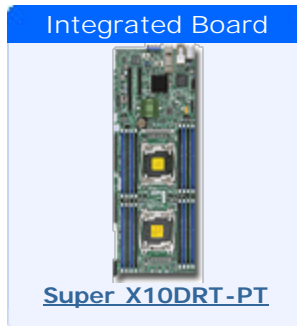


# SuperServer 1028TP-DC1TR



## 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<sup>†</sup>/ v3 family; QPI up to 9.6GT/s
2. Up to 2TB<sup>†</sup> ECC 3DS LRDIMM , up to DDR4- 2400<sup>†</sup>MHz ; 16x DIMM slots
3. 1x PCI-E 3.0 x16 Low-profile slot
4. Intel® X540 Dual port 10GbBase-T LAN
5. Integrated IPMI 2.0 with KVM and Dedicated LAN
6. 4x 2.5" Hot-swap SAS3 drive bays
7. LSI 3108 SAS3 controller; RAID 0, 1, 10, 5, 6
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-DC1TR	▪ SuperServer 1028TP-DC1TR (Black)
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### Motherboard

Super X10DRT-PT

### Processor/Cache

CPU	▪ Intel® Xeon® processor E5-2600 v4 <sup>†</sup> / v3 family (up to 145W TDP) * ▪ Dual Socket R3 (LGA 2011)
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Cores / Cache	▪ Up to 22 Cores <sup>†</sup> / Up to 55MB <sup>†</sup> Cache
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System Bus	▪ QPI up to 9.6 GT/s
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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	▪ 16x 288-pin DDR4 DIMM slots ▪ Up to 2TB <sup>†</sup> ECC 3DS LRDIMM, 512GB
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### 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)

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

#### On-Board Devices

Chipset	<ul style="list-style-type: none"> <li>Intel® C612 chipset</li> </ul>
SAS	<ul style="list-style-type: none"> <li>LSI 3108 SAS3 (12Gbps) controller; RAID 0, 1, 10, 5, 6 support</li> </ul>
IPMI	<ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> <li>ASPEED AST2400 BMC</li> </ul>
Network Controllers	<ul style="list-style-type: none"> <li>Intel® X540 Dual port 10GBase-T</li> <li>Virtual Machine Device Queues reduce I/O overhead</li> <li>Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output</li> <li>1x Realtek RTL8201N PHY (dedicated IPMI)</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>ASPEED AST2400 BMC</li> </ul>

#### Input / Output (per Node)

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

D7 Express 1x PCI-E 3.0 x16 Low-profile slot

#### Drive Bays (per Node)

Hot-swap 

- 4x 2.5" Hot-swap SAS3 drive bays

#### System Cooling (per Node)

Fans 

- 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 

- 800W/1000W

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   UL/cUL/CB/BSMI/CE/CCC Titanium Level (Cert. in progress)

#### System BIOS

BIOS Type 

- 128Mb SPI Flash EEPROM with AMI BIOS

BIOS Features 

- 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 

- RoHS Compliant

Environmental Spec. 

- 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
<b>Motherboard / Chassis</b>	MBD-X10DRT-PT	2	Super X10DRT-PT Motherboards
	CSE-809H-R1K05	1	1U Chassis
<b>Backplane</b>	BPN-ADP-S3108L-H6IRP	2	LSI 3108, SAS 12Gbps (x6 internal)
<b>Backplane</b>	BPN-SAS3-809H	1	1U 8-Port 2-Node 12Gbps Backplane for 4x2.5
<b>Label</b>	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
<b>Manual</b>	MNL-1847-QRG	1	1028TP-DC1(R/TR/FR) ,QRG
<b>Riser Card</b>	RSC-R1UTP-E16R	2	,RoHS/REACH,PBF
<b>Heatsink / Retention</b>	SNK-P0057PS	2	1U High Performance Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
<b>Heatsink / Retention</b>	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
<b>Power Supply</b>	PWS-1K05A-1R	2	1000W Redundant Titanium Level (96%) Power Supplies

### Optional Parts List

	Part Number	Qty	Description
<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>	SFT-OOB-LIC	1	OOB Management Package (per node license)
<b>Software</b>	SFT-DCMS-Single	1	DataCenter Management Package (per node license)
<b>TPM security module (optional, not included)</b>	<a href="#">AOM-TPM-9655V</a> <a href="#">AOM-TPM-9655H</a>	-	TPM module with Infineon 9655, RoHS/REACH,PBF; Vertical or Horizontal depends on the server
<b>SuperDOM</b>	-	-	Supermicro SATA DOM Solutions [ <a href="#">Details</a> ]
<b>Network Card(s)</b>	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
<b>SuperCap Kit</b>	BTR-CV3108-TP1	-	LSI 3108 CacheVault kit for TwinPro