

SuperServer 6029TR-DTR



Views: | [Angled View](#) | [Node View](#) | [Front View](#) | [Rear View](#) |



Key Applications / Features

- HPC
- Virtualization
- Data Center
- Web Server

Two **hot-pluggable** systems (nodes) in a 2U form factor. Each node supports the following:

- Dual Socket P (LGA 3647) support 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake/Skylake)[†]
- 8 DIMMs; up to 2TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM
- 2 PCI-E 3.0 x8 (FH/HL) or 1 PCI-E 3.0 x8 (FH/HL) + 1 PCI-E 3.0 x4 (FH/HL) + 1 PCI-E 3.0 x4 (LP) (8/8/0 or 8/4/4)
- Dedicated IPMI 2.0 LAN
- 6 Hot-swap 3.5" SATA3 drive bays
- 2 SATA DOM + 1 SATA/NVMe M.2 (22110/2280)
- Up to 1200W Redundant Power Supplies **Titanium Level (96%)**

- [Drivers & Utilities](#) | [BIOS](#) | [IPMI](#) | [Tested Memory](#) | [Tested M.2 List](#) | [Manuals](#) | [OS Certification Matrix](#) | [Quick-References Guide](#) | [Drive Options](#)
- [Network Card \(AOC\) Matrix](#)

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

Specifications ^

Product SKUs

SYS-6029TR-DTR SuperServer 6029TR-DTR (**Black**)

Motherboard (Two per System)

Super X11DPT-L

Processor (per Node)

- 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 70-140W
- Cores** Up to 22 Cores
- Note** [†] BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R)

System Memory (per Node)

- Memory Capacity** 8 DIMM slots Up to 2TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM
- 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

On-Board Devices (per Node)

- Chipset** Intel® C621 chipset
- SATA** SATA3 (6Gbps); RAID 0, 1, 5, 10 support
- Network Controllers** Intel® C621 chipset
- 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 (per Node)

- SATA** 6 SATA3 (6Gbps) ports
- LAN** 2 RJ45 Gigabit Ethernet LAN ports 1 RJ45 Dedicated IPMI LAN port
- USB** 2 USB 3.0 ports total (rear)
- VGA** 1 VGA port
- Serial Port / Header** 1 COM Port (1 rear)
- Others** TPM 2.0 Header

System BIOS

- BIOS Type** AMI 32Mb SPI Flash ROM with UEFI

Management

- Software** Intel® Node Manager [IPMI 2.0](#) KVM with dedicated LAN NMI [SSM](#), [SPM](#), [SUM](#) [SuperDoctor® 5](#) Watchdog

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

Chassis

- Form Factor** 2U Rackmount
- Model** **CSE-827HD-R1K23BP3**

Dimensions and Weight

- Width** 17.25" (438mm)
- Height** 3.47" (88mm)
- Depth** 28.5" (724mm)
- Weight** Gross Weight: 61.1 lbs (27.71kg) Net Weight: 42.1 lbs (19.1kg)

- Available Colors** Black

Front Panel

- Buttons** Power On/Off button UID button
- LEDs** Power status LED HDD activity LED Network activity LEDs Universal Information (UID) LED

Expansion Slots (per Node)

- PCI-Express** 2 PCI-E 3.0 x8 (FH/HL) or 1 PCI-E 3.0 x8 (FH/HL) + 1 PCI-E 3.0 x4 (FH/HL) + 1 PCI-E 3.0 x4 (LP) (8/8/0 or 8/4/4)

Drive Bays / Storage (per Node)

- Hot-swap** 6 Hot-swap 3.5" SATA3 HDD trays
- Others** 2 SATA DOM 1 PCI-E 3.0 x4 NVMe or 1 SATA M.2 (22110/2280) support via BPN-ADP-6SATA3M2-1UL
 * M.2 and SuperDOM are for OS boot

System Cooling

- Fans** 4x 8cm heavy duty PWM fans with optimal fan speed controlled

Power Supply (76mm Width)

- 1200W Redundant Power Supplies with 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
- 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-X11DPT-L | 2 | Super X11DPT-L Motherboard |
| | CSE-827HD-R1K23BP3 | 1 | 2U Chassis |
| Backplane | BPN-ADP-6SATA3M2-1UL | 2 | 6 x SATA3 with 6Gb/s, onboard 1 x M.2 . 22x80 mm and 22x110 mm, HF, RoHS |
| Backplane | BPN-SAS2-827HD2 | 1 | 2U 12-Port 2-Node 6Gbps Backplane Supports 6x3.5 |
| Cable 1 | CBL-PWCD-0900 | 2 | PWCD, US/EU/Canada/China/Australia, IEC60320 C14 TO C13, 4FT, 17AWG |
| Air Shroud | MCP-310-82721-0B | 2 | SC827HD mylar air shroud for on MBD-X11DPT-L-P |
| Manual | MNL-2164-QRG | 1 | 6029TR-DTR Quick Reference Guide |
| Riser Card | RSC-T2R-884 | 2 | 2U RHS Twin Riser card with two PCI-E x8 and one PCI-E x4 sl |
| Heatsink / Retention | SNK-P0068PS | 2 | 2U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism |
| Heatsink / Retention | SNK-P0069PS | 2 | 1.5U Proprietary 50-mm Tall Front Passive CPU Heat Sink for X11 Purley Platform 2U Node Twin Series Servers |
| Power Supply | PWS-1K23A-1R | 2 | AC-DC 1200W, Titanium Level, Redundancy, 1U, PMBUS 1.2, +12V/+5Vsb, 360x76x40 mm, HF, RoHS/REACH |
| FAN 1 | FAN-0129L4 | 4 | 80x80x38 mm 11K RPM SC217, SC827 Chassis Middle Fan |

Optional Parts List

| | Part Number | Qty | Description |
|-----------------------------------------------------|------------------------------------------------------|-----|-----------------------------------------------------------------------------|
| TPM security module (optional, not included) | AOM-TPM-9670V | 1 | SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor |
| TPM security module (optional, not included) | AOM-TPM-9671V | 1 | SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor |
| Hot-swap 3.5" to 2.5" Hard Disk Drive Tray | MCP-220-00043-0N | - | Black Hot-swap 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) |

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