

SuperStorage 5049P-E1CTR36L



Integrated Board



Super X11SPH-nCTF

Views: | [Angled View](#) | [Top View](#) |
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Key Features

- **Connectivity/Storage Compute Nodes**
- **Database Processing & Storage Appliance Platform**

1. Single Socket P (LGA 3647) supports 2nd Gen. Intel® Xeon® Scalable processor (Cascade Lake/Skylake)[‡]
2. 8 DIMMs; up to 2TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM, Supports Intel® Optane™ DCPMM^{††}
3. 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8, 1 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8)
4. 2x 10GBase-T with Intel® X557
5. 36 Hot-swap 3.5" SAS/SATA drive bays with SES3 (24 front + 12 rear); 4 Internal fixed 2.5" drive bays 2 Hot-swap 2.5" NVMe/SATA (rear, optional)
6. SAS3 via Broadcom 3008 controller
7. Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN
8. 7 High-performance 8cm 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-5049P-E1CTR36L** ■ SuperStorage 5049P-E1CTR36L (Black)

Motherboard

Super X11SPH-nCTE

Processor/Cache

- CPU** ■ Single Socket P (LGA 3647)
■ 2nd Gen. Intel® Xeon® Scalable Processors (Cascade Lake/Skylake)†
■ Support CPU TDP 70-205W
- Cores** ■ Up to 28 Cores
- Note** † BIOS version 3.0b or above is required to support 2nd Gen. Intel® Xeon® Scalable processors

System Memory

- Memory Capacity** ■ 8 DIMM slots
■ Up to 2TB 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
- SATA** ■ SATA3 (6Gbps) via C622 controller
■ RAID 0, 1, 5, 10 support
- SAS** ■ SAS3 (12Gbps) via Broadcom 3008
■ SW RAID 0, 1, 10
- Network Controllers** ■ Dual LAN with 10GBase-T with Intel® X722 + X557
- IPMI** ■ Support for Intelligent Platform Management Interface v.2.0
■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
- Graphics** ■ ASPEED AST2500 BMC

Input / Output

- LAN** ■ 2 RJ45 10GBase-T LAN ports
■ 1 RJ45 Dedicated IPMI LAN port
- USB** ■ 5 USB 3.0 ports (2 rear + 2 headers + 1 Type A)
■ 8 USB 2.0 ports (2 rear + 6 headers)
- VGA** ■ 1x VGA port
- Serial Port / Header** ■ 2 COM Ports (1 rear, 1 header)

System BIOS

- BIOS Type** ■ AMI UEFI

Chassis

- Form Factor** ■ 4U Rackmount
- Model** ■ CSE-847BTS-R1K23LPBP

Dimensions and Weight

- Width** ■ 17.2" (437mm)
- Height** ■ 7" (178mm)
- Depth** ■ 27.5" (699mm)
- Package** ■ 17.5" (H) x 27" (W) x 39.5" (D)
- Weight** ■ Gross Weight: 102.5 lbs (46.4 kg)
■ Net Weight: 65.5 lbs (29.7 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** ■ 1 PCI-E 3.0 x16
■ 1 PCI-E 3.0 x8
■ 1 PCI-E 3.0 x8
■ 1 PCI-E 3.0 x4 (in x8)
- M.2** ■ 1x M.2 Interface: PCI-E 3.0 x4 and SATA
■ Form Factor: 2280
■ Key: M-Key
■ Double Height Connector

Drive Bays / Storage

- Hot-swap** ■ 36 Hot-swap 3.5" SAS/SATA drive bays (24 front + 12 rear drive bays)
- Fixed** ■ 4 Internal fixed 2.5" drive bays
- Optional** ■ 2 Hot-swap 2.5" NVMe/SATA drive bays (rear)
- M.2** ■ M.2 Interface: PCI-E 3.0 x4 and SATA
■ Form Factor: 2280
■ Key: M-Key
■ Double Height Connector

Backplane

SAS3 / SATA3 single expander per backplane

System Cooling

- Fans** ■ 7 High-performance 80mm cooling fans

Power Supply (76mm Width)

- 1200W Redundant Power Supplies with PMBus
- Total Output Power** ■ 1000W/1200W

Management

Software

- Intel® Node Manager
- IPMI 2.0
- KVM with dedicated LAN
- NMI
- SPM, SUM
- SuperDoctor® 5
- Watch Dog

Power Configurations

- ACPI Power Management

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

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-X11SPH-nCTF	1	Super X11SPH-nCTF Motherboard
	CSE-847BTS-R1K23LPBP	1	4U 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	BPB-SAS3-826EL1	1	12-port 2U SAS3 12Gbps single-expander backplane, support up to 12x 3.5-inch SAS3/SATA3 HDD/SSD
Backplane	BPB-SAS3-846EL1	1	24-port 4U SAS3 12Gbps single-expander backplane, support up to 24x 3.5-inch SAS3/SATA3 HDD/SSD
Cable 1	CBL-0296L	4	4 pin to 4 pin fan extension cord, for PWM fan. 23cm. 24AWG
Cable 2	CBL-SAST-0531-01	6	MINI SAS HD,12G,INT,80CM,30AWG
Parts	MCP-260-00109-0N	1	Standard I/O Shield for X11SPM-TF w ith EMI Gasket
Manual	MNL-1992-QRG	1	5049P-E1CR36L Quick Reference Guide
Heatsink / Retention	SNK-P0068PS	1	2U Passive CPU Heat Sink for X11 Purley Platform Equipped w ith 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	7	80x80x38 mm, 10.5K RPM, Optional Middle Cooling Fan for X10 2U Ultra and HFT Series Servers,RoHS/REACH

Optional Parts List

	Part Number	Qty	Description
Drive Trays	MCP-220-84701-0N	-	SC847 Internal drive tray for one 3.5"
2.5" to 3.5" Converter Tray	MCP-220-00043-0N	-	Black Hot-sw ap Gen-4 2.5" to 3.5" HDD tray
Peripheral Drives	MCP-220-82616-0N	1	Rear Window 12G 2x 2.5" HDD Module
Storage Controller card & cable	AOC-S3108L-H8iR	-	Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8, RAID controller, RAID 0, 1, 5, 6, 10, 50, 60
CacheVault	BTR-TFM8G-LSICV M02 & BKT-BBU-BRACKET-05	-	CacheVault for Broadcom 3108 w ith SuperCap mounting bracket for PCI-E location
Network Card(s)	AOC-SGP-i2	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel i350-AM2
	AOC-SGP-i4	-	Standard LP, 4x GbE RJ45, PCI-E x4, Intel i350
	AOC-STGN-i2S	-	Standard Lp, 2x 10GbE SFP+, PCI-E x8, Intel 82599ES
	AOC-STGF-i2S	-	Standard Lp, 2x 10GbE SFP+, PCI-E x8, Intel X710-BM2
	AOC-STG-B4S	-	Standard Lp, 4x 10GbE SFP+, PCI-E x8, Broadcom BCM57840S
	AOC-STGS-i2T	-	Standard Lp, 2x 10GbE RJ45, PCI-E x8, Intel X550-AT2
	AOC-S25G-b2S	-	Standard LP, 2x 25GbE SFP28, PCI-E x8, Broadcom BCM57414
	AOC-S25G-m2S	-	Standard LP, 2x 25GbE SFP28, PCI-E x8, Mellanox CX-4 LX
NVMe Optional Parts (Complete System Only)	MCP-220-82619-0N	1	Rear hot-sw ap 2.5" x2 NVMe drive kit
	CBL-SAST-0819	2	OCuLink v1.0 INT PCIe NVMe SSD, 65CM, 34AWG
Front Bezels	MCP-210-84601-0B	1	Black front bezels
TPM security module	AOM-TPM-9670V	1	TPM 2.0, vertical form factor
	AOM-TPM-9671V	1	TPM 1.2, vertical form factor
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)