Storage SuperServer SSG-542B-E1CR36H

4U UP front/rear-loading storage server with 36 hot-swap 3.5" SAS/SATA bays (SAS hardware RAID) and PCIe 5.0

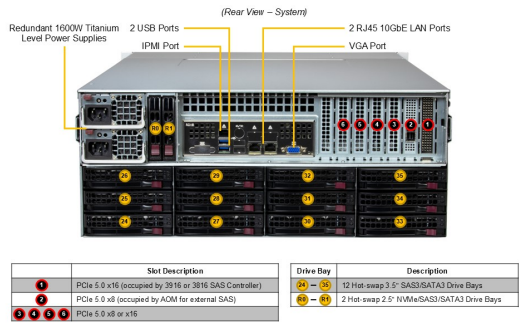More details here

Key Applications

General Purpose Computing, Data Center Enterprise Applications, iSCSI SAN, Database Processing & Storage, Corporate Database, Appliance Optimized Storage Building Blocks,

Key Features

- HW RAID by Broadcom® SAS3916 connected on all 2.5"/3.5" drive bays;
- Single Intel® Xeon® 6700/6500 series processor up to 350W TDP;
- Up to 2TB DDR5-6400MT/s ECC Registered in 8 DIMM slots (1DPC);
- 2 onboard 10GbE ports via Intel® X550 and 1 GbE port for BMC via Aspeed AST2600;
- Six total PCIe slots: 3 PCIe 5.0 x8 + 3 PCIe 5.0 x16 slots *
  * Slot 1 & 2 are occupied by system's default controller and JBOD module;
- 4U hybrid hot-swap NVMe/SAS3/SATA3 main(3.5" x 36) and rear(2.5" x 2) drive bays *
  * up to total 10 NVMe ports in the system;
- 1600W Redundant Titanium Level (96%) Hot-plug power supplies;

Form Factor	4U Rackmount Enclosure: (17.2" x 7" x 27.5") Package: (27" x 15" x 39")
Processor	Single Socket E2 (LGA-4710) Intel® Xeon® 6700/6500 series processors with P-cores or 6700 series processors with E-cores P-cores: Up to 86C/172T; Up to 336MB Cache E-cores: Up to 144C/144T; Up to 108MB Cache
System Memory	Slot Count: 8 DIMM slots/8 Channels Max Memory (1DPC): Up to 2TB 6400MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 38 bays • 24 front hot-swap 3.5" SAS/SATA drive bays • 12 rear hot-swap 3.5" SAS/SATA drive bays • 2 rear hot-swap 2.5" SAS/SATA drive bays Option A: Total 10 bays • 8 front hot-swap 3.5" PCIe 5.0 x4 NVMe* drive bays • 2 rear hot-swap 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 5.0 x2 NVMe slots (M-key 22110(default))
Expansion Slots	Default • 3 PCIe 5.0 x8 (in x8) LP slots • 3 PCIe 5.0 x16 (in x16) LP slots
On-Board Devices	SATA: 4 x SlimSAS SAS: SAS (12Gbps) via Broadcom® 3916; RAID 0/1/5/6/10/50/60 support NVMe: NVMe; RAID 0/1 support(Intel® VROC RAID key required) Chipset: System on Chip Network Connectivity: 2 RJ45 10GbE with Intel® X550
Input / Output	LAN: 2 RJ45 10 GbE LAN ports (Intel® X550) 　　　1 RJ45 1 GbE Dedicated BMC LAN port (IPMI shared on LAN port 1) USB: 2 USB 3.2 Gen1 ports(Header) 　　　2 USB 3.2 Gen1 ports(Rear) Video: 1 VGA port Serial: 1 COM port(header) TPM: 1 TPM header

(Front View – System)

Drive Bay	Description
0 → 23	24 Hot-swap 3.5" SAS3/SATA3 Drive Bays
16 → 23	8 Hot-swap NVMe Drive Bays (optional)

(Rear View – System)

Redundant 1600W Titanium Level Power Supplies · 2 USB Ports · IPMI Port · 2 RJ45 10GbE LAN Ports · VGA Port

	Slot Description
1	PCIe 5.0 x16 (occupied by 3916 or 3816 SAS Controller)
2	PCIe 5.0 x8 (occupied by AOM for external SAS)
3 4 5 6	PCIe 5.0 x8 or x16

Drive Bay	Description
24 → 35	12 Hot-swap 3.5" SAS3/SATA3 Drive Bays
B0 → B1	2 Hot-swap 2.5" NVMe/SAS3/SATA3 Drive Bays

System Cooling

Fans: 7 Heavy Duty PWM 80x80x38mm Fan(s)
Air Shroud: 1 Air Shroud

Power Supply

2x 1600W Redundant (1 + 1) Titanium Level (96%) power supplies

System BIOS

BIOS Type: AMI 64MB UEFI
BIOS Features: ACPI 6.5
SMBIOS 3.7 or later
UEFI 2.9

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: CPU thermal trip support, Monitoring for CPU and chassis environment, PECI

Dimensions and Weight

Weight: Gross Weight: 102.5 lbs (46.4 kg)
Net Weight: 65.5 lbs (29.7 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 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 X14SBI-TF

Chassis

CSE-847BTS-R1K68LPBP5