

SuperStorage 6049P-E1CR24L



Integrated Board



Super X11DPH-T

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

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 3.5" SAS3/SATA3
drive bays; 2 hot-swap 2.5"
SATA3 drive bays (rear),
2 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
cooling fans, 2 hot-swap 8cm rear
exhaust PWM fans PWM fans
9. 1200W Redundant Power Supplies
Titanium Level (96%)

Specifications

Product SKUs

- SSG-6049P-E1CR24L** ■ SuperStorage 6049P-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 Supramicro
^{††} Cascade Lake only. Contact your Supramicro 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) w ith RAID 0, 1, 5, 10
- Network Controllers** ■ Dual 10GBase-T LAN ports w ith Intel X722 + PHY Intel X557
- IPMI** ■ Support for Intelligent Platform Management Interface v.2.0
■ IPMI 2.0 w ith 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** ■ 4 USB 3.0 ports (rear)
■ 1 Type A
- VGA** ■ 1 VGA port
- Serial Port / Header** ■ 1 Fast UART 16550 port / 1 Header

System BIOS

- BIOS Type** ■ 256Mb AMI UEFI

Chassis

- Form Factor** ■ 4U Rackmount

- Model** ■ **CSE-846BE1C-R1K23B**

Dimensions

- Width** ■ 17.2" (437mm)
- Height** ■ 7" (178mm)
- Depth** ■ 26.5" (673mm)
- Weight** ■ Gross Weight: 92 lbs (41.7 kg)
■ Net Weight: 55 lbs (24.9 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 3.5" SAS3/SATA3 drive bays
- Optional** ■ 2 Optional Onboard NVMe M.2

Backplane

SAS3/SATA3 single expander per backplane

System Cooling

- Fans** ■ 3 Hot-sw ap 8cm redundant PWM cooling fans
■ 2 Hot-sw ap 8cm rear exhaust PWM fans
■ Redundant cooling

Power Supply (76mm Width)

1200W Redundant Power Supplies w ith 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-846BE1C-R1K23B	1	4U Chassis
Add On Card	AOC-S3008L-L8E-O-P	1	LSI 3008 based SAS3 HBA, 12Gb, 8 internal ports, 122HDD, Gen3 x8 Standard Low Profile
Add On Module	AOM-SAS3-8I8E-LP	1	8-port Mini SAS HD Int-to-Ext cable adapter w / LP bracket
Add-on Card / Module	AOM-SAS3-8I8E	1	8-port Mini SAS HD Int-to-Ext cable adapter w / FH bracket, HF, RoHS/REACH
Backplane	BPN-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-0099	1	Power extension cable; one HDD to two HDD and two FDD. 35/25/12cm. 22AWG
Cable 2	CBL-0296L	3	4 pin to 4 pin fan extension cord, for PWM fan. 23cm. 24AWG
Cable 3	CBL-PWEX-0645	2	big 4 pin male to big 4 pin female, power extension 15cm, 20AWG, RoHS/REACH
Cable 4	CBL-SAST-0531-01	4	MINI SAS HD, 12G, INT, 80CM, 30AWG
Parts	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
Heatsink / Retention	SNK-P0068PS	2	2U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
HDD kit	MCP-220-84606-0N	2	Rear dual 2.5 hot swap HDD kit for SC846B
* 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-PT846-2824	1	PDB with 23pairs input connector support SC846B
* Cable 5	CBL-0071L	1	CBL, FRONT CNTL, 16 TO 16 PIN, RA, RND TUBE, 75CM, 28AWG
* Cable 6	CBL-0160L	2	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
* Cable 7	CBL-0217L	1	CBL, CNTL PANEL CONVERTER, FOR SC826/846, FFC, 16PIN, 22CM
* FAN 1	FAN-0125L4	2	80x32 mm 6.7K RPM SC836 Rear Exhaust Fan w / Housing
* FAN 2	FAN-0185L4	3	80x80x38 mm, 10.5K RPM, Hot-swappable Middle Cooling Fan for X11 Generation SC846B Chassis
* Drive Tray(s)	MCP-220-00075-0B	24	Black gen 5.5 hot-swappable 3.5"; HDD tray
* Rear Window	MCP-240-84602-0N	1	846B rear window which support 2 X 2.5"; HDD module and DVD
* Front Panel	MCP-280-82601-0N	1	Front control board adapter (TB826) for SC216, 826, 936, 846
* Rail Set	MCP-290-00057-0N	1 set	Rail set, quick/quick, default for 4U 17.2"; W
* Power Supply	MCP-290-84604-0N	1	SC846 PDB Cover
* Air Shroud	MCP-310-49003-0N	1	SC846 Intel DP X9, X8 PC air shroud 1368x13/12x13MB
* Rail Set	MCP-410-00007-0N	1	Rail screw bag

Notes:

- Parts with * are inside the chassis
- 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
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-swappable gen 4 3.5 to 2.5 HDD tray
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)

