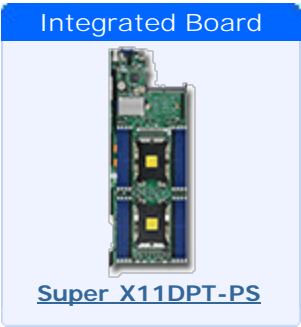


SuperServer 6029TP-HC1R



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

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 3108 SAS3 controller; RAID 0, 1, 5 with SuperCap option
7. Up to 2200W Redundant Power Supplies Titanium Level (96%)

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-HC1R	<ul style="list-style-type: none"> ▪ SuperServer 6029TP-HC1R (Black)
-----------------	---

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.

System Memory (per Node)

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 ▪ Network activity LEDs ▪ Universal Information (UID) LED

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 3108 SAS3 (12Gbps) controller; RAID 0, 1, 5 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

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-S3108L-H6IRP	4	LSI 3108, SAS 12Gbps (x6 internal)
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
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
SuperCap Kit	BTR-CV3108-TP2	-	Broadcom 3108 CacheVault kit for TwinPro
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)