

# SuperStorage Server 2029P-E1CR24H



3 Broadcom 3108 AOC



Integrated Board

Super X11DPH-T

## Key Features

- Corporate Database
- Database Processing & Storage
- Enterprise Server
- HPC, Data Center
- iSCSI SAN

1. Dual socket P (LGA 3647) supports Intel® Xeon® Scalable Processors, 3 UPI up to 10.4GT/s
2. Up to 2TB ECC 3DS LRDIMM, up to DDR4-2666MHz; 16 DIMM slots
3. 3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8 (slot 2 & 3 occupied by controller and JBOD expansion port)
4. 24 Hot-swap 2.5" SAS3/SATA3 direct attached drive bays
5. Broadcom 3108 SAS3 AOC
6. 2x 10GBase-T LAN ports with Intel X722 + PHY Intel X557
7. Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN
8. 3 Hot-swap 8cm redundant PWM fans
9. 1200W Redundant Power Supplies Titanium Level (96%)

[▶ Drivers & Utilities](#)
[▶ BIOS](#)
[▶ IPMI](#)
[▶ Tested Memory](#)
[▶ Manuals](#)
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Note: Image above may show a varied configuration or optional parts, Please refer to parts list for standard parts included.

## Specifications

Product SKUs	
SSG-2029P-E1CR24H	▪ SuperServer 2029P-E1CR24H (Black)

Motherboard	
Super X11DPH-T	

Processor/Cache	
CPU	<ul style="list-style-type: none"> <li>▪ Dual Socket P (LGA 3647)</li> <li>▪ Intel® Xeon® Scalable Processors, 3 UPI up to 10.4GT/s</li> <li>▪ Support CPU TDP 70-205W</li> </ul>
Cores	▪ Up to 28 Cores with Intel® HT Technology


System Memory	
Memory Capacity	<ul style="list-style-type: none"> <li>▪ 16 DIMM slots</li> <li>▪ Up to 2TB ECC 3DS LRDIMM, 512GB</li> </ul>

Chassis	
Form Factor	▪ 2U Rackmount
Model	▪ CSE-216BE1C4-R1K23LPB

Dimensions	
Width	▪ 17.2" (437mm)
Height	▪ 3.5" (89mm)
Depth	▪ 24.8" (630mm)
Gross Weight	▪ 61 lbs (27.7 kg)
Available Colors	▪ Black

Front Panel	
Buttons	<ul style="list-style-type: none"> <li>▪ Power On/Off button</li> <li>▪ System Reset button</li> </ul>
	▪ Power status LED

Memory Type	<ul style="list-style-type: none"> <li>▪ 2666/2400/2133MHz ECC DDR4 SDRAM</li> </ul>
<b>On-Board Devices</b>	
Chipset	<ul style="list-style-type: none"> <li>▪ Intel® C624 chipset</li> </ul>
SAS	<ul style="list-style-type: none"> <li>▪ SAS3 (12Gbps) via Broadcom 3108 AOC; HW RAID</li> <li>▪ RAID 0, 1, 5, 6, 10, 50, 60</li> </ul>
SATA	<ul style="list-style-type: none"> <li>▪ SATA3 (6Gbps); RAID 0, 1, 5, 10</li> </ul>
Network Controllers	<ul style="list-style-type: none"> <li>▪ Dual 10GBase-T LAN ports with Intel X722 + PHY Intel X557</li> </ul>
IPMI	<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>
Video	<ul style="list-style-type: none"> <li>▪ ASPEED AST2500 BMC</li> </ul>
<b>Input / Output</b>	
LAN	<ul style="list-style-type: none"> <li>▪ 2 RJ45 10GBase-T LAN ports</li> <li>▪ 1 RJ45 Dedicated IPMI LAN port</li> </ul>
USB	<ul style="list-style-type: none"> <li>▪ 4 USB 3.0 ports (rear)</li> <li>▪ 1 Type A</li> </ul>
Video	<ul style="list-style-type: none"> <li>▪ 1 VGA port</li> </ul>
Serial Port / Header	<ul style="list-style-type: none"> <li>▪ 1 Fast UART 16550 port / 1 Header</li> </ul>
<b>System BIOS</b>	
BIOS Type	<ul style="list-style-type: none"> <li>▪ 256Mb AMI UEFI</li> </ul>
<b>Management</b>	
Software	<ul style="list-style-type: none"> <li>▪ Intel® Node Manager</li> <li>▪ <a href="#">IPMI 2.0</a></li> <li>▪ NMI</li> <li>▪ <a href="#">SPM, SUM</a></li> <li>▪ <a href="#">SuperDoctor® 5</a></li> <li>▪ Watchdog</li> </ul>
<b>PC Health Monitoring</b>	
CPU	<ul style="list-style-type: none"> <li>▪ Monitors for CPU Cores, Chipset Voltages, Memory.</li> <li>▪ 4+1 Phase-switching voltage regulator</li> </ul>
FAN	<ul style="list-style-type: none"> <li>▪ Fans with tachometer monitoring</li> <li>▪ Status monitor for speed control</li> <li>▪ Pulse Width Modulated (PWM) fan connectors</li> </ul>
Temperature	<ul style="list-style-type: none"> <li>▪ Monitoring for CPU and chassis environment</li> <li>▪ Thermal Control for fan connectors</li> </ul>

LEDs	<ul style="list-style-type: none"> <li>▪ Hard drive activity LED</li> <li>▪ Network activity LEDs</li> <li>▪ System Overheat LED</li> <li>▪ Power fail LED</li> </ul>
<b>Expansion Slots</b>	
PCI-Express	<ul style="list-style-type: none"> <li>▪ 3 PCI-E 3.0 x16 slot</li> <li>▪ 4 PCI-E 3.0 x8 slots</li> <li>▪ Slot 2 &amp; 3 occupied by controller and JBOD Expansion Port</li> </ul>
<b>Drive Bays</b>	
Hot-swap	<ul style="list-style-type: none"> <li>▪ 24 Hot-swap 2.5" SAS3/SATA3 drive bays</li> </ul>
Optional	<ul style="list-style-type: none"> <li>▪ 2 Optional Onboard NVMe M.2</li> </ul>
<b>Backplane</b>	
SAS3 12Gb/s direct attached storage backplane, w/ 24x SAS3 2.5" drive slots	
<b>System Cooling</b>	
Fans	<ul style="list-style-type: none"> <li>▪ 3 Hot-swap 8cm redundant PWM cooling fans</li> </ul>
<b>Power Supply (76mm Width)</b>	
1200W Redundant Power Supplies with PMBus	
Total Output Power	<ul style="list-style-type: none"> <li>▪ 1000W/1200W</li> </ul>
Dimension (W x H x L)	<ul style="list-style-type: none"> <li>▪ 76 x 40 x 336 mm</li> </ul>
Input	<ul style="list-style-type: none"> <li>▪ 100-127Vac / 15-12A / 50-60Hz</li> <li>▪ 200-240Vac / 8.5-7A / 50-60Hz</li> </ul>
+12V	<ul style="list-style-type: none"> <li>▪ Max: 83A / Min: 0A (100-127Vac)</li> <li>▪ Max: 100A / Min: 0A (200-240Vac)</li> </ul>
+5Vsb	<ul style="list-style-type: none"> <li>▪ Max: 4A / Min: 0A</li> </ul>
Output Type	<ul style="list-style-type: none"> <li>▪ 19 Pairs Gold Finger Connector</li> </ul>
Certification	 <p>UL/cUL/CB/BSMI/CE/CCC Titanium Level [ <a href="#">Test Report</a> ]</p>
<b>Operating Environment</b>	
RoHS	<ul style="list-style-type: none"> <li>▪ RoHS Compliant</li> </ul>
Environmental Spec.	<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>

## Parts List

Parts List - (Items Included)			
	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X11DPH-T	1	Super X11DPH-T Motherboard
	CSE-216BE1C4-R1K23LPB	1	2U Chassis
<b>Add-on Card / Module</b>	AOC-S3108L-H8IR	1	LSI 3108 based SAS3 RAID, 12Gb, 8 internal ports, 240HDD - RAID 0,1,10,5,6,50,60, Gen3 x8 Standard Low Profile
<b>Add-on Card / Module</b>	AOM-SAS3-8I8E-LP	1	8-port Mini SAS HD Int-to-Ext cable adapter w/ LP bracket,HF,RoHS/REACH
<b>Backplane</b>	BPN-SAS3-216EL1-N4	1	24-port 2U SAS3 12Gbps single-expander backplane, support up to 20x 2.5-inch SAS3/SATA3 HDD/SSD and 4x NVMe/SAS3/SATA3 storage devices
<b>Cable 1</b>	CBL-0099	1	Power extension cable; one HDD to two HDD and two FDD. 35/25/12cm. 22AWG
<b>Cable 2</b>	CBL-SAST-0532	4	MINI SAS HD,12G,INT,50CM,30AWG
<b>Parts</b>	MCP-220-82616-0N	1	12G 2.5x2 Drive Kit w/ Status LED(216B/826B/417B/846X/847B)
<b>Parts</b>	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
<b>Heatsink / Retention</b>	SNK-P0068PS	1	2U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
<b>Heatsink / Retention</b>	SNK-P0068PSC	1	2U Passive CPU Heat Sink with a Side Air Channel for X11 Purley Platform Equipped with a Narrow Retention Mechanism
<b>Power Supply</b>	PWS-1K23A-1R	2	AC-DC 1200W, Titanium Level, Redundancy, 1U, PMBUS 1.2, +12V/+5Vsb, 360x76x40 mm,HF,RoHS/REACH
<b>FAN 1</b>	FAN-0158L4	3	80x80x38 mm, 10.5K RPM, Optional Middle Cooling Fan for X10 2U Ultra and HFT Series Servers,RoHS/REACH
<b>Drive Tray(s)</b>	MCP-220-00047-0B	24	Black 3rd Gen hot-swap 2.5" HDD tray

Optional Parts List			
	Part Number	Qty	Description
<b>3108 Cache Protection</b>	BTR-TFM8G-LSICVM02	1	SuperCap Module
	BKT-BBU-BRACKET-05	1	Mounting PCIe Card
<b>HDD bracket</b>	MCP-220-82609-0N	1	2.5" Rear HDD Kit
<b>HDD bracket</b>	MCP-220-82611-0N	1	Dual 2.5" fixed HDD tray
	CBL-0289L	1	HDD Power Cable
	CBL-0473L	2	HDD SATA Cable
<b>Cable</b>	CBL-0099	1	HDD Y-Split Cable
<b>Global Services &amp; Support</b>	<a href="#">OS4HR3/2/1</a>	-	3/2/1-year onsite 24x7x4 service
	<a href="#">OSNBD3/2/1</a>	-	3/2/1-year onsite NBD service
<b>Software</b>	SFT-OOB-LIC	1	OOB Management Package (per node license)
<b>Software</b>	SFT-DCMS-Single	1	DataCenter Management Package (per node license)