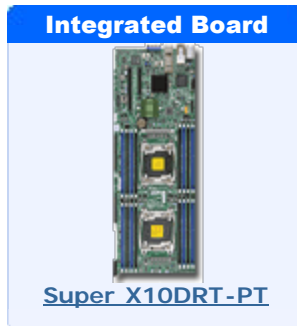


SuperServer 1028TP-DC0TR



Key Features

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

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4[†]/ v3 family; QPI up to 9.6GT/s
2. Up to **2TB[†]** ECC 3DS LRDIMM , up to DDR4- **2400[†]**MHz ; 16x DIMM slots
3. 1x PCI-E 3.0 x16 Low-profile slot and 1x "0 slot"
4. Intel® X540 Dual port 10GBase-T LAN
5. Integrated IPMI 2.0 with KVM and Dedicated LAN
6. 4x 2.5" Hot-swap SAS3 drive bays
7. LSI 3008 SAS3 controller; SW RAID
8. 1000W 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-1028TP-DC0TR	▪ SuperServer 1028TP-DC0TR (Black)
-------------------------	---

Motherboard

Super X10DRT-PT

Processor/Cache

CPU	▪ Intel® Xeon® processor E5-2600 v4 [†] / v3 family (up to 145W TDP) * ▪ Dual Socket R3 (LGA 2011)
------------	--

Cores / Cache	▪ Up to 22 Cores[†] / Up to 55MB[†] Cache
----------------------	---

System Bus	▪ QPI up to 9.6 GT/s
-------------------	----------------------

Note	† BIOS version 2.0 or above is required
-------------	---

Note	* Please contact Supermicro Technical Support for additional information about frequency optimized CPUs and specialized system optimization.
-------------	--

System Memory

Memory Capacity	▪ 16x 288-pin DDR4 DIMM slots ▪ Up to 2TB [†] ECC 3DS LRDIMM, 512GB
------------------------	---

Chassis

Form Factor	▪ 1U Rackmount
--------------------	----------------

Model	▪ CSE-809H-R1K05
--------------	-------------------------

Dimensions and Weight

Width	▪ 19.1" (485mm)
--------------	-----------------

Height	▪ 1.7" (43mm)
---------------	---------------

Depth	▪ 29.5" (750mm)
--------------	-----------------

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

Package (HxWxD)	▪ 8" (203mm) x 29.6" (752mm) x 38.4" (975mm)
------------------------	--

Available Colors	▪ Black
-------------------------	---------

Front Panel

Buttons	▪ Power On/Off button ▪ UID button/LED
----------------	---

LEDs	▪ Power status LED ▪ Network activity LED ▪ Universal Information (UID) LED
-------------	---

Expansion Slots (per Node)

	ECC RDIMM
Memory Type	<ul style="list-style-type: none"> ▪ 2400[†]/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	<ul style="list-style-type: none"> ▪ RDIMM: 64GB, 32GB, 16GB, 8GB, 4GB ▪ LRDIMM: 64GB, 32GB ▪ 3DS LRDIMM: 128GB
Memory Voltage	<ul style="list-style-type: none"> ▪ 1.2 V
Error Detection	<ul style="list-style-type: none"> ▪ Corrects single-bit errors

On-Board Devices

Chipset	<ul style="list-style-type: none"> ▪ Intel® C612 chipset
SAS	<ul style="list-style-type: none"> ▪ LSI 3008 SAS3 (12Gbps) controller; SW RAID 0, 1, 10 support
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 ▪ ASPEED AST2400 BMC
Network Controllers	<ul style="list-style-type: none"> ▪ Intel® X540 Dual port 10GBase-T ▪ Virtual Machine Device Queues reduce I/O overhead ▪ Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output ▪ 1x Realtek RTL8201N PHY (dedicated IPMI)
Graphics	<ul style="list-style-type: none"> ▪ ASPEED AST2400 BMC

Input / Output (per Node)

SAS	<ul style="list-style-type: none"> ▪ 4x SAS3 (12Gbps) ports
LAN	<ul style="list-style-type: none"> ▪ 2x RJ45 10GBase-T ports ▪ 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> ▪ 2x USB 3.0 ports (rear)
VGA	<ul style="list-style-type: none"> ▪ 1x VGA port
Serial Port / Header	<ul style="list-style-type: none"> ▪ 1x Fast UART 16550 port / 1 Header (internal)
Others	<ul style="list-style-type: none"> ▪ 1x <u>SATADOM</u> support on the motherboard

PCI-Express	1x PCI-E 3.0 x16 Low-profile slot
0 Slot	<ul style="list-style-type: none"> ▪ 1x "0 slot" (x16)
Drive Bays (per Node)	
Hot-swap	<ul style="list-style-type: none"> ▪ 4x 2.5" Hot-swap SAS3 drive bays
System Cooling (per Node)	
Fans	<ul style="list-style-type: none"> ▪ 3x heavy duty counter rotating fans with air shroud and optimal fan speed control

PowerStick Power Supply

1000W Redundant Power Supplies with PMBus	
Total Output Power	<ul style="list-style-type: none"> ▪ 800W/1000W
Dimension (W x H x L)	<ul style="list-style-type: none"> ▪ 38 x 40 x 360 mm
Input	<ul style="list-style-type: none"> ▪ 100-127Vac / 9-7.5A / 50-60Hz ▪ 200-240Vac / 6-5A / 50-60Hz
+12V	<ul style="list-style-type: none"> ▪ Max: 66.7A / Min: 0A (100-127Vac) ▪ Max: 83A / Min: 0A (200-240Vac)
+5Vsb	<ul style="list-style-type: none"> ▪ Max: 4A / Min: 0A
Output Type	<ul style="list-style-type: none"> ▪ Gold Finger Connector (16 Power Pin, 14 Signal Pin)

Certification



UL/cUL/CB/BSMI/CE/CCC

Titanium Level

(Cert. in progress)

System BIOS

BIOS Type	<ul style="list-style-type: none"> ▪ 128Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	<ul style="list-style-type: none"> ▪ Plug and Play (PnP) ▪ APM 1.2 ▪ PCI 2.2 ▪ ACPI 1.0 / 2.0 ▪ USB Keyboard support ▪ SMBIOS 2.3 ▪ UEFI

Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> ▪ RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none"> ▪ Operating Temperature: 10°C to 35°C (50°F to 95°F) ▪ Non-operating Temperature: -40°C to 70°C (-40°F to 158°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-X10DRT-PT	2	Super X10DRT-PT Motherboards
	CSE-809H-R1K05	1	1U Chassis
Backplane	BPN-ADP-S3008L-L6IP	2	LSI 3008, SAS 12Gbs (X6 port inside)
Backplane	BPN-SAS3-809H	1	1U 8-Port 2-Node 12Gbps Backplane for 4x2.5
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1846-QRG	1	1028TP-DC0(R/TR/FR) ,QRG
Riser Card	RSC-R1UTP-E16R	2	,RoHS/REACH,PBF
Heatsink / Retention	SNK-P0057PS	2	1U High Performance Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
Heatsink / Retention	SNK-P0047PSM	2	1U Passive Front CPU Heat Sink w/ a Middle Air Channel for X9, X10 2U Twin^2+ and Twin Pro^2 Series Servers
Power Supply	PWS-1K05A-1R	2	1000W Redundant Titanium Level (96%) Power Supplies

Optional Parts List

	Part Number	Qty	Description
Onsite Service Program	QS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
Onsite Service Program	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)
TPM security module (optional, not included)	AOM-TPM-9655V AOM-TPM-9655H	-	TPM module with Infineon 9655, RoHS/REACH,PBF; Vertical or Horizontal depends on the server
SuperDOM	-	-	Supermicro SATA DOM Solutions [Details]
Network Card(s)	AOC-PTG-i1S	-	Proprietary 1-port 10GbE controller w/ SFP+, based on Intel 82599EN
	AOC-S40G-i2Q	-	Standard LP 2-port 40GbE controller, based on Intel Fortville XL710
	AOC-SGP-i2	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel i350AM2
	AOC-SGP-i4	-	Standard LP, 4x GbE RJ45, PCI-E x4, Intel i350
	AOC-STG-b4S	-	Standard LP, 4x 10GbE SFP+, PCI-E x8, Broadcom BCM57840S
	AOC-STGN-i2S	-	Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel 82599ES
	AOC-STGN-i1S	-	Standard LP, 1x 10GbE SFP+, PCI-E x8, Intel 82599EN
	AOC-STG-i2T	-	Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel X540
	AOC-STG-i2	-	Standard LP, 2x 10GbE CX4, PCI-E x8, Intel 82598EB