

SuperStorage 6029P-E1CR12H



Broadcom 3108 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. 12 Hot-swap 3.5" SAS3/SATA3 drive
bays including 4 optional NVMe
drives; 2 hot-swap 2.5" SATA3
drive bays (rear), 2 M.2 NVMe,
Expander based backplane
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%)

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

Specifications

Product SKUs

- | | |
|--------------------------|--------------------------------------|
| SSG-6029P-E1CR12H | ■ SuperStorage 6029P-E1CR12H (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 |
|------------|---|

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|--------------|------------------|
| Cores | ■ Up to 28 Cores |
|--------------|------------------|

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|-------------|---|
| 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†† |
|------------------------|--|

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|--------------------|---|
| Memory Type | ■ 2933†/2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM |
|--------------------|---|

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|-------------|--|
| 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. |
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On-Board Devices

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|----------------------------|--|
| Chipset | ■ Intel® C622 chipset |
| SAS | ■ SAS3 (12Gbps) via Broadcom 3108 AOC; HW RAID
■ RAID 0, 1, 5, 6, 10, 50, 60 |
| 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

Chassis

- | | |
|--------------------|----------------|
| Form Factor | ■ 2U Rackmount |
|--------------------|----------------|

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|--------------|--------------------------------|
| Model | ■ CSE-826BE1C4-R1K23LPB |
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Dimensions

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|--------------|-----------------|
| Width | ■ 17.2" (437mm) |
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|---------------|---------------|
| Height | ■ 3.5" (89mm) |
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- | | |
|--------------|-----------------|
| Depth | ■ 24.8" (630mm) |
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- | | |
|---------------------|--------------------|
| 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

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|--------------------|---|
| 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 |
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Drive Bays

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|-----------------|---|
| Hot-swap | ■ 12 Hot-swap 3.5" SAS3/SATA3 drive bays
■ 2 Hot-swap 2.5" SATA3 drive bays (rear) |
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|-----------------|------------------------------|
| Optional | ■ 4 U.2 NVMe
■ 2 M.2 NVMe |
|-----------------|------------------------------|

Backplane

SAS3 12Gb/s expander storage backplane, w/ 12x SAS3 3.5" drive slots

System Cooling

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| Fans | ■ 3 Hot-swap 8cm redundant PWM cooling fans |
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Power Supply (76mm Width)

1200W Redundant Power Supplies with PMBus

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|---------------------------|---------------|
| Total Output Power | ■ 1000W/1200W |
|---------------------------|---------------|

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

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|--------------|--|
| 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) |
|-------------|---|

BIOS Type	■ 256Mb AMI UEFI
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Management	
Software	■ Intel® Node Manager ■ <u>IPMI 2.0</u> ■ NMI ■ <u>SPM, SUM</u> ■ <u>SuperDoctor® 5</u> ■ Watchdog

PC Health Monitoring	
CPU	■ Monitors for CPU Cores, Chipset Voltages, Memory. ■ 4+1 Phase-switching voltage regulator

FAN	■ Fans with tachometer monitoring ■ Status monitor for speed control ■ Pulse Width Modulated (PWM) fan connectors
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Temperature	■ Monitoring for CPU and chassis environment ■ Thermal Control for fan connectors
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+5Vsb	■ Max: 4A / Min: 0A
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Output Type	■ 19 Pairs Gold Finger Connector
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Certification	  Titanium Level [<u>Test Report</u>]
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Operating Environment

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
Motherboard / Chassis	MBD-X11DPH-T	1	Super X11DPH-T Motherboard
	CSE-826BE1C4-R1K23LPB	1	2U Chassis
Add-on Card / Module	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
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-SAS3-826EL1-N4	1	12-port 2U SAS3 12Gbps single-expander backplane, support up to 8x 3.5-inch SAS3/SATA3 HDD/SSD and 4x NVMe/SAS3/SATA3 storage devices
Cable 1	CBL-SAST-0532	4	MINI SAS HD,12G,INT,50CM,30AWG
Parts	MCP-220-82616-0N	1	12G 2.5x2 Drive Kit w / Status LED(216B/826B/417B/846X/847B)
Parts	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
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
FAN 1	FAN-0158L4	3	80x80x38 mm, 10.5K RPM, Optional Middle Cooling Fan for X10 2U Ultra and HFT Series Servers,RoHS/REACH
Rear Window	MCP-240-82608-0N	1	216B/826B LP rear window,RoHS/REACH,PBF
Power Supply	PWS-1K23A-1R	2	AC-DC 1200W, Titanium Level, Redundancy, 1U, PMBUS 1.2, +12V/+5Vsb, 360x76x40 mm,HF,RoHS/REACH

Optional Parts List

	Part Number	Qty	Description
Converter Trays	MCP-220-00118-0B	-	Black gen-5.5 tool-less 3.5-to-2.5 converter drive tray
	MCP-220-00043-0N	-	Black hot-sw ap gen 4 3.5 to 2.5 HDD tray
4 NVMe Drives Support	AOC-SLG3-2E4R	2	NVMe AOC
	CBL-SAST-0590	4	Internal Mini-SAS HD cable for PCIe SSD NVMe, 12Gb/s, 70cm
	MCP-220-00116-0B	4	3.5" to 2.5" NVMe drive tray
3108 Cache Protection	BTR-TFM8G-LSICVM02	1	SuperCap Module
	BKT-BBU-BRACKET-05	1	Mounting PCIe Card
Cable	CBL-SAST-0388L-02	1	Mini-SAS (iPASS) to 4-SATA Cable - To offer 2 SATADOM support on Motherboard
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> • eStore	1	OOB Management Package (per node license)
Software	<u>SFT-DCMS-Single</u>	1	DataCenter Management Package (per node license)