Storage SuperServer SSG-542B-E1CR60

4U top-loading storage server with 60 hot-swap 3.5" SAS/SATA bays and PCIe 5.0

Key Applications

Big Data & Analytics, Data Lake, HPC and AI/ML Workloads, Telco & Cloud Service Providers, Financial Services & Healthcare Image Archives, Content Repositories, Government Data Protection,

Key Features

- Intel® Xeon® 6700-series processors with E-cores, Single Socket LGA-4710 (Socket E2) supported, CPU TDP supports Up to 350W TDP;
- Up to 2TB ECC RDIMM, DDR5-6400MT/s (1DPC) or DDR5-5200MT/s (2DPC) in 16 DIMM slots;
- 1 PCIe 5.0 x8 and 3 PCIe 5.0 x16 HHHL;
- 60 3.5"/2.5" Hot-swap SAS3/SATA3 drives, 2 2.5" Hot-swap Gen4 NVMe;
- Drive Controller support via Broadcom® 3916 or 3816;
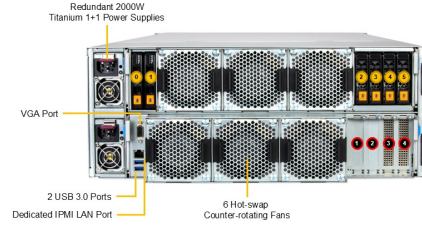- 2000W Redundant Power Supplies Titanium Level (96%);

Form Factor	4U Rackmount Enclosure: 447 x 177 x 813mm (17.6" x 6.96" x 32")
Processor	Single Socket E2 (LGA-4710) Intel® Xeon® 6700/6500 series processors with P-cores or 6700 series processors with E-cores Up to 144C/144T; Up to 108MB Cache
System Memory	Slot Count: 16 DIMM slots Max Memory (1DPC): Up to 2TB 6400MT/s ECC DDR5 RDIMM Max Memory (2DPC): Up to 2TB 5200MT/s ECC DDR5 RDIMM

Drive Bays Configuration	Default: Total 60 bays
	  • 60 top-loading hot-swap 3.5"/2.5" SAS/SATA drive bays
	Option A: Total 4 bays
	  • 4 rear hot-swap 2.5" PCIe 4.0 x4 NVMe* drive bays
	Option B: Total 2 bays
	  • 2 internal fixed 2.5" PCIe 5.0 x4 NVMe* drive bays
	(*NVMe support may require additional storage controller and/or cables, please see the optional parts list for details)
	M.2: 2 M.2 PCIe 4.0 x2 NVMe slots (M-key 2280/22110)

Expansion Slots	PCI-Express (PCIe) Configuration: Default
	                   • 1 PCIe 5.0 x8 (in x8) HHHL slot
	                   • 3 PCIe 5.0 x16 (in x16) HHHL slots
	M.2: 2 M.2 PCIe 4.0 x2 NVMe slots (M-key 2280/22110)

On-Board Devices	NVMe: NVMe; RAID 0/1 support Chipset: System on Chip Network Connectivity: No NIC option supported
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)

(Rear View – System)

Drawer Latch
Status LEDs
Power Button
Drawer Lock
Rack Lock
UID Button/LED
Drawer Handle

Redundant 2000W
Titanium 1+1 Power Supplies
VGA Port
2 USB 3.0 Ports
Dedicated IPMI LAN Port
6 Hot-swap
Counter-rotating Fans

Slot Description	
1 — 3	PCIe 5.0 x16
4	PCIe 5.0 x8¹

¹ Occupied by SAS Controller

Drive Bay	Description
0 — 1	Hot-swap 2.5" PCIe 4.0 x2 NVMe Drive Bays
2 — 5	Optional Hot-swap 2.5" PCIe 5.0 x4 NVMe Drive Bays

System Cooling	Fans: 6 Heavy Duty 8cm Fan(s) 1 Counter Rotating 6cm Fan(s)
Power Supply	2x 2000W Redundant (1 + 1) Titanium Level (96%) power supplies
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 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: 170 lbs (77.11 kg) Net Weight: 107 lbs (48.53 kg) Available Color: N/A
Operating Environment	Operating Temperature: 10°C to 35°C (50°F to 95°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)
Motherboard	**Super X14SBSC**
Chassis	**CSE-947STS-R2K05P**