

# Specifications

## Product SKUs

<b>SSG-610P-ACR12N4L</b>	<ul style="list-style-type: none"> <li>SuperServer SSG-610P-ACR12N4L (<b>Silver</b>)</li> </ul>
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## Motherboard

**Super X12DPD-A6M25**

## 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 120-205W</li> </ul>
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## 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</li> <li>Memory Type: 3200MHz ECC DDR4 RDIMM;LRDIMM</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 25GbE SFP28 with Mellanox</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>1x 25G SFP+ LAN ports</li> </ul>
<b>USB</b>	<ul style="list-style-type: none"> <li>2 USB 2.0 port(s) (2 Front_USB)</li> <li>2 USB 3.0 port(s) (2 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 Serial</li> </ul>

## System BIOS

<b>BIOS Type</b>	<ul style="list-style-type: none"> <li>AMI 128MB SPI Flash EEPROM</li> </ul>
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## Management

<b>Software</b>	<ul style="list-style-type: none"> <li>IPMI 2.0</li> <li>SUM</li> <li>NMI</li> <li>Watch Dog</li> <li>SuperDoctor® 5</li> </ul>
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## Chassis

<b>Form Factor</b>	<ul style="list-style-type: none"> <li>1U Rackmount</li> </ul>
<b>Model</b>	<ul style="list-style-type: none"> <li><b>CSV-802ETS-R804AMP</b></li> </ul>

## Dimensions and Weight

<b>Height</b>	<ul style="list-style-type: none"> <li>1.7"</li> </ul>
<b>Width</b>	<ul style="list-style-type: none"> <li>17.6"</li> </ul>
<b>Depth</b>	<ul style="list-style-type: none"> <li>37"</li> </ul>
<b>Package</b>	<ul style="list-style-type: none"> <li>12" (H) x 27" (W) x 53.15" (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>Silver</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 x16 LP</li> <li>Slot 2: PCI-E 4.0 x16 LP</li> <li>Slot 3: PCI-E 4.0 x8 LP</li> <li>Slot 4: PCI-E 4.0 x16 AIOM</li> </ul>
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## Drive Bays / Storage

<b>Hot-swap</b>	<ul style="list-style-type: none"> <li>12x 3.5" hot-swap SATA3/SAS3 drive bays</li> <li>4x E1.S and 2x 2.5" 7mm</li> </ul>
<b>M.2</b>	<ul style="list-style-type: none"> <li>2 M.2 NVMe OR 2 M.2 SATA3</li> <li>M-Key, 2280</li> </ul>

## System Cooling

<b>Fans</b>	<ul style="list-style-type: none"> <li>6 Heavy Duty 4cm Fan(s)</li> </ul>
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## Power Supply

800W Redundant Power Supplies with PMBus	
<b>Dimension (W x H x L)</b>	<ul style="list-style-type: none"> <li>54.5 x 40 x 220 mm</li> </ul>
<b>AC Input</b>	<ul style="list-style-type: none"> <li>100-127Vac / 50-60Hz</li> <li>200-240Vac / 50-60Hz</li> </ul>
<b>DC Input</b>	<ul style="list-style-type: none"> <li>230-240Vdc</li> </ul>

<b>Power Configurations</b>	<ul style="list-style-type: none"> <li>▪ ACPI Power Management</li> <li>▪ Power-on mode for AC power recovery</li> </ul>
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### PC Health Monitoring

<b>CPU</b>	<ul style="list-style-type: none"> <li>▪ 4+1 Phase-switching voltage regulator</li> <li>▪ Monitors for CPU Cores, Chipset Voltages, Memory</li> </ul>
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<b>FAN</b>	<ul style="list-style-type: none"> <li>▪ Fans with tachometer monitoring</li> <li>▪ Pulse Width Modulated (PWM) fan connectors</li> <li>▪ Status monitor for speed control</li> </ul>
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<b>Temperature</b>	<ul style="list-style-type: none"> <li>▪ Monitoring for CPU and chassis environment</li> <li>▪ Thermal Control for fan connectors</li> </ul>
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<b>+12V</b>	<ul style="list-style-type: none"> <li>▪ Max: 62.5A / Min: 0A (100Vac-127Vac)</li> <li>▪ Max: 66.6A / Min: 0A (200Vac-240Vac)</li> <li>▪ Max: 66.6A / Min: 0A (230Vdc-240Vdc)</li> </ul>
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<b>5V SB</b>	<ul style="list-style-type: none"> <li>▪ Max: 4A / Min: 0A</li> </ul>
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<b>Output Type</b>	<ul style="list-style-type: none"> <li>▪ Gold Finger Connector</li> </ul>
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<b>Certification</b>	  <b>Platinum Level</b> <a href="#">[ Test Report ]</a>
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### Operating Environment

<b>RoHS</b>	<ul style="list-style-type: none"> <li>▪ RoHS Compliant</li> </ul>
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<b>Environmental Spec.</b>	<ul style="list-style-type: none"> <li>▪ Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)</li> <li>▪ Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)</li> <li>▪ Operating Relative Humidity: 8% to 90% (Non-Condensing)</li> <li>▪ Non-operating Relative Humidity: 5% to 95% (Non-Condensing)</li> </ul>
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## Parts List

Parts List - (Items Included)			
	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X12DPD-A6M25	1	Super X12DPD-A6M25 Motherboard
	CSV-802ETS-R804AMP	1	1U Chassis
<b>Add-on Card / Module</b>	AOM-S3216-DPD-1-L-P	1	1U Drawer DPD MB, SAS 3216 I/O Controller,HF
<b>Add-on Card / Module</b>	AOM-S3224-DPD-L-P	1	DPD MB, SAS 3224 I/O Controller,HF,RoHS
<b>Backplane</b>	BPN-EDS4-802N-N2S2	1	1U 6-Slot Backplane Supports 4 x E1.S and 2 x SAS3/SATA3/NVMe4 Storage Devices,HF,RoHS
<b>Backplane</b>	BPN-SAS3-802A-3	3	4-Port Backplane Supports 4 x 3.5" SAS/SATA HDDNote: It (Rev. 1.00) shares the same design (layout and schematics) as BPN-SAS3-802A-2 beside the silkscreen and CPLD F/W,HF,RoHS
<b>Cable 1</b>	CBL-CDAT-0930	1	CBL,7PIN TO 7PIN,P1.5/1.0mm,17.2CM,26/28AWG,RoHS
<b>Cable 2</b>	CBL-PWCD-0174-IS	2	PWCD,US,NEMA5-15P TO IEC60320 C13,6FT,14AWG,RoHS/REACH
<b>Cable 3</b>	CBL-PWEX-1056	1	BPN PWR,2P/P3.0 to 3P/P3.0, 12V, 60CM,18AWG, 6A/pin,RoHS
<b>Cable 4</b>	CBL-SAST-1028	1	SLIMLINE SAS, INT,Passive Latch,150 CM, power x4, 115 CM,RoH
<b>Cable 5</b>	CBL-SAST-1237-85	1	[NR] Slimline x8 (STR) to Slimline x4 (STR),FOLD,FFC,85 OHM,
<b>Cable 6</b>	CBL-SAST-1238-85	1	[NR] 2x Slimline x8 (STR) to 4x Slimline x4 (STR),FOLD,FFC,8
<b>Front Panel</b>	FPB-802A-LED12-A	1	SC802 front HDD LED board,RoHS
<b>Air Shroud</b>	MCP-310-80201-0B	2	Mylar air shroud for SC802(X12DPD)
<b>Riser Card</b>	RSC-AOM-X6	1	Bridge board for AOM 3224/3216,HF,RoHS
<b>Riser Card</b>	RSC-PR-6-X2	1	1U RHS TwinPro Riser card with one PCI-E 4.0 x16 slot,HF,RoH
<b>Riser Card</b>	RSC-X-6G4	1	1U LHS Storage riser card with one PCI-E 4.0 x16 slot,HF,RoH
<b>Software</b>	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
<b>Heatsink / Retention</b>	SNK-P0077P	2	1U Passive CPU Heat Sink for X12 Generation Intel Whitley and Cedar Island Platforms
<b>*Power Supply</b>	PWS-804P-1R	2	1U 800W 100-240VAC/50-60Hz, and DC240V input
<b>*Power Distributor</b>	PDB-PTLB16-8814	1	1U support redundanct powers up to 1200W power distributor b
<b>*Cable 7</b>	CBL-CDAT-0914	1	CBL,SGPIO,4 PIN,F/P2.5 TO 4 PIN,F/P1.25,96.5CM,RoHS
<b>*Cable 8</b>	CBL-CDAT-0963	1	SERIAL,2X10/P2.54 TO P1.25, 84CM,RoHS
<b>*Cable 9</b>	CBL-CUSB-0834	1	USB 2.0, 2*5 pin to 8 pin, 95CM
<b>*FAN 1</b>	FAN-0141L4	6	40x40x56 mm 20.5K RPM / 17.6K RPM Counter-rotating Fan
<b>*FAN 2</b>	FAN-0163L4	6	40x40x56 mm, 23.3K-20.3K RPM, Counter-rotating Fan
<b>*Front Panel</b>	FPB-FP802	1	Front control board for 802 chassis, 2*USB2.0, optional thermal sensor
<b>*Drive Tray(s)</b>	MCP-220-00161-0B	2	SC802 2.5" NVME HDD Tray (fit up to 7mm only)
<b>*Drive Tray(s)</b>	MCP-220-00162-0N	12	SC802 3.5" internal HDD Tray
<b>*Drive Tray(s)</b>	MCP-220-12109-0N	4	SC802 E1-S cage (33.75mm height, 7mm w)
<b>*Rear Window</b>	MCP-240-80203-0N	1	Rear window for SC802(S-AIOM)
<b>*Rail Set</b>	MCP-290-00153-0N	1	1U fixed rail set for SC802 w/ quick release (700mm to 940mm)

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>Network Cards</b>	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
<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