

Storage SuperServer SSG-631E-E1CR16L



More details here

Key Applications

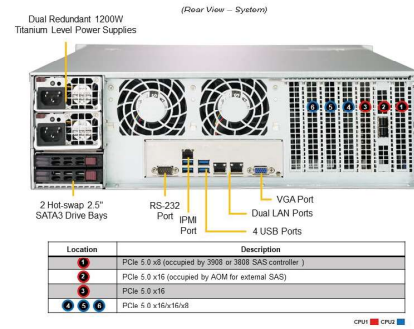
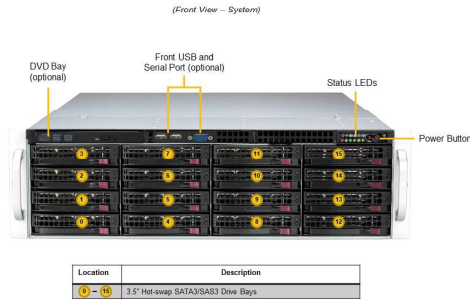
Enterprise Server, iSCSI SAN, HPC, Data Center, Database Processing & Storage, Corporate Database, Appliance Optimized Storage Building Blocks,

Key Features

- Dual socket 4th Gen Intel® Xeon® Scalable processors, up to 60 Cores Per CPU;
- Up to 4TB 3DS ECC RDIMM, DDR5-4800MT/s(1DPC) in 16 DIMM slots;
- 1x GbE Dedicated LAN for server remote management: IPMI 2.0 / KVM over LAN / Media over LAN; 2x 10 GbE onboard via Broadcom BCM57416;
- 16x 3.5"/2.5" Hot-swap SAS3/SATA3 drives, 2x Rear 2.5" SATA Slots, 2x 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%);
- HBA Controller support via Broadcom® 3808;

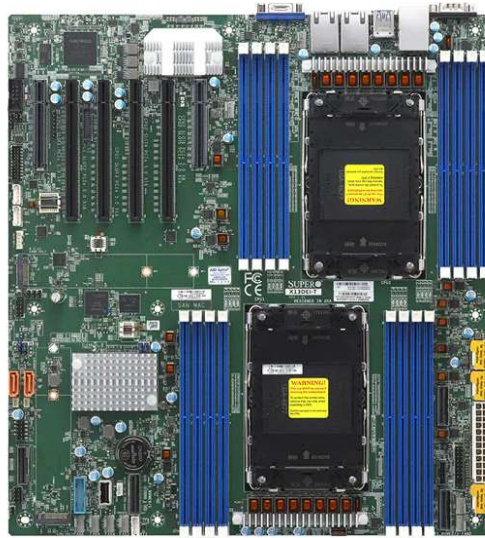


Form Factor	3U Rackmount Enclosure: (17.2" x 5.2" x 25.5") Package: (27" x 13" x 35")
Processor	Dual Socket E (LGA-4677) 4th Gen Intel® Xeon® Scalable processors Supports 120W - 270W TDP CPUs (Air Cooled)
System Memory	Memory Capacity: 16 DIMM slots Up to 4TB: 16x 256 GB DRAM Memory Type: 4800MHz ECC DDR5 RDIMM
Drive Bays	16x 3.5" hot-swap SATA3/SAS3 drive bays 2 M.2 NVMe M-Key, 2280 and 22110
Expansion Slots	3 PCIe 5.0 x16 slot(s) 1 PCIe 5.0 x8 slot(s) Note: PCIe slot 1 & 2 are occupied by the Storage Controller/JBOD Expansion Module
On-Board Devices	Chipset: Intel® C741 Network Connectivity: 2x 10GbE BaseT with Broadcom BCM57416 IPMI: Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Input / Output	LAN: 1 RJ45 Dedicated IPMI LAN port 2 Onboard 10 GbE LAN Ports USB: 4 USB 3.0 port(s) (4 Rear_USB) Video: 1 VGA port(s) Serial Port: 1 COM Port(s) (1 rear) DOM: 2 SuperDOM (Disk on Module) port



System Cooling	5x 8cm heavy duty fan(s)
Power Supply	1200W Redundant Titanium Level power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	Redfish API; Supermicro Server Manager (SSM); Supermicro Power Manager (SPM); Supermicro Update Manager (SUM); SuperDoctor® 5; Super Diagnostics Offline ; KVM with dedicated LAN ; IPMI 2.0
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory 7+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	Height: 5.2" Width: 17.2" Depth: 25.5" Gross Weight: 79 lbs (48 kg) Packaging: 13" x 27" x 35" Available Color: Silver
Operating Environment	ROHS: 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 X13DEI-T
Chassis	CSE-836BTS-R1K23BP2

X13DEI-T



X13 Mainstream

Key Features

- 4th Gen Intel® Xeon® Scalable processors, Dual Socket LGA-4677 (Socket E) , CPU TDP supports up to 350W TDP
- Support CXL
- Intel® C741 Chipset
- Up to 4TB 3DS ECC RDIMM, DDR5-4800MT/s(1DPC) in 16 DIMM slots
- 4 PCIe 5.0 x16
- 2 PCIe 5.0 x8
- Broadcom BCM57416 Dual ports 10G LAN
- 6 USB3.0 and 3 USB2.0
- 2 SATA DOM ports
- 2 M.2
- 6 NVMe ports PCIe 5.0 x4 via 3 MCIO connectors
- 8 SATA3.0 ports

Product SKUs
MBD-X13DEI-T

Physical Stats

Form Factor

EATX

Dimension

12.1" x 13.05" (30.74cm x 33.15cm)

Processor

CPU

4th Gen Intel® Xeon® Scalable processors

Dual Socket LGA-4677 (Socket E) supported, CPU TDP supports Up to 350W TDP

Core

Up to 60 cores

System Memory

Memory Capacity

16 DIMM slots

Up to 4TB 3DS ECC RDIMM, DDR5-4800MHz

Memory Type

4800/4400/4000 MT/s ECC DDR5 RDIMM (3DS) Up to 256GB of memory with speeds of up to 4800MT/s (1DPC)

DIMM Sizes

16GB, 32GB, 64GB, 128GB, 256GB

RDIMM: 16GB, 32GB, 64GB, 128GB, 256GB

Memory Voltage

1.1V

Error Detection

Corrects single-bit errors

Detects double-bit errors (using ECC memory)

On-Board Devices

Chipset

Intel® C741

SATA

Intel® C741 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10

Intel® C741 controller for 2 SATA3 (6 Gbps) ports; RAID 0,1

IPMI

ASPEED AST2600 BMC

Network Controllers

Dual LAN with Broadcom BCM57416 10GBase-T

Input / Output

SATA

8 SATA3 (6Gbps) port(s)

2 SATA3 (6Gbps) port(s)

LAN

1 RJ45 Dedicated IPMI LAN port

2 RJ45 10 Gigabit Ethernet LAN ports

USB

3 USB 2 port(s) (2 via header; 1 Type A)

6 USB 3 port(s) (4 rear; 2 via header)

Video Output

1 VGA D-Sub Connector port(s)

Serial Port

2 COM Port(s) (1 header; 1 rear)

TPM

1 TPM header

Others

3 M.2 PCIe 5.0 x8

Expansion Slots

PCIe

2 PCIe 5.0 x8,

4 PCIe 5.0 x16

M.2

M.2 Interface: 2 PCIe 4.0 x2

Form Factor: 2280/22110

Key: M-Key

System BIOS

BIOS Type

AMI 32MB AMI UEFI

BIOS Features

ACPI 6.4

SMBIOS 2.8/3.5

UEFI 2.8A

Plug and Play (PnP)

PCI FW 3.2

Management

Software

[Redfish API](#), [Supermicro Server Manager \(SSM\)](#), [Supermicro Power Manager \(SPM\)](#), [Supermicro Update Manager \(SUM\)](#), [SuperDoctor® 5](#), [Super Diagnostics Offline](#), [KVM with dedicated LAN](#), [IPMI 2.0](#)

Security

Hardware

Trusted Platform Module (TPM) 2.0

Silicon Root of Trust (RoT) – NIST 800-193 Compliant

Features

Cryptographically Signed Firmware

Secure Boot

Secure Firmware Updates

Automatic Firmware Recovery

Supply Chain Security: Remote Attestation

Runtime BMC Protections

System Lockdown

PC Health Monitoring

Voltage

System temperature, PCH temperature, Memory temperature, CPU temperature, +5V standby, +5V, +3.3V, +12V, CPU thermal trip support, +3.3V standby, Vcore, Vmem, Peripheral temperature, Platform Environment Control Interface (PECI)/(TSI)

LED

UID/Remote UID

CPU / System Overheat LED

Temperature

Monitoring for CPU and chassis environment

CPU thermal trip support

Thermal Monitor 2 (TM2) support

PECI

FAN

8x 4-pin fan headers (up to 8 fans)

Fan speed control

Overheat LED indication

8x fans with tachometer monitoring

Other Features

UID, Node Manager Support, M.2 NGFF connector, Control of power-on for recovery from AC power loss, Chassis intrusion detection, ACPI power management

Operating Environment

Operating Temperature Range

10°C - 35°C (50°F - 95°F)

Non-Operating Temperature Range

-40°C - 70°C (-40°F - 158°F)

Operating Relative Humidity Range

8% - 90% (non-condensing)

Non Operating Relative Humidity Range

5% - 95% (non-condensing)