

Storage SuperServer SSG-640P-E1CR36H



Key Applications

Enterprise Server
 iSCSI SAN
 HPC, Data Center
 Database Processing & Storage
 Corporate Database

Key Features

- Dual socket 3rd Gen Intel® Xeon® Scalable processors, up to 72 Cores Per Node;
- 16 ECC DDR4-3200: LRDIMM/RDIMM + 2 Intel® Optane™ Persistent Memory Dedicated Slots;
- 2x 10GbE; Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN per node;
- 36 3.5"/2.5" Hot-swap SAS3/SATA3 drives (4 Hybrid NVMe), 2x Rear SATA Slots, 1x SATA/NVMe M.2 (form factor: 2280 and 22110);
- 7x 8cm hot-swap counter-rotate redundant PWM cooling fans;
- 1600W Redundant Power Supplies Titanium Level (96%);
- HW RAID support via Broadcom® 3908;

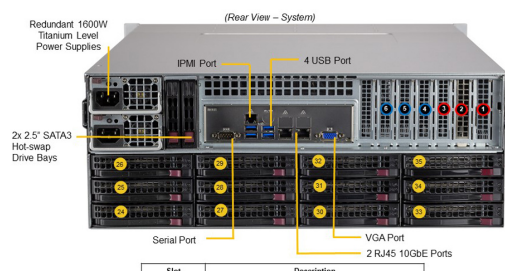
[More details here](#)



Form Factor	4U Rackmount Enclosure: (17.2" x 7" x 27.5") Package: (27" x 15" x 39")
Processor	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI
System Memory	16 DIMM slots Up to 18TB Intel® DCPMM, DDR4-2666MHz Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz
Drive Bays	36x 3.5" hot-swap SATA3/SAS3 drive bays; 4x 3.5" NVMe hybrid; Optional RAID support via RAID/HBA controller AOC
Expansion Slots	Slot 3: PCI-E 4.0 x16 LP Slot 4: PCI-E 4.0 x16 LP Slot 5: PCI-E 4.0 x16 LP Slot 6: PCI-E 4.0 x8 LP Note: PCIe slot 1/2 is occupied by the JBOD Expansion/Storage Controller
On-Board Devices	Chipset: Intel® C621A Network Connectivity: 2x 10GbE BaseT with Intel® X550 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 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



Location	Description
① - ④	24x 3.5" Hot-swap SATA3/SAS3 Front Drive Bays



Slot	Description
①	PCI-E 4.0 x8 Low Profile Slot (Occupied by 3998 SAS controller)
②	PCI-E 4.0 x16 Low Profile Slot (Slot 2 occupied by ADM-SAS3-88E)
③	PCI-E 4.0 x16 Low Profile Slot
④	PCI-E 4.0 x8 Low Profile Slot

CPU1 CPU2

Cooling System	7x 8cm heavy duty fan(s)
Power Supply	1600W Redundant Power Supplies with PMBus Dimension (W x H x L): 76.5 x 40 x 360 mm Output Type: 27 Pairs Gold Finger Connector
System BIOS	BIOS Type: AMI 128MB SPI Flash EEPROM
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0
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	Height: 7" Width: 17.2" Depth: 27.5" Gross Weight: 102.5 lbs (46.4 kg) Net Weight: 65.5 lbs (29.7 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 X12DPI-NT6
Chassis	CSE-847BTS-R1K68LPBP4

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X12DPI-NT6	1	Super X12DPI-NT6 Motherboard
	CSE-847BTS-R1K68LPBP4	1	4U Chassis
Add-on Card / Module	AOC-S3908L-H8IR-P	1	8 int 12Gb/s ports, x8 Gen4, ROC - LP, 240 HDD w/ exp,RoHS
Add-on Card / Module	AOM-SAS3-8I8E-LP	1	8-port Mini SAS HD Int-to-Ext cable adapter w/ LP bracket,HF,RoHS/REACH
Backplane	BPN-SAS3-826EL1-N4	1	12-Port 2U Backplane with Expander support up to 8 x 3.5" SAS3/SATA3 HDD/SDD and 4 x SAS3/SATA3/NVMe Storage Devices ,HF,RoHS/REACH
Backplane	BPN-SAS3-846EL1-N8	1	4U 24-Port LFF Expander Backplane support up to 16 SAS3/SATA3 and 8 SAS3/SATA3/NVMe Storage Media
Cable 1	CBL-0296L	1	9" 4 PIN FAN PWS EXTENSION CORD, PBF
Cable 2	CBL-CDAT-0728	1	4 Pin to 4 Pin I2C Cable, 65cm, 26AWG, 4 Wires, Pinout 1-1
Cable 3	CBL-SAST-0531-01	4	Internal Mini-SAS HD to Mini-SAS HD 80cm,30AWG,12Gb/s [FCI]
Cable 4	CBL-SAST-1264-100	1	Slimline x8 (STR) to 2x MiniSAS HD x4,65CM,100 OHM,RoHS
Parts	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
Software	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
Heatsink / Retention	SNK-P0078P	1	2U Passive CPU Heat Sink for X12 Generation Intel Whitley and Cedar Island Platforms
Heatsink / Retention	SNK-P0078PC	1	2U Passive CPU Heat Sink w/ a Side Air Channel for X12 Generation Intel Whitley and Cedar Island Platforms
*Power Supply	PWS-1K68A-1R	2	1U 1600W Redundant Titanium Power Supply 76mm width 27Pair,PBF
*Power Distributor	PDB-PT847-8824	1	24pin standard output with 5V high current 100Amp power distributor board for SC847
*Cable 5	CBL-0071L	1	ROUND 16 TO 16 PIN RIBBON FP CABLE 30"L, LF
*Cable 6	CBL-0160L	2	US POWER CORD 16AWG, PB FREE
*Cable 7	CBL-PWEX-1079	7	PWEX,FAN,1X4/P2.5 TO 1X4/P2.54,37CM,22AWG,5A/pin,RoHS
*FAN 1	FAN-0166L4	7	80x80x38 mm, 13.5K RPM, Optional Middle Cooling Fan for 2U Ultra Series Servers (Hot-swappable Version of FAN-0162L4)
*Front Panel	FPB-TB826-T	1	Chassis transfer board for SC826
*Drive Tray(s)	MCP-220-00075-0B	36	Black gen 5.5 hot-swap 3.5" HDD tray
*Drive Tray(s)	MCP-220-84708-ASM	1	SC847B LP MB Tray assembly,HF,RoHS/REACH
*Rail Set	MCP-290-00057-0N	1 set	Rail set, quick/quick, default for 4U 17.2" W
*Air Shroud	MCP-310-49004-0N	1	SC847/417 DP X9 universal PC air shroud 1368x13/12x13MB
*Rail Set	MCP-410-00007-0N	1	Rail screw bag

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

	Part Number	Qty	Description
3916 Cache Protection	BKT-BBU-BRACKET-05	1	Remote Mounting Bracket for LSI BBUs
	BTR-CVPM05	1	Broadcom 05-50039-00 CacheVault w/ 24" Remote Extender
Bezel	MCP-210-84601-0B •eStore	-	Black Front Bezel For SC846 Chassis
Converter Tray	MCP-220-00043-0N •eStore	-	Black hot-swap gen 4 3.5 to 2.5 HDD tray
External SAS Cable (FOR JBOD)	CBL-SAST-0573 •eStore	-	1m External Mini SAS HD to External Mini SAS HD.28AWG
IPASS Cable	CBL-SAST-0388L-02 •eStore	-	30AWG Ipass to 4SATA 90/90/70/70CM W/ 90CM SB
Network Cards	AOC-S40G-I2Q	-	Standard LP 2-port 40GbE controller, Intel Fortville XL710
	AOC-S25G-M2S	-	Standard LP, 2x 25GbE SFP28, Mellanox ConnectX-4 LX EN
	More	-	AOC Compatibility Matrix (Select Storage & X12)
	AOC-SGP-I2	-	Standard LP 2-port GbE, Intel 82575
Power Cord	CBL-PWCD-0579	-	Power Cord Type IEC (C14 to C13) 6 ft (14AWG), 15A, 250V
	CBL-PWCD-0579-1	-	Power Cord Type IEC (C14 to C13) 6 ft (14AWG), 15A, 250V
	CBL-PWCD-0300-IS	-	PWCD,US,IEC60320 C14 TO C13,6FT,18AWG,RoHS/REACH
Toolless Converter Tray	MCP-220-00118-0B •eStore	-	Black gen-5.5 tool-less 3.5-to-2.5 converter drive tray,RoHS/REACH
TPM Module	AOM-TPM-9671V	-	SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor
	AOM-TPM-9670V	-	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor