# Storage SuperServer SSG-640P-E1CR24H

4U front-loading storage server with 24 hot-swap 3.5" SAS/SATA bays (SAS hardware RAID) and PCIe 4.0

More details here

## Key Applications

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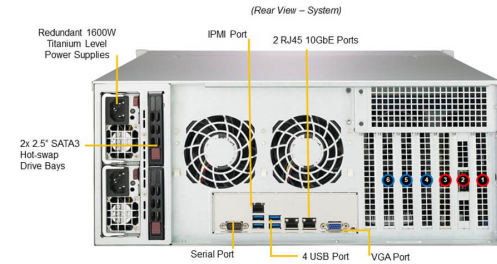
## Key Features

- 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;
- 24 3.5"/2.5" Hot-swap SAS3/SATA3 drives, 2x Rear SATA Slots, 1x SATA/NVMe M.2 (form factor: 2280 and 22110);
- 5x 8cm hot-swap counter-rotate redundant PWM cooling fans;
- 1200W Redundant Power Supplies Titanium Level (96%);
- HW RAID support via Broadcom® 3908;

| | |
|---|---|
| Form Factor | 4U Rackmount<br>Enclosure: 437 x 178 x 660mm (17.2" x 7" x 26")<br>Package: 871 x 673 x 343mm (34.3" x 26.5" x 13.5") |
| Processor | Dual Socket P+ (LGA-4189)<br>3rd Gen Intel® Xeon® Scalable processors<br>Up to 38C/76T; Up to 57MB Cache per CPU |
| System Memory | Slot Count: 16 DIMM slots<br>Max Memory (2DPC): Up to 4TB 3200MT/s ECC DDR4<br>Supports Intel® Optane™ persistent memory 200 series |
| Drive Bays Configuration | Default: Total 26 bay(s)<br>  • 24 front hot-swap 3.5" SAS/SATA drive bay(s)<br>  • 2 rear hot-swap 2.5" SAS*/SATA drive bay(s)<br>(*SAS support may require additional storage controller and/or cables, please see the optional parts list for details)<br>M.2: 1 M.2 NVMe slot(s) (M-key) |
| Expansion Slots | Default<br>  • 3 PCIe 4.0 x16 LP slot(s)<br>  • 1 PCIe 4.0 x8 LP slot(s) |
| On-Board Devices | Chipset: Intel® C621A<br>Network Connectivity: 2 RJ45 10GBASE-T with Intel® X550 |
| Input / Output | LAN: 1 RJ45 1 GbE Dedicated IPMI LAN port(s)<br>USB: 4 USB 3.0 port(s) (rear)<br>Video: 1 VGA port(s)<br>DOM: 2 SuperDOM (Disk on Module) port(s) |

*(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

2 RJ45 10GbE Ports

2x 2.5" SATA3 Hot-swap Drive Bays

Serial Port    4 USB Port    VGA Port

| 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-SAS3-88E) |
| 4 5 | PCI-E 4.0 x16 Low Profile Slot |
| 6 | PCI-E 4.0 x8 Low Profile Slot |

CPU1 ■ CPU2 ■

| System Cooling | Fans: 5 Heavy Duty 8cm Fan(s) |
|---|---|
| **Power Supply** | 2x 1200W 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<br>    4+1 Phase-switching voltage regulator<br>FAN: Fans with tachometer monitoring<br>    Status monitor for speed control<br>    Pulse Width Modulated (PWM) fan connectors<br>Temperature: Monitoring for CPU and chassis environment<br>    Thermal Control for fan connectors |
| **Dimensions and Weight** | Weight: Gross Weight: 118 lbs (53.52 kg)<br>    Net Weight: 86 lbs (39 kg)<br>Available Color: Black |
| **Operating Environment** | RoHS Compliant<br>Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)<br>Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)<br>Operating Relative Humidity: 8% to 90% ()<br>Non-operating Relative Humidity: 5% to 95% () |
| **Motherboard** | **Super X12DPi-NT6** |
| **Chassis** | **CSE-846BE1C-R1K23B** |