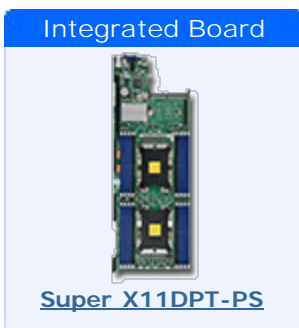


SuperServer 6029TP-HC0R



Key Features

- Compute Intensive Application
- HPC, Data Center
- Enterprise Server
- Financial Analysis
- Mission-critical applications

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

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
3. 2 PCI-E 3.0 x16 slots
4. Flexible Networking support via SIOM; Dedicated IPMI 2.0 LAN
5. 3 Hot-swap 3.5" SAS/SATA drive bays
6. Broadcom 3008 SAS3 controller; RAID 0, 1, 10
7. Mini-mSATA (half size) support
8. Up to 2200W Redundant Power Supplies Titanium Level (96%)

[▶ Drivers & Utilities](#)
[▶ BIOS](#)
[▶ IPMI](#)
[▶ Tested Memory](#)
[▶ Manuals](#)
[▶ OS Certification Matrix](#)
[▶ Quick-References Guide](#)
[▶ Drive Options](#)
[▶ Tested SIOM](#)
[▶ Tested Network Card \(AOC\)](#)

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

Specifications

Product SKUs

SYS-6029TP-HC0R	<ul style="list-style-type: none"> ▪ SuperServer 6029TP-HC0R (Black)
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Motherboard

Super X11DPT-PS

Processor/Cache (per Node)

CPU	<ul style="list-style-type: none"> ▪ Dual Socket P (LGA 3647) ▪ Intel® Xeon® Scalable Processors, Dual UPI up to 10.4GT/s ▪ Support CPU TDP 70-165W*
Cores	<ul style="list-style-type: none"> ▪ Up to 28 Cores with Intel® HT Technology

Note * Please contact Supermicro Technical Support for supporting conditions of high power (TDP 150W and above) or high base frequency (3.0 GHz and above) processors.

Chassis

Form Factor	<ul style="list-style-type: none"> ▪ 2U Rackmount
Model	<ul style="list-style-type: none"> ▪ CSE-827HQ+-R2K20BP2



Dimensions and Weight

Width	<ul style="list-style-type: none"> ▪ 17.25" (438mm)
Height	<ul style="list-style-type: none"> ▪ 3.47" (88mm)
Depth	<ul style="list-style-type: none"> ▪ 30.5" (774mm)
Weight	<ul style="list-style-type: none"> ▪ Gross Weight: 90 lbs (40.9kg) ▪ Net Weight: 72 lbs (32.7 kg)
Available Colors	<ul style="list-style-type: none"> ▪ Black

Front Panel

Buttons	<ul style="list-style-type: none"> ▪ Power On/Off button ▪ UID button
LEDs	<ul style="list-style-type: none"> ▪ Power status LED ▪ HDD activity LED

System Memory (per Node)	
Memory Capacity	<ul style="list-style-type: none"> 16 DIMM slots Up to 2TB ECC 3DS LRDIMM, 2TB ECC RDIMM, DDR4 up to 2666MHz
Memory Type	<ul style="list-style-type: none"> 2666/2400/2133MHz ECC DDR4 SDRAM
On-Board Devices	
Chipset	<ul style="list-style-type: none"> Intel® C621 chipset
SAS	<ul style="list-style-type: none"> Broadcom 3008 SAS3 (12Gbps) controller; RAID 0, 1, 10 support
Network Controllers	<ul style="list-style-type: none"> Must bundle with at least one SIOM or network card per node
IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Graphics	<ul style="list-style-type: none"> ASPEED AST2500 BMC
Input / Output (per Node)	
SAS	<ul style="list-style-type: none"> 3 SAS3 (12Gbps) ports
LAN	<ul style="list-style-type: none"> 1 RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 2 USB 3.0 ports total (rear)
VGA	<ul style="list-style-type: none"> 1 VGA port
Serial Port / Header	<ul style="list-style-type: none"> 1 Fast UART 16550 port / 1 Header (internal)
Others	<ul style="list-style-type: none"> 2 SATADOM support on the motherboard
System BIOS	
BIOS Type	<ul style="list-style-type: none"> AMI 32MB SPI Flash ROM
Management	
Software	<ul style="list-style-type: none"> Intel® Node Manager IPMI 2.0 KVM with dedicated LAN NMI SSM, SPM, SUM SuperDoctor® 5 Watchdog
Power Configurations	<ul style="list-style-type: none"> ACPI Power Management
PC Health Monitoring	
CPU	<ul style="list-style-type: none"> Monitors for CPU Cores, Chipset Voltages, Memory. 5+1 Phase-switching voltage regulator
FAN	<ul style="list-style-type: none"> Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors
Temperature	<ul style="list-style-type: none"> Monitoring for CPU and chassis environment Thermal Control for fan connectors
Omni-Path Fabric CPUs	<ul style="list-style-type: none"> Do not support

	<ul style="list-style-type: none"> Network activity LEDs Universal Information (UID) LED
Expansion Slots (per Node)	
	<ul style="list-style-type: none"> 2 PCI-E 3.0 x16 Low-profile slots 1 SIOM card support
PCI-Express	<p>Note: Must bundle with Network Card</p> <p>(With only one CPU installed, SXB2 M.2 and SXB4 riser card slots not function)</p>
Drive Bays (per Node)	
Hot-swap	<ul style="list-style-type: none"> 3 Hot-swap 3.5" SAS/SATA HDD trays
System Cooling	
Fans	<ul style="list-style-type: none"> 4 Heavy duty 8cm PWM fans with optimal fan speed control
Power Supply	
2200W Redundant Power Supplies with PMBus	
Total Output Power and Input	<ul style="list-style-type: none"> 1200W with Input 100-127Vac 1800W with Input 200-220Vac 1980W with Input 220-230Vac 2090W with Input 230-240Vac 2200W with Input 220-240Vac (for UL/cUL use only) 2090W with Input 230-240Vdc (for CCC only)
AC Input Frequency	<ul style="list-style-type: none"> 50-60Hz
Dimension (W x H x L)	<ul style="list-style-type: none"> 76 x 40 x 336 mm
+12V	<ul style="list-style-type: none"> Max: 100A / Min: 0A (100-127Vac) Max: 150A / Min: 0A (200-220Vac) Max: 165A / Min: 0A (220-230Vac) Max: 174.17A / Min: 0A (230-240Vac) Max: 183.3A / Min: 0A (220-240Vac)
5VSB	<ul style="list-style-type: none"> Max: 1A / Min: 0A
Output Type	<ul style="list-style-type: none"> Backplanes (gold finger)
Certification	  <ul style="list-style-type: none"> UL/cUL/CB/BSMI/CE/CCC Titanium Level [Cert. in progress]
Operating Environment	
RoHS	<ul style="list-style-type: none"> RoHS Compliant
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)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X11DPT-PS	4	Super X11DPT-PS Motherboard
	CSE-827HQ+-R2K20BP2	1	2U Chassis
Backplane	BPN-ADP-S3008L-L6IP	4	LSI 3008, SAS 12Gbs (X6 port inside)
Backplane	BPN-SAS3-827HQ2	1	2U 12-Port 4-Node Backplane Supports 3x3.5
Parts	MCP-240-82715-0N	1	TwinPro SC827HQ+ BPN retention bracket assembly
Air Shroud	MCP-310-21707-0B	4	SC217HQ+ TwinPro 2pcs air shroud set for X11 DPT-PS
Riser Card	RSC-P-6	4	RSC-P-6 (1U LHS TwinPro RSC with 1 PCI-Ex16),RoHS
Riser Card	RSC-R1UTP-E16R	4	1U RHS TwinPro Riser card with one PCI-E x16 slot
Heatsink / Retention	SNK-P0067PS	4	1U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
Heatsink / Retention	SNK-P0067PSM	4	1U Passive CPU Heat Sink with a 26-mm Wide Middle Air Channel for X11 Purley Platform Equipped with a Narrow Retention Mechanism
Power Supply	PWS-2K20A-1R	2	1U 2200W Redundant, Titanium, 76(W) X 40(H) X 336(L) mm
FAN 1	FAN-0162L4	4	80x80x38 mm, 13.5K RPM, HCP, LMV, and LPC Cooling Fan,RoHS/REACH

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
Add-on-Card	AOC-SMG3-2H8M2	-	AOC supports 2280 M.2 form factor SSD (1 NVMe or 2 SATA)
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	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)