

SuperServer 6028R-TT



Integrated Board



Super X10DRi-T

Key Features

- Cloud and Virtualization needs
- Compute Intensive Application
- Database Processing and Storage
- High Availability Storage
- Mission-critical Applications

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v3 family; QPI up to 9.6GT/s
2. Up to 1TB ECC DDR4 2133MHz; 16x DIMM sockets
3. 3 PCI-E 3.0 x16, 3 PCI-E 3.0 x8 slots
4. Intel® X540 Dual port 10GBase-T
5. Intel C612 controller for SATA3 ports; RAID 0, 1, 5, 10
6. 6x 3.5" Hot-swap SATA3 HDD Bays
7. 650W High-efficiency Power Supply Gold Level

Available Colors:

Black



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

Specifications

Product SKUs

SYS-6028R-TT ■ SuperServer 6028R-TT (Black)

Motherboard

Super X10DRi-T

Processor/Cache

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 your Supermicro sales representative for additional details.

System Memory

Memory Capacity ■ 16x 288-pin DDR4 DIMM sockets
 ■ Up to 1TB ECC LRDIMM, 512GB ECC RDIMM

Memory ■ 2133/1866/1600MHz ECC DDR4 SDRAM

Chassis

Form Factor ■ 2U Rackmount

Model ■ CSE-823TO-653LPB

Dimensions and Weight

Width ■ 19" (490mm)

Height ■ 3.5" (89mm)

Depth ■ 27" (680mm)

Package ■ 9.7" (H) x 24" (W) x 28" (D)

Weight ■ Net Weight: 31 lbs (14.2 kg)
 ■ Gross Weight: 51.5 lbs (23.6 kg)

Available Colors ■ Black

Front Panel

Buttons ■ Power On/Off button
 ■ System Reset button
 ■ UID button

LEDs ■ Power status LED
 ■ HDD activity LED
 ■ 2x Network activity LEDs
 ■ System information (overheat/UID) LED

| | |
|-----------------|---|
| Type | 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

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|---------------------|---|
| Chipset | <ul style="list-style-type: none"> Intel® C612 Express chipset |
| SATA | <ul style="list-style-type: none"> SATA 3.0 (6Gbps) with 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® 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 | <ul style="list-style-type: none"> ASPEED AST2400 BMC |

Input / Output

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|----------------------|--|
| Serial ATA | <ul style="list-style-type: none"> 6x SATA3 (6Gbps) ports 2x SATA3 (6Gbps) ports onboard 2x SATA3 powered ports that support SATA DOM |
| LAN | <ul style="list-style-type: none"> 2x RJ45 10GBase-T LAN ports 1x RJ45 Dedicated IPMI LAN port |
| USB | <ul style="list-style-type: none"> Rear USB: 2x USB 3.0 + 2x USB 2.0 USB Header: 2x 3.0, 4x 2.0, 1x Type A |
| VGA | <ul style="list-style-type: none"> 1x VGA port |
| Serial Port / Header | <ul style="list-style-type: none"> 1x COM Port |
| DOM | <ul style="list-style-type: none"> 2x SuperDOM (Disk on Module) ports |

Management

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|----------------------|--|
| Software | <ul style="list-style-type: none"> SuperDoctor® 5 Watch Dog NMI, SPM, SUM IPMI 2.0 Intel Node Manager |
| Power Configurations | <ul style="list-style-type: none"> ACPI / APM Power Management Power-on mode for AC power recovery |

Expansion Slots

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|-------------|---|
| PCI-Express | <ul style="list-style-type: none"> 3x PCI-E 3.0 x16 (Low-profile) 3x PCI-E 3.0 x8 (Low-profile) |
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Drive Bays

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| Hot-swap | <ul style="list-style-type: none"> 6x 3.5" Hot-swap SATA HDD trays |
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Backplane

2U SAS/SATA backplane

System Cooling

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| Fans | <ul style="list-style-type: none"> 4x 80cm hot-swap redundant PWM cooling fans |
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Power Supply

650W AC-DC High Efficiency Power Supply

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| AC Input | <ul style="list-style-type: none"> 100 - 140V, 8-5.2A 180-240V 4.2-3.1A, 50-60Hz |
| +5V | <ul style="list-style-type: none"> 30 Amp |
| +5V standby | <ul style="list-style-type: none"> 4 Amp |
| +12V | <ul style="list-style-type: none"> 100-140Vac 49Amp 180-240Vac 54Amp |
| -12V | <ul style="list-style-type: none"> 0.5 Amp |
| +3.3V | <ul style="list-style-type: none"> 25 Amp |

Certification



Gold Certified

System BIOS

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|---------------|---|
| 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 2.3 ACPI 1.0 / 2.0 / 3.0 / 4.0 USB Keyboard support SMBIOS 2.7.1 UEFI 2.3.1 |

Operating Environment / Compliance

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|---------------------|---|
| 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-X10DRi-T | 1 | Super X10DRi-T Motherboard |
| | CSE-823TQ-653LPB | 1 | 1U Chassis |
| Backplane | BPN-SAS-823TQ-O-P | 1 | 823 SAS TQ BACKPLANE W/AMI 9072 |
| Cable 1 | CBL-0483L | 3 | 29cm 30AWG SATA S-S cable |
| Cable 2 | CBL-0484L | 3 | 55cm 30AWG SATA S-S cable |
| Cable 3 | CBL-CDAT-0661 | 2 | 8 pin to 8 pin round SGPIO cable, 40cm, 28AWG, pinout 1-1,RoHS/REACH |
| Heatsink / Retention | SNK-P0048PS | 2 | 2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB |
| Power Supply | PWS-653-2H | 1 | 2U 650W Multi Output Power Supply High Efficiency |
| Air Shroud | MCP-310-29016-0N | 1 | SC823/822 Intel DP X10,X9 PC universal air shroud,12x13MB,HF,RoHS/REACH |
| Drive Tray(s) | CSE-PT41L-BOEM | 1 | BLACK 5.25 DUMMY TRAY W/ RAIL IN SC822 |
| Drive Tray(s) | MCP-220-00092-0B | 6 | Black Hot-swap 3.5inch HDD Tray (w/o logo) |

Optional Parts List

| | Part Number | Qty | Description |
|------------------------|----------------------------|-----|--|
| Onsite Service Program | QS4HR3/2/1 | - | 3/2/1-year onsite 24x7x4 service |
| Onsite Service Program | QSNBD3/2/1 | - | 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) |