

SuperServer 6028TP-DNCFR



Available Colors: Black

Key Features

Two **hot-pluggable** systems (nodes) in a 2U form factor. Each node supports the following:

1. Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 v3 family; QPI up to 9.6GT/s
2. Up to 1TB ECC LRDIMM, 512GB ECC RDIMM, up to 2133MHz; 16x DIMM sockets
3. 1x PCI-E 3.0 x16, 1x PCI-E 3.0 x8 slots
4. Single port IB (FDR, 56Gbps), w/ QSFP connector
5. Intel® i350-AM2 Dual port GbE LAN
6. Integrated IPMI 2.0 with KVM and Dedicated LAN
7. 6x 3.5" Hot-swap drive bays (Up to 4x NVMe + 2x SAS3 or 6x SAS3)
8. LSI 3008 SAS3 controller (8 ports); RAID 0, 1, 10
9. 1600W Redundant Power Supplies Titanium Level Digital (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-6028TP-DNCFR	▪ SuperServer 6028TP-DNCFR (Black)
Motherboard	
<u>Super X10DRT-PIBF</u>	
Processor/Cache (per Node)	
CPU	▪ Intel® Xeon® processor E5-2600 v3 family (up to 145W TDP) * ▪ Dual Socket R3 (LGA 2011)
Cores / Cache	▪ Up to 18 Cores / Up to 45MB Cache
System Bus	▪ QPI up to 9.6 GT/s
Note	* Please contact Supermicro Technical Support for additional information about frequency optimized CPUs and specialized system optimization.
System Memory (per Node)	

Chassis	
Form Factor	▪ 2U Rackmount
Model	▪ CSE-827HD+-R1K68B
Dimensions and Weight	
Width	▪ 17.25" (438mm)
Height	▪ 3.47" (88mm)
Depth	▪ 30.5" (774mm)
Weight	▪ Gross Weight: 85 lbs (38.6kg) ▪ Net Weight: 66 lbs (29.9 kg)
Available Colors	▪ Black
Front Panel	
Buttons	▪ Power On/Off button ▪ UID button
LEDs	▪ Power status LED ▪ HDD activity LED ▪ 2x Network activity LEDs ▪ Universal Information (UID) LED

Memory Capacity	<ul style="list-style-type: none"> 16x 288-pin DDR4 DIMM slots Up to 1TB ECC LRDIMM, 512GB ECC RDIMM
Memory Type	<ul style="list-style-type: none"> 2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	<ul style="list-style-type: none"> RDIMM: 32GB, 16GB, 8GB, 4GB LRDIMM: 64GB, 32GB
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
Infiniband	<ul style="list-style-type: none"> Mellanox ConnectX-3 FDR Infiniband 56Gbps Controller
SAS	<ul style="list-style-type: none"> LSI 3008 SAS3 (12Gbps) controller; RAID 0, 1, 10 support Optional SuperCap Note: In order to support NVMe drives, both CPU socket must be populated
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-AM2 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)

SAS	<ul style="list-style-type: none"> 6x SAS3 (12Gbps) ports
LAN	<ul style="list-style-type: none"> 2x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port
Infiniband	<ul style="list-style-type: none"> 1x external QSFP Infiniband connector
USB	<ul style="list-style-type: none"> 2x USB 3.0 ports total (2x 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>mSATA</u> (full size) and one SATADOM support on the daughter card 1x <u>SATADOM</u> support on the motherboard

Expansion Slots (per Node)

PCI- 91 dFyGg	<ul style="list-style-type: none"> 1x PCI-E 3.0 x16 slot 1x PCI-E 3.0 x8 slot
----------------------	---

Drive Bays (per Node)

Hot-swap	<ul style="list-style-type: none"> 6x 3.5" Hot-swap drive bays: Up to 4x NVMe + 2x SAS3 or 6x SAS3
----------	---

System Cooling

Fans	<ul style="list-style-type: none"> 4x 8cm heavy duty PWM fans with optimal fan speed control
------	---

Power Supply

1600W Titanium Level (96%) High-efficiency Redundant Single Output Power Supplies

AC Input	<ul style="list-style-type: none"> 800W Output @ 100-140V, 7-10A, 50-60Hz 1600W Output @ 180-240V, 8-11A, 50-60Hz
DC Output	<ul style="list-style-type: none"> 800W: +12V/67A, +5Vsb/1A 1600W: +12V/133A, +5Vsb/1A

Certification	  Titanium Level [Test Report]
---------------	--

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-000	2	Super X10DRT-000 Motherboards
	CSE-1G7HD+-R1K68B	1	2U Chassis
Backplane	BPN-SAS3-1G HD-N4	1	2U SAS3-1G HD-N4 Backplane
Backplane	BPN-ADP-8S3008N4-2UP-O-P	2	2U adapter card for 2U TwinPro system; LSI3008 on board to provide 8x SAS3 ports, 4x NVMe ports, 1x mSATA port and 1x SATADOM port, HF, RoHS/REACH
Heatsink / Retention	SNK-P0048PS	4	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
Power Supply	PWS-1K68A-1R	2	1U 1600W Redundant Titanium Power Supply 76mm width 27Pair, PBF

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	2	OOB Management Package (per node license)
Software	SFT-DCMS-Single	2	DataCenter Management Package (per node license)