

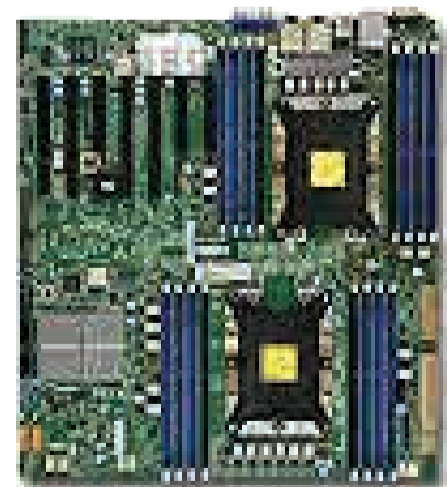
Key Features

- 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 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%)



Integrated Board



Super X11DPH-T

Specifications

Product SKUs

- SSG-2029P-E1CR24H
 - SuperStorage 2029P-E1CR24H (Black)

Motherboard

Super X11DPH-T

Processor/Cache

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

- Cores**
 - Up to 28 Cores

- Note**
 - [‡] BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)

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 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

- BIOS Type**
 - 256Mb AMI UEFI

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-switching 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

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-swap 2.5" SAS3/SATA3 drive bays
 - 2 Hot-swap 2.5" SATA3 drive bays (rear)
- Optional**
 - 2 Optional Onboard NVMe M.2

Backplane


Expander based backplane

System Cooling

- Fans**
 - 3 Hot-swap 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
- 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	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-SAS3-216EL1-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-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
Power Supply	PWS-1K23A-1R	2	AC-DC 1200W, Titanium Level, Redundancy, 1U, PMBUS 1.2, +12V/+5Vsb, 360x76x40 mm,HF,RoHS/REACH
FAN 1	FAN-0158L4	3	80x80x38 mm, 10.5K RPM, Optional Middle Cooling Fan for X10 2U Ultra and HFT Series Servers,RoHS/REACH
Drive Tray(s)	MCP-220-00047-0B	24	Black 3rd Gen hot-swap 2.5" HDD tray

Optional Parts List

	Part Number	Qty	Description
4 NVMe Drives Support	AOC-SLG3-2E4R-O	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
3108 Cache Protection	BTR-TFM8G-LSICVM02	1	SuperCap Module
	BKT-BBU-BRACKET-05	1	Mounting PCIe Card
Cable	CBL-0099	1	HDD Y-Split Cable
Global Services & Support	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	OSNBD3/2/1	-	3/2/1-year onsite NBD service
Software	SFT-OOB-LIC • eStore	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)