

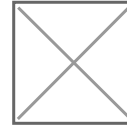
Storage SuperServer SSG-640SP-DE1CR90

4U 2-node top-loading storage server with 90 hot-swap 3.5" SAS/SATA bays and PCIe 4.0



Key Applications

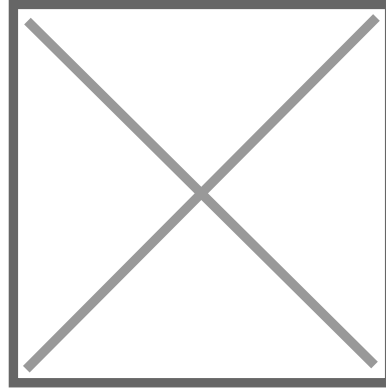
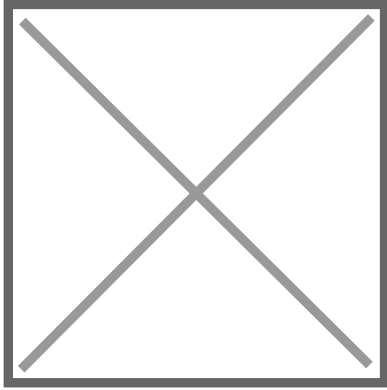
Big Data & Analytics, Data Lake, HPC and AI/ML Workloads, Telco & Cloud Service Providers, Financial Services & Healthcare Image Archives, Content Repositories, Government Data Protection,



Key Features

- Two **hot-pluggable** systems (nodes) in a 4U form factor. Each node supports the following;:
- Dual socket 3rd Gen Intel® Xeon® Scalable processors, up to 72 Cores Per Node;
- 16 ECC DDR4-3200: LRDIMM/RDIMM;
- 3 x PCIe 4.0 x16 HHHL PCIe slots;
- 90 3.5"/2.5" Hot-swap SAS3/SATA3 drives (Each node controls 45 drives);
- 6x 8cm hot-swap counter-rotate redundant PWM cooling fans;
- 2600W Redundant Power Supplies Titanium Level (96%);
- Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN Drive Controller support via Broadcom® 3916 or 3616;

Form Factor	4U Rackmount Enclosure: 447 x 177 x 1099mm (17.6" x 6.96" x 43.3")
Processor	Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors Up to 36C/72T; Up to 54MB Cache per CPU
System Memory	Slot Count: 16 DIMM slots Max Memory (2DPC): Up to 4TB 3200MT/s ECC DDR4 RDIMM/LRDIMM
Drive Bays Configuration	Default: Total 47 bays <ul style="list-style-type: none"> • 2 internal fixed 2.5" SATA drive bays • 45 top-loading hot-swap 3.5"/2.5" SAS/SATA drive bays M.2: 2 M.2 NVMe slots (M-key)
Expansion Slots	Default <ul style="list-style-type: none"> • 3 PCIe 4.0 x16 LP slots
On-Board Devices	2 RJ45 10GBASE-T
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port 2 RJ45 10 GBASE-T LAN ports USB: 2 USB 3.0 ports(rear) Video: 1 VGA port DOM: 2 SuperDOM (Disk on Module) ports



System Cooling

Fans: Up to 6 Heavy Duty 8cm Fan(s)
Air Shroud: 1 Air Shroud

Power Supply

2x 2600W 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: 4+1 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: Monitoring for CPU and chassis environment
Thermal Control for fan connectors

Dimensions and Weight

Weight: Gross Weight: 225 lbs (102.06 kg)
Net Weight: 130 lbs (58.97 kg)
Available Color: N/A

Operating Environment

RoHS Compliant
Operating Temperature: 10°C to 35°C (50°F to 95°F)
Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)
Operating Relative Humidity: 8% to 90% (Non-Condensing)
Non-operating Relative Humidity: 5% to 95% (Non-Condensing)

Motherboard

[Super X12DSC-6](#)

Chassis

CSE-947HTS-R2K63P