

Storage SuperServer SSG-640SP-DE2CR90

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



Key Applications

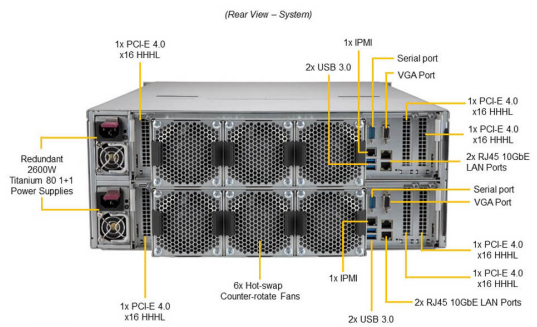
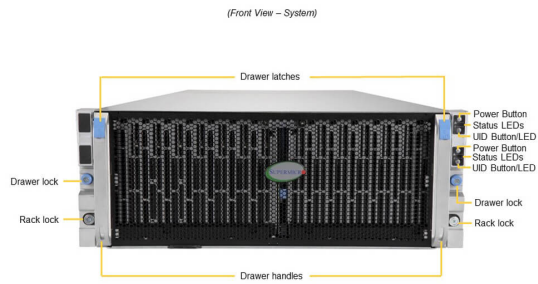
Big Data & Analytics, Data Lake, HPC and AI/ML Workloads, Telco & Cloud Service Providers, Financial Services & Healthcare Image Archives, Content Repositories, Government Data Protection,

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 drives, 2x Fixed slim SATA SSD, 2x NVMe M.2 (form factor: 2280 and 22110);
- 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 HBA Controller support via Broadcom® 3616;
- Dedicated node to node connectivity featuring high performance NTB PCIe 4.0 x16 , 1G private Ethernet, and IPMI for robust node fail-over support;



Form Factor	4U Rackmount Enclosure: (17.6" x 7" x 42.1") Package: (35.82" x 29.92" x 53.15")
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 92 bays • 90 top-loading hot-swap 3.5"/2.5" SAS/SATA drive bays • 2 top-loading fixed 2.5" SATA drive bays M.2: 1 M.2 NVMe slot (M-key)
Expansion Slots	Default • 3 PCIe 4.0 x16 LP slots
On-Board Devices	Chipset: Intel® C621A Network Connectivity: 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: 240 lbs (108.86 kg) Net Weight: 150 lbs (68.04 kg) Available Color: Black
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	CSV-947HTS-R2K63P