

SuperServer 6029P-TRT



Key Features

- Cloud and Virtualization needs
- Compute Intensive Application
- Database Processing and Storage
- High Availability Storage
- Hosting & Application Delivery

1. Dual socket P (LGA 3647) supports Intel® Xeon® Scalable Processors, Dual UPI up to 10.4GT/s
2. Up to 2TB ECC 3DS LRDIMM, up to DDR4-2666MHz; 16 DIMM slots Supports Intel Optane Memory NVDIMM
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. 2x 10GBase-T LAN ports with Intel X722
7. 1000W Redundant Power Supplies Titanium Level (96% efficiency)

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

Specifications

Product SKUs

SYS-6029P-TRT ■ SuperServer 6029P-TRT (Black)

Motherboard

[Super X11DPi-NT](#)

Processor/Cache

CPU

- Dual Socket P (LGA 3647)
- Intel® Xeon® Scalable Processors, Dual UPI up to 10.4GT/s
- Support CPU TDP 70-205W

Cores

- Up to 28 Cores with Intel® HT Technology

System Memory

Memory Capacity

- 16 DIMM slots
- Up to 2TB ECC 3DS LRDIMM, 512GB ECC RDIMM, DDR4 up to 2666MHz

Memory Type

- 2666/2400/2133MHz ECC DDR4 SDRAM

Chassis

Form Factor

- 2U Rackmount

Model

- [CSE-825TOC-R1K03LPB](#)

Dimensions and Weight

Width

- 17.2" (437mm)

Height

- 3.5" (89mm)

Depth

- 25.5" (647mm)

Package

- 26.7" (H) x 11.4" (W) x 34.5" (D)

Weight

- Net Weight: 35.5 lbs (16.1 kg)
- Gross Weight: 69 lbs (31.2 kg)

Available Colors

- Black

Front Panel

Buttons

- Power On/Off button
- System Reset button
- UID button

LEDs

- Power status LED
- HDD activity LED

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
Graphics	▪ ASPEED AST2500 BMC

Input / Output

SATA	▪ 8 SATA3 (6Gbps) ports
LAN	▪ 2 RJ45 10GBase-T 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
VGA	▪ 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
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Management

Software	▪ Intel® Node Manager ▪ IPMI 2.0 ▪ KVM with dedicated LAN ▪ SSM , SPM , SUM ▪ SuperDoctor® 5 ▪ Watch Dog
Power Configurations	▪ ACPI / APM 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

Network activity LEDs

- System information (overheat/UID) LED

Expansion Slots

PCI-Express	▪ 4 PCI-E 3.0 x16 (Low-profile) ▪ 2 PCI-E 3.0 x8 (Low-profile)
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Drive Bays

Hot-swap	▪ 8 Hot-swap 3.5" SATA drive bays
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Backplane

2U SAS/SATA backplane

System Cooling

Fans	▪ 3 Heavy duty 80mm fans with PWM fan speed control
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Power Supply (76mm Width)

1000W Redundant Power Supplies with PMBus	
Total Output Power	▪ 800W/1000W
Dimension (W x H x L)	▪ 76 x 40 x 336 mm
Input	▪ 100-127Vac / 12-9A / 50-60Hz ▪ 200-240Vac / 7.2-6A / 50-60Hz
+12V	▪ Max: 66.7A & Min. 0A (100-127Vac) ▪ Max: 83A & Min. 0A (200-240Vac)
5Vsb	▪ Max: 4A / Min: 0A
Output Type	▪ 19 Pairs Gold Finger Connector

Certification



UL/cUL/CE/CCC
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-X11DPI-NT	1	Super X11DPI-NT Motherboard
	CSE-825TQC-R1K03LPB	1	2U Chassis
Backplane	BPN-SAS3-825TQ	1	8-port 2U SAS3 12Gbps TQ backplane, support up to 8x 3.5-inch SAS3/SATA3 HDD/SSD
Cable 1	CBL-0343L-01	2	MINI SAS-4 SATA,INT,76/66/54/45CM,66CM SB,30AWG
Drive Tray(s)	MCP-220-00007-01	1	Black USB/COM port tray for SC825, 836
Parts	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
Manual	MNL-1918-QRG	1	6029P-TR/TRT Quick Reference Guide
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-1K03A-1R	2	1U 1000W Redundant Power Supply Titanium W/PMbus 76x365x40mm,RoHS/REACH
FAN 1	FAN-0181L4	3	80x80x38 mm, 9.4K RPM, Hot-swappable Middle Cooling Fan for X11 Purley Platform Newly Enabled 2U+ Chassis

Optional Parts List			
	Part Number	Qty	Description
Cable Management Arm	MCP-290-00073-0N	-	Supermicro Cable Management Arm for 2U, 3U and 4U chassis (Extendable Length: 70mm to 830mm)
Adaptor Bracket	MCP-120-82503-0N	-	Cable arm adapter for SC825LP,213LP (MCP-290-00073-0N required),HF,RoHS/REACH,PBF
SATA DVD Kit	MCP-220-81502-0N	-	Slim SATA DVD mounting kit for SC213,219,813,815,818,819,825,828,829,836,842
2.5" NVMe fixed drive support	CBL-SAST-0956	-	Oculink to 1 NVMe drive w/ power, each NVMe drive needs 1x cable, system can support total 2x NVMe fixed drives
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	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)