



Specifications

Product SKUs		Chassis	
SSG-620P-ACR16L	<ul style="list-style-type: none"> SuperServer SSG-620P-ACR16L (Black) 	Form Factor	<ul style="list-style-type: none"> 2U
		Model	<ul style="list-style-type: none"> CSE-829HE1C4-R1K62LPB
Motherboard		Dimensions and Weight	
Super X12DPI-NT6		Height	<ul style="list-style-type: none"> 3.5" (89mm)
		Width	<ul style="list-style-type: none"> 17.2" (437mm)
		Depth	<ul style="list-style-type: none"> 27.75" (705mm)
		Package	<ul style="list-style-type: none"> 10.8" (H) x 25.9" (W) x 39.3" (D)
		Weight	<ul style="list-style-type: none"> Net Weight: 41.5 lbs (18.82 kg) Gross Weight: 62 lbs (28.12 kg)
		Available Color	<ul style="list-style-type: none"> Black
Processor		Front Panel	
CPU	<ul style="list-style-type: none"> Dual Socket P+ (LG-4189) 3rd Gen Intel® Xeon® Scalable processors Support CPU TDP 120-270W 	Buttons	<ul style="list-style-type: none"> Power On/Off
		LEDs	<ul style="list-style-type: none"> HDD activity Network activity Power status System information (overheat/UID)
System Memory		Expansion Slots	
Memory	<ul style="list-style-type: none"> Memory Capacity: 16 DIMM slots Up to 4TB: 16x 256 GB DRAM Memory Type: 3200MHz ECC DDR4 RDIMM;LRDIMM;DCPMM 	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
Note	<ul style="list-style-type: none"> 2 extra DIMM slots available for Intel® Optane™ DCPMM @ 2666MHz 	Note	<ul style="list-style-type: none"> PCIe slot 1 is occupied by the Storage Controller
Memory Voltage	<ul style="list-style-type: none"> 1.2 V 		
Error Detection	<ul style="list-style-type: none"> ECC 		
On-Board Devices		Drive Bays / Storage	
Chipset	<ul style="list-style-type: none"> Intel® C621A 	Hot-swap	<ul style="list-style-type: none"> 16x 3.5" hot-swap SATA3/SAS3 drive bays (4x 3.5" NVMe hybrid)
Network Connectivity	<ul style="list-style-type: none"> 2x 10GbE BaseT with Intel® X550 	M.2	<ul style="list-style-type: none"> 1 M.2 NVMe
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 		
Input / Output		System Cooling	
LAN	<ul style="list-style-type: none"> 1 RJ45 Dedicated IPMI LAN port 2 RJ-45 10Gbase-T ports 	Fans	<ul style="list-style-type: none"> 4 Heavy Duty 8cm Fan(s)
USB	<ul style="list-style-type: none"> 4 USB 3.0 port(s) (4 Rear_USB) 		
Video	<ul style="list-style-type: none"> 1 VGA port(s) 		
Serial Port	<ul style="list-style-type: none"> 1 COM Port(s) (1 rear) 		
DOM	<ul style="list-style-type: none"> 2 SuperDOM (Disk on Module) port 		
System BIOS		Power Supply	
BIOS Type	<ul style="list-style-type: none"> AMI 128MB SPI Flash EEPROM 	1600W Redundant Power Supplies with PMBus	
		Dimension (W x H x L)	<ul style="list-style-type: none"> 73.5 x 40 x 203 mm
		AC Input	<ul style="list-style-type: none"> 1000W: 100-127Vac / 50-60Hz 1600W: 200-240Vac / 50-60Hz
Management			

Software	<ul style="list-style-type: none"> ▪ IPMI 2.0 ▪ SUM ▪ 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

+12V	<ul style="list-style-type: none"> ▪ Max: 83A / Min: 0A (100Vac-127Vac) ▪ Max: 133A / Min: 0A (200Vac-240Vac)
12V SB	<ul style="list-style-type: none"> ▪ Max: 2.1A / Min: 0A
Output Type	<ul style="list-style-type: none"> ▪ AC-Input
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-829HE1C4-R1K62LPB	1	2U Chassis
Add-on Card / Module	AOC-S3816L-L16IT-O	1	16 int 12Gb/s SAS3 ports, x8 Gen4, HBA - LP, 122 HDD w/ exp,RoHS
Backplane	BPN-SAS3-829HA-A4	1	4-port internal SAS3 12Gbps backplane, support up to 4x 3.5-inch SAS3/SATA3 HDD/SSD
Backplane	BPN-SAS3-LA26A-N12	1	2U 12-Slot LFF Backplane Supports 12 x SAS3/SATA3/NVMe4 Storage Devices with 1x(2x4) + 4x(1x4) power connectors, co-lay with BPN-SAS3-LA26A-N12,HF,RoHS
Cable 1	CBL-0277L	2	HDD POWER CABLE (BIG 4 PIN; 32CM), PBF
Cable 2	CBL-CDAT-0728	1	4 Pin to 4 Pin I2C Cable, 65cm, 26AWG, 4 Wires, Pinout 1-1
Cable 3	CBL-PWEX-0645	2	Big 4 Pin Male to Big 4 Pin Female, Power Extension 15cm
Cable 4	CBL-SAST-1250A-100	1	SlimSAS (x8 ST to x4 STR and miniS)80/50CM,100OHM,RoHS
Cable 5	CBL-SAST-1281-100	1	Slimline x8 (STR) to 2x Slimline x4 (STR),80CM,100 OHM,
Parts	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
Air Shroud	MCP-310-82935-0B	1	Mylar 1U air shroud for SC829H X12
Software	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
Heatsink / Retention	SNK-P0077PW	1	1U Passive CPU HS 92mm Width for X12 Whitley Platform
Heatsink / Retention	SNK-P0078AP4	1	2U Active CPU Heat Sink for X12 Generation Building Block Solutions
*Power Supply	PWS-1K62A-1R	2	AC-DC 1600W, Titanium Level, Redundancy, 1U, DC Output: +12V and +12Vs, 203 x 73.5 x 40 mm, AC Input: 90 - 264 VAC/47-63Hz, PMBus 1.2 with DSP controller,HF,RoHS/REACH
*Power Distributor	PDB-PT829H-2824	1	2U standard output with 24Pin PDB support up to
*Cable 6	CBL-CDAT-0607	1	[NR] FRONT CNTL,20 TO 20 PIN, P0.5, FFC,FLAT, 23.5CM, STD
*Cable 7	CBL-PWCD-0160-IS	2	PWCD,US,NEMA5-15P TO IEC60320 C13,6FT,16AWG,RoHS/REACH
*Cable 8	CBL-PWEX-1078	4	PWEX,FAN,1X4/P2.5 TO 1X4/P2.54,20CM,22AWG,5A/PIN,RoHS
*FAN 1	FAN-0166L4	4	80x80x38 mm, 13.5K RPM, Optional Middle Cooling Fan for 2U Ultra Series Servers (Hot-swappable Version of FAN-0162L4)
*FAN 2	FAN-0206L4	4	80x80x38 mm, 13.5K RPM, Middle Cooling Fan for 2U and above Servers
*Front Panel	FPB-TB826-T	1	Chassis transfer board for SC826
*Drive Tray(s)	MCP-220-00075-0B	12	Black gen 5.5 hot-swap 3.5" HDD tray
*Drive Tray(s)	MCP-220-82902-0N	1	Middle tray plate for SC829H
*Drive Tray(s)	MCP-220-82903-0N	4	Internal mid tray with handle for SC829H
*Rail Set	MCP-290-00053-0N-01	1	36"; Rail set for Auto-latch, quick/quick, 2, 3U 17.2";W
*Drive Tray(s)	MCP-290-82607-0N	1	826B/216B rear dummy cover for 2 X 2.5

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-210-82601-0B • eStore	-	Black Front Bezel for 826 chassis
Converter Tray	MCP-220-00043-0N • eStore	-	Black hot-swap gen 4 3.5 to 2.5 HDD tray
IPASS Cable	CBL-SAST-0388L-02 • eStore	-	30AWG Ipass to 4SATA 90/90/70/70CM W/ 90CM SB
Network Cards	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
	AOC-S40G-I2Q	-	Standard LP 2-port 40GbE controller, Intel Fortville XL710
NVMe Support	CBL-SAST-1248-85	2	[NR] Slimline x8 (LE) to Slimline x8 (STR),46CM,85 OHM,RoHS
	MCP-220-00116-0B • eStore	4	Black gen-5.5 tool-less 3.5-to-2.5 NVME converter drive tray,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-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