

Storage SuperServer SSG-640P-E1CR24H



Key Applications

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

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;
- 24 3.5"/2.5" Hot-swap SAS3/SATA3 drives, 2x Rear SATA Slots, 1x 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%);
- HW RAID support via Broadcom® 3908;

[More details here](#)



Form Factor	4U Rackmount Enclosure: 437 x 178 x 660mm (17.2" x 7" x 26") Package: 871 x 673 x 343mm (34.3" x 26.5" x 13.5")
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	24x 3.5" hot-swap SATA3/SAS3 drive bays; 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



Cooling System	5x 8cm heavy duty fan(s)
Power Supply	AC 1200W, Titanium Level, Redundancy,PMBUS 1.2, +12V/+5Vsb, 360x76x40 mm,HF,RoHS/REACH Dimension (W x H x L): 76 x 40 x 336 mm Output Type: Gold Finger
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" (178 mm) Width: 17.2" (437 mm) Depth: 26" (660 mm) Gross Weight: 118 lbs (53.52 kg) Net Weight: 86 lbs (39 kg) Packaging: 26.5" (H) x 34.3" (W) x 13.5" (D) Available Color: Black
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-846BE1C-R1K23B

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X12DPi-NT6	1	Super X12DPi-NT6 Motherboard
	CSE-846BE1C-R1K23B	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	1	8-port Mini SAS HD Int-to-Ext cable adapter w/FH bracket,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-CDAT-0728	1	4 Pin to 4 Pin I2C Cable, 65cm, 26AWG, 4 Wires, Pinout 1-1
Cable 2	CBL-PWEX-0645	2	Big 4 Pin Male to Big 4 Pin Female, Power Extension 15cm
Cable 3	CBL-SAST-0532	2	Internal Mini-SAS HD to Mini-SAS HD 50cm,30AWG,12Gb/s
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	2	2U Passive CPU Heat Sink for X12 Generation Intel Whitley and Cedar Island Platforms
*Power Supply	PWS-1K23A-1R	2	AC-DC 1200W, Titanium Level, Redundancy, 1U, PMBUS 1.2, +12V/+5Vs_b, 336x76x40 mm,HF,RoHS/REACH
*Power Distributor	PDB-PT846-2824	1	PDB with 23pairs input connector support SC846B
*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-1078	5	PWEX,FAN,1X4/P2.5 TO 1X4/P2.54,20CM,22AWG,5A/PIN,RoHS
*FAN 1	FAN-0185L4	3	80x80x38 mm, 10.5K RPM, Hot-swappable Middle Cooling Fan for X11 Generation SC846B Chassis
*FAN 2	FAN-0212L4	2	80x80x32 mm, 9.7K RPM Rear Exhaust Fan for SC836B and SC846B
*Front Panel	FPB-TB826-T	1	Chassis transfer board for SC826
*Drive Tray(s)	MCP-220-00075-0B	24	Black gen 5.5 hot-swap 3.5" HDD tray
*Rear Window	MCP-240-84604-0N	1	X12 846B rear window support 2 X 2.5"HDD and PCIe holder
*Rail Set	MCP-290-00057-0N	1 set	Rail set, quick/quick, default for 4U 17.2" W
*Power Supply	MCP-290-84604-0N	1	SC846 PDB Cover
*Air Shroud	MCP-310-49003-0N	1	SC846 Intel DP X9, X8 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 lpass to 4SATA 90/90/70/70CM W/ 90CM SB
Network Cards	AOC-SGP-I2	-	Standard LP 2-port GbE, Intel 82575
	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)
Power Cord	CBL-PWCD-0300-IS	-	PWCD,US,IEC60320 C14 TO C13,6FT,18AWG,RoHS/REACH
	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
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