

SuperServer 6028TP-HTFR

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Integrated Board



X10DRT-PIBF

Views: | [Angled View](#) | [Node View](#) |
| [Front View](#) | [Rear View](#) |

SPECfp_base2006 World Record Holder!

Please contact your Supermicro sales rep for details.

▶ [Drivers & Utilities](#) ▶ [BIOS](#) ▶ [IPMI](#) ▶ [Tested Memory](#) ▶ [Manuals](#) ▶ [OS Certification Matrix](#) ▶ [Drive Options](#)

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-HTFR ■ SuperServer 6028TP-HTFR (Black)

Motherboard

Super X10DRT-PIBF

Processor/Cache (per Node)

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 (per Node)

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

Memory Type ■ 2400†/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit

DIMM Sizes ■ RDIMM: 64GB, 32GB, 16GB, 8GB, 4GB
■ LRDIMM: 64GB, 32GB
■ 3DS LRDIMM: 128GB

Memory Voltage ■ 1.2 V

Error Detection ■ Corrects single-bit errors

On-Board Devices

Chipset ■ Intel® C612 chipset

Infiniband ■ Mellanox ConnectX-3 FDR Infiniband 56Gbps Controller

SATA ■ SATA3 (6Gbps); RAID 0, 1, 5

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

Chassis

Form Factor ■ 2U Rackmount

Model ■ CSE-827HQ+R2K04B

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)

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

■ 1x "0 slot" (x16)
■ [Compatible Listing](#)

0 Slot

(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

Power Supply (76mm Width)



2000W Redundant Power Supplies with PMBus

Total Output Power ■ 1000W/2000W

Dimension (W x H x L) ■ 76 x 40.4 x 336 mm

■ 100-127 Vac / 12-9.5 A / 50-60 Hz
■ 200-220 Vac / 10-9.5 A / 50-60 Hz

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)	
SATA	<ul style="list-style-type: none">■ 3x SATA3 (6Gbps) 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>SATA DOM</u> support on the motherboard

Input	<ul style="list-style-type: none">■ 220-230 Vac / 10-9.8 A / 50-60 Hz■ 230-240 Vac / 10-9.8 A / 50-60 Hz■ 200-240 Vac / 11.8-10 A / 50-60 Hz (UL/cUL only)
+12V	<ul style="list-style-type: none">■ Max: 83.3A & Min: 0A (100-127 Vac)■ Max: 150A & Min: 0A (200-220 Vac)■ Max: 165A & Min: 0A (220-230 Vac)■ Max: 166.7A & Min: 0A (230-240 Vac)■ Max: 166.7A & Min: 0A (200-240 Vac) (UL/cUL only)
+5Vsb	<ul style="list-style-type: none">■ Max: 1A / Min: 0A
Output Type	<ul style="list-style-type: none">■ 27 Pairs Gold Finger Connector
Certification	<div><div>UL/cUL/CE/CCC Titanium Level [Test Report]</div></div>
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

[See Parts List](#)