

SuperStorage 2029P-E1CR24L



Broadcom 3008 AOC

Integrated Board



Super X11DPH-T

**Views: | [Angled View](#) | [Top View](#) |
| [Front View](#) | [Rear View](#) |**

[▶ Drivers & Utilities](#) ▶ [BIOS](#) ▶ [IPMI](#) ▶ [Tested Memory](#) ▶ [Tested M.2 List](#) ▶ [NVMe Options](#) ▶ [Manuals](#) ▶ [OS Certification Matrix](#)
▶ [Drive Options](#)

Key Features

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

1. Dual Socket P (LGA 3647) support
2nd Gen. Intel® Xeon® Scalable
processors (Cascade Lake/Skylake)[‡]
2. 16 DIMMs; up to 4TB 3DS ECC
DDR4-2933MHz[†] RDIMM/LRDIMM,
Supports Intel® Optane™ DCPMM^{††}
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 drive bays
including 4 optional NVMe drives;
2 Hot-swap 2.5" SATA3 drive bays (rear),
2x M.2 NVMe. Expander based backplane.
5. Broadcom 3008 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%)

Note: Image above may show a varied configuration of optional parts. Please refer to parts list for standard parts included.

Specifications

Product SKUs

- SSG-2029P-E1CR24L** ■ SuperStorage 2029P-E1CR24L (**Black**)

Motherboard

Super X11DPH-T

Processor/Cache

- CPU** ■ Dual Socket P (LGA 3647)
■ 2nd Gen. Intel® Xeon® Scalable Processors (Cascade Lake/Skylake)[‡],
3 UPI up to 10.4GT/s
■ Support CPU TDP 70-205W

- Cores** ■ Up to 28 Cores

- Note** [‡] BIOS version 3.0a or above is required to support 2nd Gen. Intel® Xeon® Scalable processors

System Memory

- Memory Capacity** ■ 16 DIMM slots
■ Up to 4TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM
■ Supports Intel® Optane™ DCPMM^{††}

- Memory Type** ■ 2933[†]/2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM

- Note** [†] 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro
^{††} Cascade Lake only. Contact your Supermicro sales rep for more info.

On-Board Devices

- Chipset** ■ Intel® C622 chipset
- SAS** ■ SAS3 (12Gbps) via Broadcom 3008 AOC
■ Broadcom 3008 controller
- SATA** ■ SATA3 (6Gbps); RAID 0, 1, 5, 10
- Network Controllers** ■ Dual 10GBase-T LAN ports with Intel X722 + PHY Intel X557
- IPMI** ■ Support for Intelligent Platform Management Interface v.2.0
■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
- Video** ■ ASPEED AST2500 BMC

Input / Output

- LAN** ■ 2 RJ45 10GBase-T LAN ports
■ 1 RJ45 Dedicated IPMI LAN port
- USB** ■ 4 USB 3.0 ports (rear)
■ 1 Type A
- Video** ■ 1 VGA port
- Serial Port / Header** ■ 1 Fast UART 16550 port / 1 Header

System BIOS

- BIOS Type** ■ 256Mb AMI UEFI

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** ■ Power On/Off button
■ System Reset button

- LEDs** ■ Power status LED
■ Hard drive activity LED
■ Network activity LEDs
■ System Information LED
■ Power fail LED

Expansion Slots

- PCI-Express** ■ 3 PCI-E 3.0 x16 slot
■ 4 PCI-E 3.0 x8 slots
■ Slot 2 & 3 occupied by controller and JBOD Expansion Port

Drive Bays

- Hot-swap** ■ 24 Hot-sw ap 2.5" SAS3/SATA3 drive bays
■ 2 Hot-sw ap 2.5" SATA3 drive bays (rear)

- Optional** ■ 2 Optional Onboard NVMe M.2

Backplane

Expander based backplane

System Cooling

- Fans** ■ 3 Hot-sw ap 8cm redundant PWM cooling fans

Power Supply (76mm Width)

1200W Redundant Power Supplies with PMBus

- Total Output Power** ■ 1000W/1200W

- Dimension (W x H x L)** ■ 76 x 40 x 336 mm

- Input** ■ 100-127Vac / 15-12A / 50-60Hz
■ 200-240Vac / 8.5-7A / 50-60Hz
■ 200-240Vdc / 8.5-7A (for CCC only)

- +12V** ■ Max: 83A / Min: 0A (100-127Vac)
■ Max: 100A / Min: 0A (200-240Vac)
■ Max: 100A / Min: 0A (200-240Vdc)

- +5Vsb** ■ Max: 4A / Min: 0A

Management

- Software**
- Intel® Node Manager
 - IPMI 2.0
 - NMI
 - SPM, SUM
 - SuperDoctor® 5
 - Watchdog

PC Health Monitoring

- CPU**
- Monitors for CPU Cores, Chipset Voltages, Memory.
 - 4+1 Phase-sw itching voltage regulator
- FAN**
- Fans with tachometer monitoring
 - Status monitor for speed control
 - Pulse Width Modulated (PWM) fan connectors
- Temperature**
- Monitoring for CPU and chassis environment
 - Thermal Control for fan connectors

- Output Type**
- 19 Pairs Gold Finger Connector

Certification



Titanium Level
[Test Report]

Operating Environment

- RoHS**
- RoHS Compliant
- 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)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X11DPH-T	1	Super X11DPH-T Motherboard
	CSE-216BE1C4-R1K23LPB	1	2U Chassis
Add-on Card / Module	AOM-SAS3-8I8E-LP	1	8-port Mini SAS HD Int-to-Ext cable adapter w / LP bracket,HF,RoHS/REACH
Backplane	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
Cable 1	CBL-0099	1	Power extension cable; one HDD to two HDD and two FDD. 35/25/12cm. 22AWG
Cable 2	CBL-SAST-0532	4	MINI SAS HD,12G,INT,50CM,30AWG
Parts	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
Parts	MCP-220-82616-0N	1	12G 2.5x2 Drive Kit w / Status LED(216B/826B/417B/846X/847B)
Heatsink / Retention	SNK-P0068PS	1	2U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
Heatsink / Retention	SNK-P0068PSC	1	2U Passive CPU Heat Sink with a Side Air Channel for X11 Purley Platform Equipped with a Narrow Retention Mechanism
* Power Supply	PWS-1K23A-1R	2	AC-DC 1200W, Titanium Level, Redundancy, 1U, PMBUS 1.2, +12V/+5Vsb, 360x76x40 mm,HF,RoHS/REACH
* Power Distributor	PDB-PT216-2824	1	PDB with 23pairs input connectors for SC216B
* Cable 3	CBL-0071L	1	CBL,FRONT CNTL,16 TO 16 PIN,RA,RND TUBE,75CM,28AWG
* Cable 4	CBL-0088	3	10.5", 4 PIN MIDDLE FAN POWER EXTENSION (PWM)
* Cable 5	CBL-0160L	2	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
* Cable 6	CBL-0182L	1	4 pin to 4 pin power extension .HDD to RA,40cm. 20AWG
* Cable 7	CBL-0217L	1	CBL,CNTL PANEL CONVERTER,FOR SC826/846,FFC,16PIN,22CM
* FAN 1	FAN-0158L4	3	80x80x38 mm, 10.5K RPM, Optional Middle Cooling Fan for X10 2U Ultra and HFT Series Servers,RoHS/REACH
* Front Panel	FPB-FP826-D	1	Front control board Dual color LED(FP826-D)forSC826,213,216,219
* Drive Tray(s)	MCP-220-00047-0B	24	Black gen 3rd hot-sw ap 2.5inch HDD tray
* Rear Window	MCP-240-82608-0N	1	216B/826B LP rear window,RoHS/REACH,PBF
* Rail Set	MCP-290-00053-0N	1	Rail set, quick/quick, default for 2,3U 17.2";W
* Drive Tray(s)	MCP-290-82607-0N	1	826B/216B rear dummy cover for 2 X 2.5
* Air Shroud	MCP-310-29001-0N	1	SC825/826/216/213 Intel DP X9,X8 air shroud 13.68x13/12x13
* Rail Set	MCP-410-00007-0N	1	Rail screw bag
* Front Panel	TB826	1	Front panel adaptor board (TB826) forSC826,213,216,219

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
4 NVMe Drives Support	AOC-SLG3-2E4R	2	Dual-Port PCIe Gen-3 NVMe Internal Host Bus Adapter
	CBL-SAST-0590	4	MINI SAS HD,INT,PCIe NVMe SSD, 70CM,30AWG
	MCP-220-00121-0B	4	Black gen-3 2.5 NVMe drive tray
Cable	CBL-0099	1	HDD Y-Split Cable
Global Services & Support	<u>OS4HR3/2/1</u>	-	3/2/1-year onsite 24x7x4 service
	<u>OSNBD3/2/1</u>	-	3/2/1-year onsite NBD service

Software	<u>SFT-OOB-LIC</u> • <i>eStore</i>	1	OOB Management Package (per node license)
Software	<u>SFT-DCMS-Single</u>	1	DataCenter Management Package (per node license)