

# SuperServer 1029TP-DC1R



## Integrated Board



## Super X11DPT-PS

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

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## Key Features

- Mission-critical applications
- High Availability Storage Appliance Platform

Two hot-pluggable systems (nodes) in a 1U form factor. Each node supports the following:

1. Dual Socket P (LGA 3647) support  
2nd Gen Intel® Xeon® Scalable processors (Cascade Lake/Skylake)‡
2. 16 DIMMs; up to 4TB 3DS ECC DDR4-2933MHz† RDIMM/LRDIMM
3. 2 PCI-E 3.0 x16 slots
4. Flexible Networking support via SIOM; Dedicated IPMI 2.0 LAN
5. 4 Hot-swap 2.5" SAS3 drive bays
6. Broadcom 3108 SAS3 controller; RAID 0, 1, 5, 6, 10, 50, 60 with SuperCap option
7. 2 SuperDOM onboard
8. Up to 1000W Redundant Power Supplies  
**Titanium Level (96%)**

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

# Specifications

## Product SKUs

- **SYS-1029TP-DC1R** ■ SuperServer 1029TP-DC1R (**Black**)

## Motherboard (Two per System)

### Super X11DPT-PS

## Processor/Cache (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 70-145W

- **Cores** ■ Up to 28 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** ■ 16 DIMM slots  
■ Up to 4TB 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

- **SAS** ■ Broadcom 3108 SAS3 (12Gbps) controller; RAID 0, 1, 5, 6, 10, 50, 60 support  
■ Optional SuperCap

- **Network Controllers** ■ Barebones and Complete System must have at least one SIOM card installed per node

- **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)

- **SAS** ■ 4 SAS3 (12Gbps) ports

- **LAN** ■ 1 RJ45 Dedicated IPMI LAN port

- **USB** ■ 2 USB 3.0 ports (rear)

- **VGA** ■ 1 VGA port

- **Serial Port / Header** ■ 1 Fast UART 16550 port / 1 Header (internal)

- **Others** ■ 2 SuperDOM support on the motherboard. SuperDOM is for OS boot.

## System BIOS

- **BIOS Type** ■ AMI 32MB SPI Flash ROM

## Management

- **Software** ■ Intel® Node Manager  
■ IPMI 2.0  
■ KVM with dedicated LAN  
■ NMI  
■ SSM, SPM, SUM  
■ SuperDoctor® 5  
■ Watchdog

- **Power Configurations** ■ ACPI 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

## Chassis

- **Form Factor** ■ 1U Rackmount

- **Model** ■ **CSE-809H-R1K05P3**

## Dimensions and Weight

- **Width** ■ 17.2" (437mm)

- **Height** ■ 1.7" (88mm)

- **Depth** ■ 28.25" (718mm)

- **Package** ■ 29.6" (W) x 8" (H) x 38.4" (L)

- **Weight** ■ Gross Weight: 48.1 lbs (21.9 kg)  
■ Net Weight: 33.5 lbs (15.2 kg)

## 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 x16 Low-profile slots  
■ 1 SIOM card support

Note: Barebones and Complete System must bundle with SIOM

**(With only one CPU installed, SXB2 M.2 and SXB4 riser card slots not function)**

## Drive Bays (per Node)

- **Hot-swap** ■ 4 Hot-swap 2.5" SAS3/SATA3 drive bays

## Backplane

SAS3 backplane

## System Cooling

- **Fans** ■ 3 Heavy duty counter rotating fans with air shroud and optimal fan speed control

## PowerStick Power Supply

1000W 1U Redundant Power Supplies with PMBus

- **Total Output Power** ■ 800W: 100 – 127Vac  
■ 1000W: 200 – 240Vac

- **Dimension (W x H x L)** ■ 38 x 40 x 360 mm

- **Input** ■ 100-127Vac / 9-7.5A / 50-60Hz  
■ 200-240Vac / 6-5A / 50-60Hz

- **+12V** ■ Max: 66.7A / Min: 0A (100-127Vac)  
■ Max: 83A / Min: 0A (200-240Vac)

- **+5Vsb** ■ Max: 4A / Min: 0A

- **Output Type** ■ Gold Finger Connector (16 Power Pin, 14 Signal Pin)

## 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
<b>Motherboard / Chassis</b>	MBD-X11DPT-PS	2	Super X11DPT-PS Motherboards
	CSE-809H-R1K05P3	1	1U Chassis
<b>Backplane</b>	BPN-ADP-S3108L-H6IRP	2	LSI 3108, SAS 12Gbps (x6 internal)
<b>Backplane</b>	BPN-SAS3-809H	1	8-port 1U Tw inPro SAS3 12Gbps (4 drives per node) backplane, support up to 8x 2.5-inch SAS3/SATA3 HDD/SSD
<b>Cable 1</b>	CBL-PWCD-0900	2	PWCD,US/EU/Canada/China/Australia,IEC60320 C14 TO C13,4FT,17AWG
<b>Manual</b>	MNL-2112-QRG	1	1029TP-DTR/DC0R/DC1R Quick Reference Guide
<b>Riser Card</b>	RSC-P-6	2	RSC-P-6 (1U LHS Tw inPro RSC with 1 PCI-Ex16),RoHS
<b>Riser Card</b>	RSC-R1UTP-E16R	2	1U RHS Tw inPro Riser card with one PCI-Ex16 slot
<b>Heatsink / Retention</b>	SNK-F0067PS	2	1U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
<b>Heatsink / Retention</b>	SNK-F0067PSM	2	1U Passive CPU Heat Sink with a 26-mm Wide Middle Air Channel for X11 Purley Platform Equipped with a Narrow Retention Mechanism
<b>Power Supply</b>	PWS-1K05A-1R	2	1U 1000W Redundant Power Supply Titanium, 38X40X360mm length

## Optional Parts List

	Part Number	Qty	Description
<b>TPM security module (optional, not included)</b>	AOM-TPM-9670V	1	SPI capable TPM 2.0 with Infineon 9670 controller with vertical form factor
<b>TPM security module (optional, not included)</b>	AOM-TPM-9671V	1	SPI capable TPM 1.2 with Infineon 9670 controller with vertical form factor
<b>SuperCap Kit</b>	BTR-CV3108-TP2	-	Broadcom 3108 CacheVault kit for Tw inPro
<b>Global Services &amp; Support</b>	<a href="#">OS4HR3/2/1</a>	-	3/2/1-year onsite 24x7x4 service
	<a href="#">OSNBD3/2/1</a>	-	3/2/1-year onsite NBD service
<b>Software</b>	<a href="#">SFT-OOB-LIC</a> • <a href="#">eStore</a>	1	OOB Management Package (per node license)
<b>Software</b>	<a href="#">SFT-DCMS-Single</a>	1	DataCenter Management Package (per node license)