Storage SuperServer SSG-640P-E1CR36H

4U front/rear-loading storage server with 36 hot-swap 3.5" SAS/SATA bays (SAS hardware RAID) and PCIe 4.0
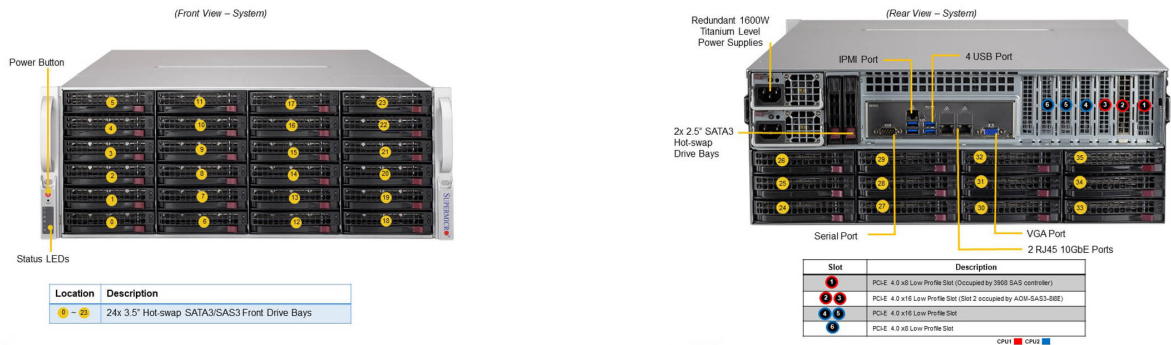
Key Applications

Enterprise Server, iSCSI SAN, HPC, Data Center, Database Processing & Storage, Corporate Database,

Key Features

- Dual socket 3rd Gen Intel® Xeon® Scalable processors, up to 72 Cores Per Node;
- 16 ECC DDR4-3200: LRDIMM/RDIMM + 2 Intel® Optane™ Persistent Memory Dedicated Slots;
- 2x 10Gbe
  Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN per node;
- 36 3.5"/2.5" Hot-swap SAS3/SATA3 drives (4 Hybrid NVMe), 2x Rear SATA Slots, 1x SATA/NVMe M.2 (form factor: 2280 and 22110);
- 7x 8cm hot-swap counter-rotate redundant PWM cooling fans;
- 1600W Redundant Power Supplies Titanium Level (96%);
- HW RAID support via Broadcom® 3908;

Form Factor	4U Rackmount Enclosure: (17.2" x 7" x 27.5") Package: (27" x 15" x 39")
Processor	Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors Up to 38C/76T; Up to 57MB Cache per CPU
System Memory	Slot Count: 16 DIMM slots Max Memory (2DPC): Up to 4TB 3200MT/s ECC DDR4
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 (*SAS support may require additional storage controller and/or cables) M.2: 1 M.2 NVMe slot (M-key)
Expansion Slots	Default • 3 PCIe 4.0 x16 LP slots • 1 PCIe 4.0 x8 LP slot
On-Board Devices	Chipset: Intel® C621A Network Connectivity: 2 RJ45 10GBASE-T with Intel® X550
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 4 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 ~ 23	24x 3.5" Hot-swap SATA3/SAS3 Front Drive Bays

(Rear View – System)

Redundant 1600W
Titanium Level
Power Supplies

IPMI Port

4 USB Port

2x 2.5" SATA3
Hot-swap
Drive Bays

Serial Port

VGA Port

2 RJ45 10GbE Ports

Slot	Description
1	PCI-E 4.0 x8 Low Profile Slot (Occupied by 3908 SAS controller)
2 3	PCI-E 4.0 x16 Low Profile Slot (Slot 2 occupied by AOM-SAS3-8BE)
4 5	PCI-E 4.0 x16 Low Profile Slot
6	PCI-E 4.0 x8 Low Profile Slot

CPU1 ■ CPU2 ■

System Cooling	Fans: 7 Heavy Duty 8cm Fan(s)
Power Supply	2x 1600W Redundant Titanium Level (96%) Hot-plug power supplies
System BIOS	BIOS Type: AMI 128MB 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 　　4+1 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: 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 ~ 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: 5% to 95% ()
Motherboard	**Super X12DPi-NT6**
Chassis	**CSE-847BTS-R1K68LPBP4**