



# Specifications

Product SKUs	
<b>SSG-620P-ACR12H</b>	<ul style="list-style-type: none"> <li>SuperServer SSG-620P-ACR12H (Black)</li> </ul>
Motherboard	
<b>Super X12DPI-NT6</b>	
Processor	
<b>CPU</b>	<ul style="list-style-type: none"> <li>Dual Socket P+ (LG-4189)</li> <li>3rd Gen Intel® Xeon® Scalable processors</li> <li>Support CPU TDP 120-270W</li> </ul>
System Memory	
<b>Memory</b>	<ul style="list-style-type: none"> <li>Memory Capacity: 16 DIMM slots</li> <li>Up to 4TB: 16x 256 GB DRAM and 8x 512 GB PMem</li> <li>Memory Type: 3200MHz ECC DDR4 RDIMM;LRDIMM;DCPMM</li> <li>Intel® Optane™ persistent memory 200 series</li> </ul>
<b>Note</b>	<ul style="list-style-type: none"> <li><b>2 extra DIMM slots available for Intel® Optane™ DCPMM @ 2666MHz</b></li> </ul>
<b>Memory Voltage</b>	<ul style="list-style-type: none"> <li>1.2 V</li> </ul>
<b>Error Detection</b>	<ul style="list-style-type: none"> <li>ECC</li> </ul>
On-Board Devices	
<b>Chipset</b>	<ul style="list-style-type: none"> <li>Intel® C621A</li> </ul>
<b>Network Connectivity</b>	<ul style="list-style-type: none"> <li>2x 10GbE BaseT with Intel® X550</li> </ul>
<b>IPMI</b>	<ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> </ul>
Input / Output	
<b>LAN</b>	<ul style="list-style-type: none"> <li>1 RJ45 Dedicated IPMI LAN port</li> <li>2 RJ-45 10Gbase-T ports</li> </ul>
<b>USB</b>	<ul style="list-style-type: none"> <li>4 USB 3.0 port(s) (4 Rear_USB)</li> </ul>
<b>Video</b>	<ul style="list-style-type: none"> <li>1 VGA port(s)</li> </ul>
<b>Serial Port</b>	<ul style="list-style-type: none"> <li>1 COM Port(s) (1 rear)</li> </ul>
<b>DOM</b>	<ul style="list-style-type: none"> <li>2 SuperDOM (Disk on Module) port</li> </ul>
System BIOS	
<b>BIOS Type</b>	<ul style="list-style-type: none"> <li>AMI 128MB SPI Flash EEPROM</li> </ul>
Management	

Chassis	
<b>Form Factor</b>	<ul style="list-style-type: none"> <li>2U Rackmount</li> </ul>
<b>Model</b>	<ul style="list-style-type: none"> <li><b>CSV-826BTS-R1K23LPBP2</b></li> </ul>
Dimensions and Weight	
<b>Height</b>	<ul style="list-style-type: none"> <li>3.5"</li> </ul>
<b>Width</b>	<ul style="list-style-type: none"> <li>17.3"</li> </ul>
<b>Depth</b>	<ul style="list-style-type: none"> <li>25.5"</li> </ul>
<b>Package</b>	<ul style="list-style-type: none"> <li>12" (H) x 27" (W) x 35" (D)</li> </ul>
<b>Weight</b>	<ul style="list-style-type: none"> <li>Net Weight: 34 lbs (15.4 kg)</li> <li>Gross Weight: 61 lbs (27.7 kg)</li> </ul>
<b>Available Color</b>	<ul style="list-style-type: none"> <li>Black</li> </ul>
Front Panel	
<b>Buttons</b>	<ul style="list-style-type: none"> <li>Power On/Off</li> </ul>
<b>LEDs</b>	<ul style="list-style-type: none"> <li>HDD activity</li> <li>Network activity</li> <li>Power status</li> <li>System information (overheat/UID)</li> </ul>
Expansion Slots	
<b>PCI-Express (PCI-E)</b>	<ul style="list-style-type: none"> <li>Slot 1: PCI-E 4.0 x8 LP</li> <li>Slot 2: PCI-E 4.0 x16 LP</li> <li>Slot 3: PCI-E 4.0 x16 LP</li> <li>Slot 4: PCI-E 4.0 x16 LP</li> <li>Slot 5: PCI-E 4.0 x16 LP</li> <li>Slot 6: PCI-E 4.0 x8 LP</li> </ul>
<b>Note</b>	<ul style="list-style-type: none"> <li><b>PCIe slot 1 is occupied by the Storage Controller</b></li> </ul>
Drive Bays / Storage	
<b>Hot-swap</b>	<ul style="list-style-type: none"> <li>12x 3.5" hot-swap SATA3/SAS3 drive bays (4x 3.5" NVMe hybrid)</li> </ul>
<b>M.2</b>	<ul style="list-style-type: none"> <li>1 M.2 NVMe</li> </ul>
System Cooling	
<b>Fans</b>	<ul style="list-style-type: none"> <li>3 Heavy Duty 8cm Fan(s)</li> </ul>
Power Supply	
AC 1200W, Titanium Level, Redundancy,PMBUS 1.2, +12V/+5Vsb, 360x76x40 mm,HF,RoHS/REACH	
<b>Dimension (W x H x L)</b>	<ul style="list-style-type: none"> <li>76 x 40 x 336 mm</li> </ul>
<b>Output Type</b>	<ul style="list-style-type: none"> <li>Gold Finger</li> </ul>
<b>Certification</b>	<ul style="list-style-type: none"> <li>   <b>Titanium Level</b>  <b>[ Test Report ]</b> </li> </ul>

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

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- Power Configurations**
- ACPI Power Management
  - Power-on mode for AC power recovery

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### PC Health Monitoring

- CPU**
- 4+1 Phase-switching voltage regulator
  - Monitors for CPU Cores, Chipset Voltages, Memory

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- FAN**
- Fans with tachometer monitoring
  - Pulse Width Modulated (PWM) fan connectors
  - Status monitor for speed control

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- Temperature**
- Monitoring for CPU and chassis environment
  - Thermal Control for fan connectors

### Operating Environment

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- RoHS**
- RoHS Compliant
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- Environmental Spec.**
- 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)
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## Parts List

Parts List - (Items Included)			
	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X12DPi-NT6	1	Super X12DPi-NT6 Motherboard
	CSV-826BTS-R1K23LPBP2	1	2U Chassis
<b>Add-on Card / Module</b>	AOC-S3916L-H16IR-32DD-O	1	16 int 12Gb/s ports, x8 Gen4, ROC - LP, 32 HDD w/ exp,RoHS
<b>Backplane</b>	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
<b>Cable 1</b>	CBL-CDAT-0728	1	4 Pin to 4 Pin I2C Cable, 65cm, 26AWG, 4 Wires, Pinout 1-1
<b>Cable 2</b>	CBL-SAST-1249-100	1	Slimline x8 (STR) to 2x Slimline x4 (STR),50CM,100 OHM,
<b>Cable 3</b>	CBL-SAST-1281-100	1	Slimline x8 (STR) to 2x Slimline x4 (STR),80CM,100 OHM,
<b>Parts</b>	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
<b>Software</b>	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
<b>Heatsink / Retention</b>	SNK-P0078P	1	2U Passive CPU Heat Sink for X12 Generation Intel Whitley and Cedar Island Platforms
<b>Heatsink / Retention</b>	SNK-P0078PC	1	2U Passive CPU Heat Sink w/ a Side Air Channel for X12 Generation Intel Whitley and Cedar Island Platforms
<b>*Power Supply</b>	PWS-1K23A-1R	2	AC-DC 1200W, Titanium Level, Redundancy, 1U, PMBUS 1.2, +12V/+5Vsb, 336x76x40 mm,HF,RoHS/REACH
<b>*Power Distributor</b>	PDB-PT826-8824	1	PDB with longer 24pin for SC826B

### 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
<b>3916 Cache Protection</b>	BTR-CVPM05	1	Broadcom 05-50039-00 CacheVault w/ 24" Remote Extender
	BKT-BBU-BRACKET-05	1	Remote Mounting Bracket for LSI BBUs
<b>Bezel</b>	MCP-210-82601-0B • <i>eStore</i>	-	Black Front Bezel for 826 chassis
<b>Converter Tray</b>	MCP-220-00043-0N • <i>eStore</i>	-	Black hot-swap gen 4 3.5 to 2.5 HDD tray
<b>IPASS Cable</b>	CBL-SAST-0388L-02 • <i>eStore</i>	-	30AWG Ipass to 4SATA 90/90/70/70CM W/ 90CM SB
<b>Network Cards</b>	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)
<b>NVMe Support</b>	CBL-SAST-1248-85	2	[NR] Slimline x8 (LE) to Slimline x8 (STR),46CM,85 OHM,RoHS
	MCP-220-00116-0B • <i>eStore</i>	4	Black gen-5.5 tool-less 3.5-to-2.5 NVME converter drive tray,RoHS/REACH
<b>Toolless Converter Tray</b>	MCP-220-00118-0B • <i>eStore</i>	-	Black gen-5.5 tool-less 3.5-to-2.5 converter drive tray,RoHS/REACH

<b>TPM Module</b>	<u>AOM-TPM-9671V-S</u>	-	SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor
	<u>AOM-TPM-9670V-S</u>	-	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor