

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



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
Onboard Trusted Platform Module 2.0 via Infineon TPM 9672;
- 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

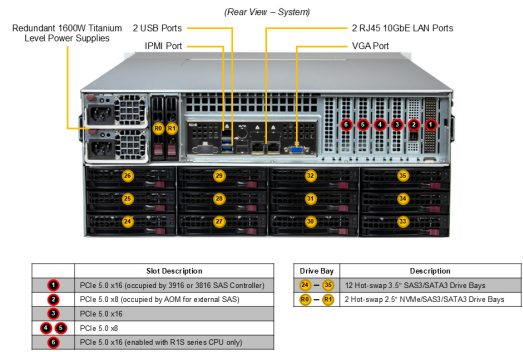
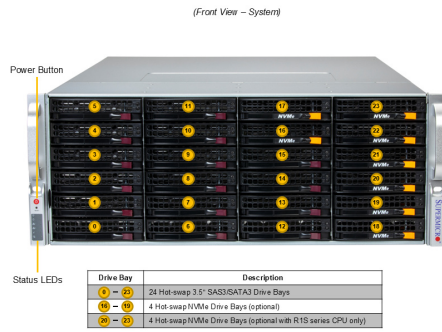
- 3 PCIe 5.0 x8 (in x8) LP slots
- 3 PCIe 5.0 x16 (in x16) LP slots

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)
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



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® (SCC); Supermicro Server Manager (SSM); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!
PC Health Monitoring	CPU: 8 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: 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