Storage SuperServer SSG-641E-E1CR24L
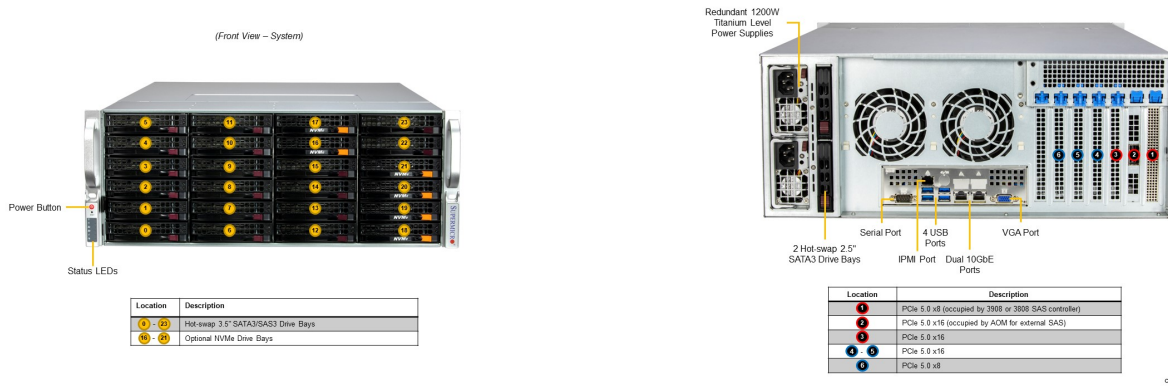
More details here

Key Applications

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

Key Features

- Dual Socket E (LGA-4677) 5th/4th Gen Intel® Xeon® Scalable processors;
- Up to 4TB 3DS ECC RDIMM, DDR5-5600MT/s(1DPC) in 16 DIMM slots;
- 2x 10 GbE onboard via Broadcom BCM57416; 1x GbE Dedicated LAN for server remote management: IPMI 2.0 / KVM over LAN / Media over LAN;
- 24x 3.5"/2.5" Hot-swap SAS3/SATA3 drives, 2x Rear 2.5" SATA Slots, 2x 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	4U Rackmount Enclosure: (17.2" x 7" x 26") Package: (27" x 15" x 39")
Processor	Dual Socket E (LGA-4677) 5th Gen Intel® Xeon®/4th Gen Intel® Xeon® Scalable processors
System Memory	Slot Count: 16 DIMM slots Max Memory (1DPC): Up to 4TB 5600MT/s ECC DDR5 RDIMM
Drive Bays	24x 3.5" hot-swap SATA3/SAS3 drive bays (6x 2.5" NVMe hybrid)(2x 2.5" hot-swap SATA3 rear drive bays) 2 M.2 NVMe M-Key, 2280 and 22110
Expansion Slots	2 PCIe 5.0 x8 FH slot(s) 4 PCIe 5.0 x16 FH 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

(Front View – System)

Power Button

Status LEDs

Location	Description
0 - 23	Hot-swap 3.5" SATA3/SAS3 Drive Bays
16 - 21	Optional NVMe Drive Bays

Redundant 1200W
Titanium Level
Power Supplies

Serial Port
4 USB Ports
VGA Port

2 Hot-swap 2.5"
SATA3 Drive Bays
IPMI Port
Dual 10GbE Ports

Location	Description
1	PCIe 5.0 x8 (occupied by 3908 or 3808 SAS controller)
2	PCIe 5.0 x16 (occupied by AOM for external SAS)
3	PCIe 5.0 x16
4 - 5	PCIe 5.0 x16
6	PCIe 5.0 x8

CPU1 ■ CPU2 ■

System Cooling

Fans: 5 Heavy Duty 8cm 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: 7"
Width: 17.2"
Depth: 26"
Gross Weight: 92 lbs (41.7 kg)
Net Weight: 55 lbs (24.9 kg)
Packaging: 15" x 27" x 39"
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-846BTS-R1K23BP5

Parts List

Standard Parts (Parts Included)

Motherboard / Chassis

Part Number	MBD-X13DEI-T	CSE-846BTS-R1K23BP5
Qty	1	1
Description	Super X13DEI-T Motherboard	4U Chassis

Add-on Card / Module

Part Number	AOC-S3808L-L8IT-P	AOM-SAS3-8I8E
Qty	1	1
Description	8 int 12Gb/s SAS3 ports, x8 Gen4, HBA - LP,122HDDw/exp,R	8-port Mini SAS HD Int-to-Ext Cable Adapter w/FH Bracket

Backplane

Part Number	BPN-SAS3-846EL1-N8-1
Qty	1
Description	4U 24-Port LFF Expander Backplane support up to 16 SAS3/SATA3 and 8 SAS3/SATA3/NVMe Gen 4 Storage Media

Cable

Part Number	CBL-CDAT-0728 CBL-0160L	CBL-PWEX-0645 CBL-PWEX-1078	CBL-SAST-1281-100	CBL-SAST-1285-100	CBL-0071L
Qty	1 2	1 5	1	2	1
Description	4 Pin to 4 Pin I2C Cable, 65cm, 26AWG, 4 Wires, Pinout 1-1 US POWER CORD 16AWG, PB FREE	Big 4 Pin Male to Big 4 Pin Female, Power Extension 15cm PWEX,FAN,1X4/P2.5 TO 1X4/P2.54,20CM,22AWG,5A/PIN,RoHS	Slimline x8 (STR) to 2x Slimline x4 (STR),80CM,100 OHM,	Slimline x4 (STR) to MiniSAS HD (STR) x4,85CM,100 OHM,R	ROUND 16 TO 16 PIN RIBBON FP CABLE 30"L, LF

Parts

Part Number	MCP-260-00042-3N
Qty	1
Description	STD I/O shield for X13 server MB with venting holes

Software

Part Number	SFT-OOB-LIC
Qty	1
Description	License key for enabling OOB BIOS management

Heatsink / Retention

Part Number	SNK-P0088P
Qty	2
Description	2U Passive CPU HS for X13 Intel Eagle Stream Platform

*Power Supply

Part Number	PWS-1K23A-1R	MCP-290-84604-0N
Qty	2	1
Description	AC-DC 1200W, Titanium Level, Redundancy, 1U, PMBUS 1.2, +12V/+5Vsb, 336x76x40 mm,HF,RoHS/REACH	SC846 PDB Cover

*Power Distributor

Part Number	PDB-PT846-H2824
Qty	1
Description	4U support redundant powers 1.6KW output Power Distribute Bo

*Fan

Part Number	FAN-0166L4-2	FAN-0212L4
Qty	3	2
Description	80x80x38 mm, 13.5K RPM, Middle Cooling Fan for SYS-740A-T, R	80x80x32 mm, 9.7K RPM Rear Exhaust Fan for SC836B and SC846B

*Front Panel

Part Number	FPB-TB826-T
Qty	1
Description	Chassis transfer board for SC826

*Drive Tray(s)

Part Number	MCP-220-00075-0B
Qty	24
Description	Black gen 5.5 hot-swap 3.5" HDD tray

*Rear Window

Part Number	MCP-240-84604-0N
Qty	1
Description	X12 846B rear window support 2 X 2.5"HDD and PCIe holder

*Rail Set

Part Number	MCP-290-00057-0N	MCP-410-00007-0N
Qty	1 set	1
Description	Rail set, quick/quick, default for 4U 17.2" W	Rail screw bag

*Air Shroud

Part Number	MCP-310-49003-0N
Qty	1
Description	SC846 Intel DP X9, X8 PC air shroud 1368x13/12x13MB

Notes:
1. Parts with * are inside the chassis
2. Excessive parts might not be shipped, including but not limited to excessive drive trays, fans, riser brackets, air shrouds, IO shields, cables.....etc.

Optional Parts List

Cable - for NVMe in main drive bay

Part Number	CBL-MCIO-1260M5 Store (https://store.supermicro.com/mcio-x8-str-to-x8-str-60cm-30awg-85ohm-rohs.html)
Qty	-
Description	MCIO (x8 STR to x8 STR),60CM,30AWG,85OHM,RoHS

Converter Tray

Part Number	MCP-220-00043-0N Store (https://store.supermicro.com/mcp-220-00043-0n.html)

Qty	-
Description	2.5" HDD TRAY IN 4TH GENERATION 3.5" HOT SWAP TRAY

Converter Tray - orange NVMe tab

Part Number	MCP-220-00138-0B *eStore* (https://store.supermicro.com/mcp-220-00138-0b.html)
Qty	-
Description	Black gen-5.5 tool-less NVMe 3.5-to-2.5 drive tray, Orange tab

Network Cards

Part Number	AOC-S25G-i2S-O	AOC-S25G-b2S-O	AOC-STGS-i2T-O	AOC-STG-b2T-O	AOC-S25G-M2S-O *eStore* (https://store.supermicro.com/aoc-s25g-m2s-o-1013.html)
Qty	-	-	-	-	-
Description	Std. Low Profile 25G dual port SFP28, based on Intel XXV710	Std LP 2-port 25G SFP28, Broadcom BCM57414	Std LP 2-port 10G RJ45, Intel X550	Standard LP 2-port 10Gbase-T, Broadcom 57416,HF,RoHS	Std LP 2-port 25G SFP28, Mellanox ConnectX-4 LX EN

Power Cord

Part Number	CBL-PWCD-0579-1	CBL-PWCD-0300-IS	CBL-PWCD-0579
Qty	-	-	-
Description	Power Cord Type IEC (C14 to C13) 6 ft (14AWG), 15A, 250V	PWCD,US,IEC60320 C14 TO C13,6FT,18AWG,RoHS/REACH	Power Cord Type IEC (C14 to C13) 6 ft (14AWG), 15A, 250V

TPM

Part Number	AOM-TPM-9671V-O	AOM-TPM-9670V-O
Qty	1	1
Description	TPM 1.2, vertical form factor, provisioned for server	TPM 2.0, vertical form factor, provisioned for server

VROC

Part Number	AOC-VROCSTNMOD (/products/accessories/addon/AOC-VROCxxxMOD.php) *eStore* (https://store.supermicro.com/supermicro-vroc-standard-module-1.html)	AOC-VROCPREMOD (/products/accessories/addon/AOC-VROCxxxMOD.php) *eStore* (https://store.supermicro.com/supermicro-vroc-premium-module.html)
Qty	-	-
Description	Intel VROC HW key (RSTe) standard upgrade module,HF,RoHS	Intel VROC Premium, RAID0,1,5,10,HF,RoHS