



Specifications

Product SKUs		Chassis	
SSG-640P-E1CR24H	<ul style="list-style-type: none"> SuperServer SSG-640P-E1CR24H (Black) 	Form Factor	<ul style="list-style-type: none"> 4U
Motherboard		Model	<ul style="list-style-type: none"> CSE-846BE1C-R1K23B
Super X12DPI-NT6		Dimensions and Weight	
Processor		Height	<ul style="list-style-type: none"> 7" (178mm)
CPU	<ul style="list-style-type: none"> Dual Socket P+ (LG-4189) 3rd Gen Intel® Xeon® Scalable processors Support CPU TDP 120-270W 	Width	<ul style="list-style-type: none"> 17.2" (437mm)
System Memory		Depth	<ul style="list-style-type: none"> 26" (660mm)
Memory	<ul style="list-style-type: none"> Memory Capacity: 16 DIMM slots Up to 4TB: 16x 256 GB DRAM and 8x 512 GB PMem Memory Type: 3200MHz ECC DDR4 RDIMM;LRDIMM;DCPMM Intel® Optane™ persistent memory 200 series 	Package	<ul style="list-style-type: none"> 26.5" (H) x 34.3" (W) x 13.5" (D)
Memory Voltage	<ul style="list-style-type: none"> 1.2 V 	Weight	<ul style="list-style-type: none"> Gross Weight: 75 lbs (34.02 kg)
Error Detection	<ul style="list-style-type: none"> ECC 	Available Color	<ul style="list-style-type: none"> Black
On-Board Devices		Front Panel	
Chipset	<ul style="list-style-type: none"> Intel® C621A 	Buttons	<ul style="list-style-type: none"> Power On/Off
Network Connectivity	<ul style="list-style-type: none"> 2x 10GbE BaseT with Intel® X550 	LEDs	<ul style="list-style-type: none"> HDD activity Network activity Power status System information (overheat/UID)
IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support 	Expansion Slots	
Input / Output		PCI-Express (PCI-E)	<ul style="list-style-type: none"> 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
LAN	<ul style="list-style-type: none"> 1 RJ45 Dedicated IPMI LAN port 	Note	<ul style="list-style-type: none"> PCIe slot 1/2 is occupied by the JBOD Expansion/Storage Controller
USB	<ul style="list-style-type: none"> 4 USB 3.0 port(s) (4 Rear_USB) 	Drive Bays / Storage	
Video	<ul style="list-style-type: none"> 1 VGA port(s) 	Hot-swap	<ul style="list-style-type: none"> 24x 3.5" hot-swap SATA3/SAS3 drive bays
Serial Port	<ul style="list-style-type: none"> 1 COM Port(s) (1 rear) 	M.2	<ul style="list-style-type: none"> 1 M.2 NVMe
DOM	<ul style="list-style-type: none"> 2 SuperDOM (Disk on Module) port 	System Cooling	
System BIOS		Fans	<ul style="list-style-type: none"> 5 Heavy Duty 8cm Fan(s)
BIOS Type	<ul style="list-style-type: none"> AMI 128MB SPI Flash EEPROM 	Power Supply	
Management		AC 1200W, Titanium Level, Redundancy,PMBUS 1.2, +12V/+5Vsb, 360x76x40 mm,HF,RoHS/REACH	
		Dimension (W x H x L)	<ul style="list-style-type: none"> 76 x 40 x 336 mm
		Output Type	<ul style="list-style-type: none"> Gold Finger
		Certification	<ul style="list-style-type: none">   Titanium Level [Test Report]

Software	<ul style="list-style-type: none"> ▪ <u>IPMI 2.0</u> ▪ <u>SUM</u> ▪ NMI ▪ Watch Dog ▪ SuperDoctor® 5
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

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-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	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-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/+5Vsb, 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 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-9671V-S	-	SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor
	AOM-TPM-9670V-S	-	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor