

SuperServer 7049P-TRT



Integrated Board



Super X11DPi-NT

**Views: | [Angled View](#) | [Side View](#) |
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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

Cost Effective

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. 4 PCI-E 3.0 x16, 2 PCI-E 3.0 x8 slots
4. 8 Hot-swap 2.5"/3.5" SATA3 (6Gbps) drive bays; RAID 0, 1, 5, 10
5. Optional DVD-ROM drive, optional support: 2 fixed 2.5" NVMe/SSD/HDD, 1 M.2 support
6. **M.2 Interface:** PCI-E 3.0 x4
M.2 Form Factor: 2260, 2280, 22110
M.2 Key: M-Key
7. 3 Peripheral 5.25" bays
8. 2x 10GBase-T LAN ports with Intel X722
9. 1200W Redundant Power Supplies
Titanium Level
(Updated for 2021 Version)

Specifications

Product SKUs

SYS-7049P-TRT ■ SuperServer 7049P-TRT (Black)

Motherboard

Super X11DPI-NT

Processor

CPU ■ Dual Socket P (LGA 3647)
 ■ 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors[‡], Dual 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)
 * CPU SKUs not supported: Gold 6256 and Gold 6250(L) (L = increased memory capacity per socket), Gold 6233W and Gold 5216W

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

SATA ■ SATA3 (6Gbps); RAID 0, 1, 5, 10

Network Controllers ■ Intel® X722 10GBase-T Ethernet Controller
 ■ Virtual Machine Device Queues reduce I/O overhead
 ■ Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output

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

SATA ■ 8 SATA3 (6Gbps) ports

LAN ■ 2 RJ45 10GBase-T LAN ports
 ■ 1 RJ45 Dedicated IPMI LAN port

USB ■ Rear USB: 2 USB 3.0 + 2 USB 2.0
 ■ Front USB: 2 USB 2.0
 ■ USB Header: 1 Type A

Chassis

Form Factor ■ 4U Rackmountable / Tower
 ■ Optional Rackmount Kit

Model ■ CSE-745BTS-R1K23B

Dimensions and Weight

Height ■ 17.8" (452mm)

Width ■ 7.0" (178mm)

Depth ■ 25.5" (648mm)

Package ■ 24" (H) x 14" (W) x 26.5" (D)

Weight ■ Net Weight: 56 lbs (25.6 kg)
 ■ Gross Weight: 73.5 lbs (33.6 kg)

Available Colors ■ Black

Front Panel

Buttons ■ Power On/Off button
 ■ System Reset button

LEDs ■ Power LED
 ■ Hard drive activity LED
 ■ Network activity LEDs
 ■ System Information LED
 ■ Power Fail LED

Ports ■ 2 USB Ports

Expansion Slots

PCI-Express ■ 4 PCI-E 3.0 x16 slots
 ■ 2 PCI-E 3.0 x8 slots
 ■ Support total of 6 Full-height AOC

Drive Bays

Hot-swap ■ 8 Hot-swap 2.5"/3.5" SATA3 (6Gbps) drive bays

Peripheral Bays ■ 3 Peripheral 5.25" drive bays

SAS / SATA Backplane

SAS / SATA Hard Drive Backplane w/AMI MG9072

System Cooling

Fans ■ 3x 80mm high-performance fans
 ■ 2x 80mm PWM Rear Chassis fans

Power Supply

1200W Redundant High-efficiency Power Supplies

Total Output Power ■ 1000W with Input 100 - 127Vac
 ■ 1200W with Input 200 - 240Vac
 ■ 1200W with Input 200 - 240Vdc (for CCC only)

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

Input ■ 50-60Hz

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

Video	<ul style="list-style-type: none"> 1 VGA port
Serial Port / Header	<ul style="list-style-type: none"> 2 Fast UART 16550 serial 2 COM Ports (1 rear, 1 header)
DOM	<ul style="list-style-type: none"> 2 Super<u>DOM</u> (Disk on Module) ports

System BIOS

BIOS Type	<ul style="list-style-type: none"> AMI UEFI
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Management

Software	<ul style="list-style-type: none"> Intel® Node Manager <u>IPMI 2.0</u> KVM with dedicated LAN NMI <u>SSM, SPM, SUM</u> <u>SuperDoctor@ 5</u>
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Power Configurations	<ul style="list-style-type: none"> ACPI Power Management
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PC Health Monitoring

CPU	<ul style="list-style-type: none"> Monitors for CPU Cores, Chipset Voltages, Memory. 4+1 Phase-switching voltage regulator
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FAN	<ul style="list-style-type: none"> Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors
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Temperature	<ul style="list-style-type: none"> Monitoring for CPU and chassis environment Thermal Control for fan connectors
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Certification



Titanium Level

Operating Environment

RoHS	<ul style="list-style-type: none"> RoHS Compliant
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Environmental Spec.	<ul style="list-style-type: none"> 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-X11DPI-NT	1	Super X11DPI-NT Motherboard
	CSE-745BTS-R1K23B	1	4U Chassis
Backplane	BPN-SAS3-743A	1	8-port 4U/Tower 3.5-inch SAS3/SAS2/SATA3 12Gbps backplane for SC743/SC745 chassis
Cable 1	CBL-SAST-0508-01	2	MINI SAS HD-MINI SAS,6G,INT,50CM,SB,30AWG
Cable 2	CBL-SAST-0508-02	2	MINI SAS HD-MINI SAS,6G,INT,50CM,SB,30AWG
Parts	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
Manual	MNL-1940-QRG	1	SYS-7049P-TR/SYS-7049P-TRT, QRG
Heatsink / Retention	SNK-P0068PS	2	2U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
* Power Supply	PWS-1K23A-SQ	2	1U, Redundancy, Titanium, Input: 100-127Vac, 200-240Vac
* Power Distributor	PDB-PT747-4648	1	POWER DISTRIBUTOR FOR SC747 W/ GRAPHIC OUTPUT FEATURE
* Cable 3	CBL-0087	1	CBL,FRONT CNTL,16 TO 16 PIN,Ribbon,50CM
* Cable 4	CBL-0160L	2	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
* Cable 5	CBL-0216L	3	4 PIN TO 4 PIN MIDDLE FAN POWER EXTENSION, 20cm. 24AWG(PWM)
* Cable 6	CBL-0471L	1	USB 3.0,INT,19 PIN/F TO 19PIN/F,2 CH,80CM,30/28/26AWG
* FAN 1	FAN-0180L4	2	80x80x38 mm, 9.4K RPM, Hot-swappable Rear Exhaust Fan for X11 Purley Platform Newly Enabled 4U Chassis
* FAN 2	FAN-0182L4	3	80x80x38 mm, 9.4K RPM, Hot-swappable Middle Cooling Fan for X11 Purley Platform Newly Enabled 4U Chassis
* Drive Tray(s)	MCP-220-00092-0B	8	Black Hot-swap 3.5inch HDD Tray (w/o logo)
* Parts	MCP-290-74502-0B	1	Plastic feet (4 pcs set) for 4U tower chassis, black color
* Air Shroud	MCP-310-49001-0N	1	SC745 Intel DP X9, X8 PC air shroud 1368x13/12x13MB

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
Storage Controller Card(s) & Cables(s)	AOC-S3008L-L8i & 2x CBL-SAST-0531-01	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 63HDD; RAID 0, 1, 10
	AOC-S3008L-L8e & 2x CBL-SAST-0531-01		Standard LP, 8 internal ports (12Gb/s) Gen-3, 122HDD; HBA
	AOC-S3108L-H8IR & 2x CBL-SAST-0531-01		Standard LP, 8 internal ports (12Gb/s) 8x Gen3; RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3108L-H8IR-16DD & 2x CBL-SAST-0531-01		Standard LP, 8 internal ports (12Gb/s) Gen-3, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60
Mounting Rails	CSE-PT26L-B	1	4U Chassis Rail Kits SC743,745 (w/ 2pcs Black Chassis Ears)
5.25" SATA DVD drive	5.25" DVD reader or writer	1	Any third party 5.25 inch SATA DVD reader or writer
SATA cable for DVD drive	CBL-0178L	1	SATA CABLE 48CM FLAT S-S PBF. 26AWG
SATA Power cable for DVD drive	CBL-0080L	1	Big 4 pin to SATA POWER ADAPTER CABLE 6", 18AWG
2.5" NVMe fixed drive support	MCP-220-00160-0N	1	Dual 2.5" NVMe Drive BKT: 743, 745, 502, 503, 510, 512, 515
2.5" NVMe fixed drive support	CBL-SAST-0956	1	Oculink to 1 NVMe drive w/ power, each NVMe drive needs 1 cable, system can support total 2 NVMe fixed drives

3.5" to 2.5" HDD tray Converter	MCP-220-00080-0B	1	Black hot-swap gen2 3.5" to 2.5" HDD tray converter. Each 2.5" drive needs one converter, total 8x 2.5" Hot-swap drives can be supported
HDD Bracket	MCP-220-00044-0N	1	Dual 2.5" fixed HDD bracket for SC502, 503, 510, 512, 515U
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)

