

Specifications

Product SKUs

SSG-640P-E1CR36L	▪ SuperServer SSG-640P-E1CR36L (Silver)
-------------------------	---

Motherboard

Super X12DPI-NT6

Processor

CPU	▪ Dual Socket P+ (LG-4189) ▪ 3rd Gen Intel® Xeon® Scalable processors ▪ Support CPU TDP 120-270W
------------	--

System Memory

Memory	▪ Memory Capacity: 16 DIMM slots ▪ Up to 4TB: 16x 256 GB DRAM ▪ Memory Type: 3200MHz ECC DDR4 RDIMM;LRDIMM;DCPMM
---------------	--

Memory Voltage	▪ 1.2 V
-----------------------	---------

Error Detection	▪ ECC
------------------------	-------

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

System BIOS

BIOS Type	▪ AMI 128MB SPI Flash EEPROM
------------------	------------------------------

Management

Software	▪ IPMI 2.0 ▪ SUM ▪ NMI ▪ Watch Dog ▪ SuperDoctor® 5
-----------------	---

Chassis

Form Factor	▪ 4U Rackmount
--------------------	----------------

Model	▪ CSE-847BTS-R1K68LPBP4
--------------	-------------------------

Dimensions and Weight

Height	▪ 7"
---------------	------

Width	▪ 17.2"
--------------	---------

Depth	▪ 27.5"
--------------	---------

Package	▪ 15" (H) x 27" (W) x 39" (D)
----------------	-------------------------------

Weight	▪ Net Weight: 65.5 lbs (29.7 kg) ▪ Gross Weight: 102.5 lbs (46.4 kg)
---------------	---

Available Color	▪ Silver
------------------------	----------

Front Panel

Buttons	▪ Power On/Off
----------------	----------------

LEDs	▪ HDD activity ▪ Network activity ▪ Power status ▪ System information (overheat/UID)
-------------	---

Expansion Slots

PCI-Express (PCI-E)	▪ Slot 1: PCI-E 4.0 x8 LP ▪ Slot 2: PCI-E 4.0 x16 LP ▪ 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
-------------	--

Drive Bays / Storage

Hot-swap	▪ 36x 3.5" hot-swap SATA3/SAS3 drive bays (4x 3.5" NVMe hybrid)
-----------------	---

M.2	▪ 1 M.2 NVMe
------------	--------------

System Cooling

Fans	▪ 7 Heavy Duty 8cm Fan(s)
-------------	---------------------------

Power Supply

1600W Redundant Power Supplies with PMBus

Dimension (W x H x L)	▪ 76.5 x 40 x 360 mm
------------------------------	----------------------

AC Input	▪ 100-140Vac / 7A-10A / 50-60Hz ▪ 180-240Vac / 8A-11A / 50-60Hz
-----------------	--

-
- | | |
|-----------------------------|---|
| Power Configurations | <ul style="list-style-type: none">▪ ACPI Power Management▪ Power-on mode for AC power recovery |
|-----------------------------|---|
-

PC Health Monitoring

- | | |
|------------|--|
| CPU | <ul style="list-style-type: none">▪ 4+1 Phase-switching voltage regulator▪ Monitors for CPU Cores, Chipset Voltages, Memory |
|------------|--|
-

- | | |
|------------|---|
| FAN | <ul style="list-style-type: none">▪ Fans with tachometer monitoring▪ Pulse Width Modulated (PWM) fan connectors▪ Status monitor for speed control |
|------------|---|
-

- | | |
|--------------------|---|
| Temperature | <ul style="list-style-type: none">▪ Monitoring for CPU and chassis environment▪ Thermal Control for fan connectors |
|--------------------|---|
-

-
- | | |
|-------------|--|
| +12V | <ul style="list-style-type: none">▪ Max: 66A / Min: 0A (100Vac-127Vac)▪ Max: 133A / Min: 0A (200Vac-240Vac) |
|-------------|--|
-

- | | |
|--------------|---|
| 5V SB | <ul style="list-style-type: none">▪ Max: 1A / Min: 0A |
|--------------|---|
-

- | | |
|--------------------|--|
| Output Type | <ul style="list-style-type: none">▪ 27 Pairs Gold Finger Connector |
|--------------------|--|
-

Certification



Titanium Level

[Test Report]

Operating Environment

- | | |
|-------------|--|
| RoHS | <ul style="list-style-type: none">▪ RoHS Compliant |
|-------------|--|
-

- | | |
|----------------------------|--|
| Environmental Spec. | <ul style="list-style-type: none">▪ 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) |
|----------------------------|--|
-

Parts List

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-S3808L-L8IT-P	1	8 int 12Gb/s SAS3 ports, x8 Gen4, HBA - LP, 122 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	24-Port 4U Expander Backplane Support up-to 16x 3.5" SAS3/SATA3 HDD/SSD and 8 x SAS3/SATA3/NVMe Storage Devices
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
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	More	-	AOC Compatibility Matrix (Select Storage & X12)
	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
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-9670V-S	-	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor
	AOM-TPM-9671V-S	-	SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor