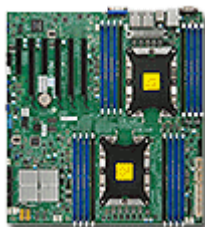




Integrated Board



Super X11DPi-N

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](#) | [▶ Quick-References Guide](#) | [▶ Drive Options](#) | [▶ Network Card \(AOC\) Matrix](#)

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 3.5" SATA3 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 1GbE LAN ports with Intel® X722
9. 1280W Redundant Power Supplies
Platinum Level (94%)

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

Specifications

Product SKUs

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

Motherboard

Super X11DPI-N

Processor/Cache

CPU ■ Dual Socket P (LGA 3647)
■ 2nd Gen. Intel® Xeon® Scalable Processors (Cascade Lake/Skylake)[‡],
Dual 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 Supermicro
^{††} Cascade Lake only. Contact your Supermicro sales rep for more info.

On-Board Devices

Chipset ■ Intel® C621 chipset

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

Network Controllers ■ Dual 1GbE LAN with Intel® X722

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 Gigabit Ethernet 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

Video ■ 1 VGA port

Serial Port / Header ■ 2 Fast UART 16550 serial
■ 2 COM Ports (1 rear, 1 header)

DOM ■ 2 SuperDOM (Disk on Module) ports

System BIOS

BIOS Type ■ AMI UEFI

Management

Chassis

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

Model ■ **CSE-745BAC-R1K28B2**

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 3.5" SATA3 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

1280W Redundant High-efficiency Digital Power Supplies w / PMBus 1.2

AC Input ■ 1000W Output @ 100-140V, 8-12A, 50-60Hz
■ 1280W Output @ 180-240V, 6-8A, 50-60Hz

DC Output ■ 1000W: +12V/83A; +5Vsb/4A
■ 1280W: +12V/106.7A, +5Vsb/4A

Certification   **Platinum Certified**
[[Test Report](#)]

Operating Environment

RoHS ■ RoHS Compliant

Software	■ Intel® Node Manager ■ <u>IPMI 2.0</u> ■ KVM with dedicated LAN ■ NMI ■ <u>SSM, SPM, SUM</u> ■ <u>SuperDoctor® 5</u>
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

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-X11DPI-N	1	Super X11DPI-N Motherboard
	CSE-745BAC-R1K28B2	1	4U Chassis
Backplane	BPN-SAS3-743A	1	8-port 4U/Tow er 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-1K28P-SQ	2	1U 1280W, redundant single output pow er supply
* 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 pow er cord 16AWG 6ft, PBF (default for high w att)
* 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-sw appable Rear Exhaust Fan for X11 Purley Platform New ly Enabled 4U Chassis
* FAN 2	FAN-0182L4	3	80x80x38 mm, 9.4K RPM, Hot-sw appable Middle Cooling Fan for X11 Purley Platform New ly Enabled 4U Chassis
* Drive Tray(s)	MCP-220-00092-0B	8	Black Hot-sw ap 3.5inch HDD Tray (w/o logo)
* Parts	MCP-290-74502-0B	1	Plastic feet (4 pcs set) for 4U tow er 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
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 / pow er, 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-sw ap gen2 3.5" to 2.5" HDD tray converter. Each 2.5" drive needs one converter, total 8x 2.5" Hot-sw ap 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	<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> • <i>eStore</i>	1	OOB Management Package (per node license)
Software	<u>SFT-DCMS-Single</u>	1	DataCenter Management Package (per node license)