SuperServer 6028TP-HTTR

Integrated Board

Super X10DRT-PT

Available Colors: Black

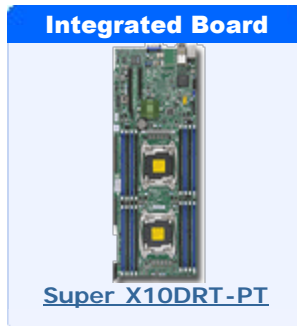*Note: Image above may show a varied configuration or optional parts, Please refer to parts list for standard parts included.*

Key Features

Four 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 Low-profile slot; 1x "0 slot" (x16)

4. Intel® X540 Dual port 10GBase-T

5. Integrated IPMI 2.0 with KVM and Dedicated LAN

6. 3x 3.5" Hot-swap SATA HDD Bays

7. 2000W Redundant Power Supplies **Platinum Level (94%)**

Specifications

Product SKUs

SYS-6028TP-HTTR	SuperServer 6028TP-HTTR (**Black**)

Motherboard

Super X10DRT-PT

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)

• 16x 288-pin DDR4 DIMM slots

Chassis

Form Factor	• 2U Rackmount
Model	• **CSE-827HQ+-R2K02B**

Dimensions and Weight

Width	• 17.25" (438mm)
Height	• 3.47" (88mm)
Depth	• 30.5" (774mm)
Weight	• Gross Weight: 90 lbs (40.9kg) • Net Weight: 72 lbs (32.7 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

Expansion Slots (per Node)

Memory Capacity	Up to 1TB ECC LRDIMM, 512GB ECC RDIMM
Memory Type	2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	RDIMM: 32GB, 16GB, 8GB, 4GB LRDIMM: 64GB, 32GB
Memory Voltage	1.2 V
Error Detection	Corrects single-bit errors

On-Board Devices

Chipset	Intel® C612 Express chipset
SATA	SATA3 (6Gbps); RAID 0, 1, 10
IPMI	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	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	ASPEED AST2400 BMC

Input / Output (per Node)

SATA	3x SATA3 (6Gbps) ports
LAN	2x RJ45 10GBase-T ports 1x RJ45 Dedicated IPMI LAN port
USB	2x USB 3.0 ports total (2x rear)
VGA	1x VGA port
Serial Port / Header	1x Fast UART 16550 port / 1 Header (internal)
Others	1x SATADOM support on the motherboard

PCI-Express

PCI-Express	1x PCI-E 3.0 x16 Low-profile slot
0 Slot	1x "0 slot" (x16) Compatible Listing **(Both CPUs need to be installed for full access to PCI-E slots and 0 slot.)**

Drive Bays (per Node)

Hot-swap	3x 3.5" Hot-swap SATA HDD trays

System Cooling

Fans	4x 8cm heavy duty PWM fans with optimal fan speed control

Switching Power Supply

2000W Redundant Power Supplies with I^{2}C & PMBus

AC Input	1100W Output @ 100-120V, 12.7-10.5A, 50-60Hz 1400W Output @ 120-140V, 13.5-11.5A, 50-60Hz 1800W Output @ 200-220V, 10.0-9.5A, 50-60Hz 1980W Output @ 220-230V, 10.0-9.8A, 50-60Hz 2000W Output @ 230-240V, 10.0-9.8A, 50-60Hz
5Vsb	4A
I^{2}C Remote Monitoring	FRU Data / SMBus / PMBus
Certification	Platinum Certified [Test Report]

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
Motherboard / Chassis	MBD-X10DRT-PT	4	Super X10DRT-PT Motherboard
	CSE-827HQ+-R2K02B	1	2U Chassis
Backplane	BPN-SAS3-827HQ	1	12x 3.5" hard drive backplane; supports 3.5" Twin Pro Chassis; SAS-3 12Gb/s compliance, new Molex 64-pin receptacles, PWM fan control and Power delay control on HDD spin up,RoHS/REACH,PBF
Backplane	BPN-ADP-6SATA3P-O-P	4	Backplan adapter card; 6SATA ports,RoHS/REACH,PBF
Riser Card	RSC-R1UTP-E16R-O-P	4	,RoHS/REACH,PBF
Heatsink / Retention	SNK-P0057PS	4	1U High Performance Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
Heatsink / Retention	SNK-P0047PSM	4	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-2K04A-1R	2	AC-DC 2000W, Titanium Level, Redundancy, 1U, PMBus 1.2, +12V/+5Vsb, 360x76x40mm,HF,RoHS/REACH
Power Supply	PWS-2K02P-1R	2	2000W redundant platinum power supply

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	4	OOB Management Package (per node license)
Software	SFT-DCMS-Single	4	DataCenter Management Package (per node license)