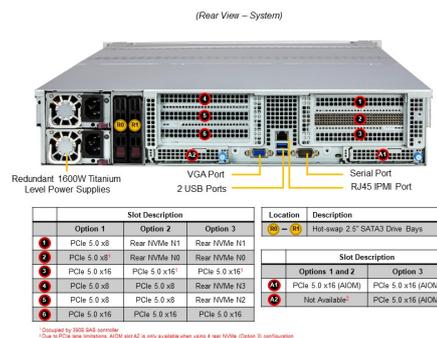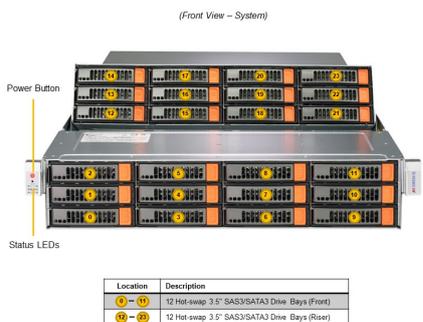|	
Form Factor	2U Rackmount Enclosure: (17.2" x 3.5" x 34") Package: (29" x 12" x 52")
Processor	Single Socket E (LGA-4677) 5th Gen Intel® Xeon® / 4th Gen Intel® Xeon® Scalable processors Up to 36C/72T; Up to 180MB Cache
System Memory	Slot Count: 16 DIMM slots Max Memory (2DPC): Up to 4TB 5600MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 26 bays • 12 front hot-swap 3.5" SAS/SATA drive bays • 12 top-loading hot-swap 3.5" SAS/SATA drive bays • 2 rear hot-swap 2.5" SATA drive bays Option A: Total 28 bays • 12 front hot-swap 3.5" SAS/SATA drive bays • 12 top-loading hot-swap 3.5" SAS/SATA drive bays • 2 rear hot-swap 2.5" SATA drive bays • 2 rear hot-swap 2.5" NVMe drive bays Option B: Total 30 bays • 12 front hot-swap 3.5" SAS/SATA drive bays • 12 top-loading hot-swap 3.5" SAS/SATA drive bays • 4 rear hot-swap 2.5" NVMe drive bays • 2 rear hot-swap 2.5" SATA drive bays M.2: 2 M.2 NVMe/SATA slots (M-key 2280/22110)
Expansion Slots	Default • 4 PCIe 5.0 x8 FHHL slots • 2 PCIe 5.0 x16 FHHL slots • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option A • 2 PCIe 5.0 x8 FHHL slots • 2 PCIe 5.0 x16 FHHL slots • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option B • 2 PCIe 5.0 x16 FHHL slots • 2 PCIe 5.0 x16 AIOM slots (OCP 3.0 compatible)
On-Board Devices	Chipset: Intel® C741 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
	DOM: 2 SuperDOM (Disk on Module) ports

(Front View – System)

Power Button

Status LEDs

Location	Description
0 – 11	12 Hot-swap 3.5" SAS3/SATA3 Drive Bays (Front)
12 – 23	12 Hot-swap 3.5" SAS3/SATA3 Drive Bays (Riser)

(Rear View – System)

Redundant 1600W Titanium
Level Power Supplies

VGA Port
2 USB Ports

Serial Port
RJ45 IPMI Port

Slot Description			
	Option 1	Option 2	Option 3
1	PCIe 5.0 x8	Rear NVMe N1	Rear NVMe N1
2	PCIe 5.0 x8¹	Rear NVMe N0	Rear NVMe N0
3	PCIe 5.0 x16	PCIe 5.0 x16¹	PCIe 5.0 x16¹
4	PCIe 5.0 x8	PCIe 5.0 x8	Rear NVMe N3
5	PCIe 5.0 x8	PCIe 5.0 x8	Rear NVMe N2
6	PCIe 5.0 x16	PCIe 5.0 x16	PCIe 5.0 x16

Location	Description
N0 – R1	Hot-swap 2.5" SATA3 Drive Bays

Slot Description		
	Options 1 and 2	Option 3
A1	PCIe 5.0 x16 (AIOM)	PCIe 5.0 x16 (AIOM)
A2	Not Available²	PCIe 5.0 x16 (AIOM)

¹ Occupied by 3908 SAS controller
² Due to PCIe lane limitations, AIOM slot A2 is only available when using 4 rear NVMe (Option 3) configuration

System Cooling	Fans: Up to 4 Heavy Duty 8cm Fan(s) Air Shroud: 1 Air Shroud
Power Supply	2x 1600W Redundant Titanium Level (96%) Hot-plug 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: 7 Phase-switching voltage regulator
	    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: 74.5 lbs (33.79 kg) Net Weight: 52 lbs (23.59 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 X13SEDW-F**
Chassis	**CSE-826S3TS-R1K62P1**