

SuperServer 1028TP-DTR



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® i350 Dual port GbE LAN
5. Integrated IPMI 2.0 with KVM and Dedicated LAN
6. 4x 2.5" Hot-swap SATA3 drive bays
7. 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-DTR	▪ SuperServer 1028TP-DTR (Black)
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Motherboard

Super X10DRT-P

Processor/Cache

CPU	▪ Intel® Xeon® processor E5-2600 v4 [†] / v3 family (up to 145W TDP) * ▪ Dual Socket R3 (LGA 2011)
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Cores / Cache	▪ Up to 22 Cores [†] / Up to 55MB [†] 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
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Note	* Please contact Supermicro Technical Support for additional information about frequency optimized CPUs and specialized system optimization.
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System Memory

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

PCI-Express	▪ 1x PCI-E 3.0 x16 Low-profile slot
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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
SATA	<ul style="list-style-type: none"> SATA3 (6Gbps) w/ RAID 0, 1, 5, 10
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® i350 Dual Port Gigabit Ethernet Virtual Machine Device Queues reduce I/O overhead Supports 10BASE-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)

SATA	<ul style="list-style-type: none"> 4x SATA3 (6Gbps) ports
LAN	<ul style="list-style-type: none"> 2x RJ45 Gigabit Ethernet LAN 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

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 SATA3 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

Power Supply	
1000W Redundant Titanium Level (96%) AC to DC Power Supplies w/ PFC	
AC Voltage	<ul style="list-style-type: none"> 100-240V, 60-50Hz, 9-5Amp
+12V	<ul style="list-style-type: none"> 66.7A (100-127Vac) 83A (200-240Vac)
5V SB	<ul style="list-style-type: none"> 4A
Certification	 <ul style="list-style-type: none"> 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-P	2	Super X10DRT-P Motherboards
	CSE-809H-R1K05	1	2U Chassis
Backplane	BPN-SAS3-809H	1	1U 8-Port 2-Node 12Gbps Backplane for 4x2.5
Backplane	BPN-ADP-6SATA3P	2	Backplan adapter card; 6SATA ports,RoHS/REACH,PBF
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1848-QRG	1	1028TP-DT(R/TR/FR),QRG
Riser Card	RSC-R1UTP-E16R	2	,RoHS/REACH,PBF
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
Heatsink / Retention	SNK-P0057PS	2	1U High Performance Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
Power Supply	PWS-1K05A-1R	2	1000W Redundant Titanium Level (96%) Power Supplies

Optional Parts List			
	Part Number	Qty	Description
Onsite Service Program	OS4HR3/2/1	-	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	-	
	AOC-SGP-i4	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel i350AM2
	AOC-STG-b4S	-	Standard LP, 4x GbE RJ45, PCI-E x4, Intel i350
	AOC-STGN-i2S	-	Standard LP, 4x 10GbE SFP+, PCI-E x8, Broadcom BCM57840S
	AOC-STGN-i1S	-	Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel 82599ES
	AOC-STG-i2T	-	Standard LP, 1x 10GbE SFP+, PCI-E x8, Intel 82599EN
	AOC-STG-i2	-	Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel X540
			Standard LP, 2x 10GbE CX4, PCI-E x8, Intel 82598EB