

SuperServer 6029P-TR



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 1GbE LAN ports with Intel® X722
7. 1000W Redundant Power Supplies Titanium Level (96% efficiency)

[▶ Drivers & Utilities](#)
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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-TR ■ SuperServer 6029P-TR (Black)

Motherboard

[Super X11DPi-N](#)

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® 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 |
| Graphics | ▪ 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 |
| 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 |
|-----------|------------|

Management

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|----------------------|---|
| 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) |
|-------------|---|

Drive Bays

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

Backplane

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|-----------------------|
| 2U SAS/SATA backplane |
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System Cooling

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|------|---|
| Fans | ▪ 3 Heavy duty 80mm fans with PWM fan speed control |
|------|---|

Power Supply (76mm Width)

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|---|--|
| 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/CB/BSMI/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-N | 1 | Super X11DPi-N 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) |