Storage SuperServer SSG-640SP-E1CR90

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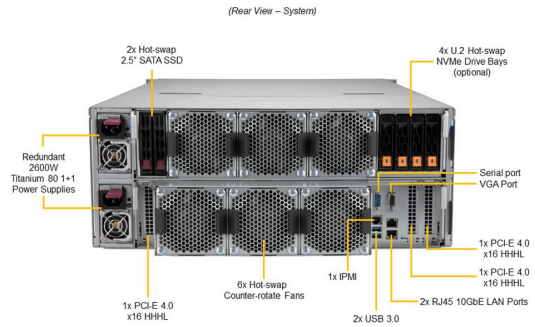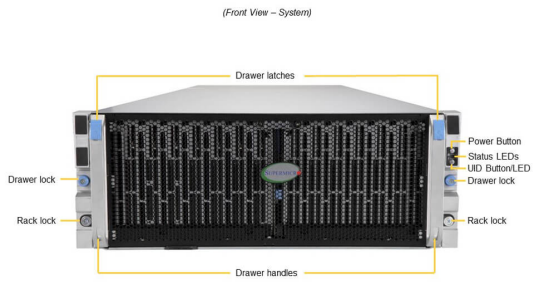
Key Applications

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

- Dual socket 3rd Gen Intel® Xeon® Scalable processors, up to 72 Cores;
- 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, 2x Fixed slim SATA SSD, 2x NVMe M.2 (form factor: 2280 and 22110);
- 6 x 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: (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 96 bay(s) • 2 rear hot-swap 2.5" SATA drive bay(s) • 4 rear hot-swap 2.5" NVMe* drive bay(s) • 90 top-loading hot-swap 3.5"/2.5" SAS/SATA drive bay(s) (*NVMe support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 2 M.2 NVMe slot(s) (M-key)
Expansion Slots	Default • 3 PCIe 4.0 x16 LP slot(s)
On-Board Devices	Chipset: Intel® C621A Network Connectivity: 2 RJ45 10GBASE-T
Input / Output	LAN: 1 RJ45 1 GbE Dedicated IPMI LAN port(s) 2 RJ45 10 GBASE-T LAN port(s) USB: 2 USB 3.0 port(s) (rear) Video: 1 VGA port(s) DOM: 2 SuperDOM (Disk on Module) port(s)

(Front View – System)

Drawer latches

Power Button
Status LEDs
UID Button/LED
Drawer lock

Drawer lock

Rack lock

Rack lock

Drawer handles

(Rear View – System)

2x Hot-swap
2.5" SATA SSD

4x U.2 Hot-swap
NVMe Drive Bays
(optional)

Redundant
2600W
Titanium 80 1+1
Power Supplies

Serial port
VGA Port

1x PCI-E 4.0
x16 HHHL

1x PCI-E 4.0
x16 HHHL

1x PCI-E 4.0
x16 HHHL

6x Hot-swap
Counter-rotate Fans

1x IPMI

2x RJ45 10GbE LAN Ports

2x USB 3.0

System Cooling	Fans: 6 Heavy Duty 8cm Fan(s)
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: 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: 240 lbs (108.86 kg) Net Weight: 150 lbs (68.04 kg) Available Color: Black
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-Condensing) Non-operating Relative Humidity: 5% to 95% (Non-Condensing)
Motherboard	**Super X12DSC-6**
Chassis	**CSV-947HTS-R2K63P**