

SuperServer 6028R-TT



Integrated Board



Super X10DRi-T

Available Colors:

Black



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

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 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. 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**

Specifications

Product SKUs

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

Motherboard

Super X10DRi-T

Processor/Cache

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

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

SATA ■ SATA 3.0 (6Gbps) with RAID 0, 1, 5, 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

Serial ATA ■ 6x SATA3 (6Gbps) ports
■ 2x SATA3 (6Gbps) ports onboard
■ 2x SATA3 powered ports that support SATA DOM

LAN ■ 2x RJ45 10GBase-T LAN ports
■ 1x RJ45 Dedicated IPMI LAN port

Chassis

Form Factor ■ 2U Rackmount

Model ■ **CSE-823TQ-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

Expansion Slots

PCI-Express ■ 3x PCI-E 3.0 x16 (Low-profile)
■ 3x PCI-E 3.0 x8 (Low-profile)

Drive Bays

Hot-swap ■ 6x 3.5" Hot-swap SATA HDD trays

Backplane

2U SAS/SATA backplane

System Cooling

Fans ■ 4x 80cm hot-swap redundant PWM cooling fans

Power Supply

650W AC-DC High Efficiency Power Supply

AC Input ■ 100 - 140V, 8-5.2A 180-240V 4.2-3.1A, 50-60Hz

+5V ■ 30 Amp

+5V standby ■ 4 Amp

+12V ■ 100-140Vac 49Amp
180-240Vac 54Amp

-12V ■ 0.5 Amp

+3.3V ■ 25 Amp

Certification



Gold Certified

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

Software	<ul style="list-style-type: none"> ■ <u>SuperDoctor® 5</u> ■ 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

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

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-X10DRi-T	1	Super X10DRi-T Motherboard
	CSE-823TQ-653LPB	1	2U Chassis
Backplane	BPN-SAS-823TQ	1	6-port 2U TQ (W/ AMI 9072) backplane, support up to 6x 3.5-inch SAS/SATA HDD
Cable 1	CBL-0484L	3	SATA,INT,ROUND,ST-ST,55CM,30AWG
Cable 2	CBL-0483L	3	SATA,INT,ROUND,ST-ST,29CM,30AWG
Cable 3	CBL-CDAT-0661	2	CBL,SGPIO,2X4F TO 2X4F,P2.54,ROUND CABLE,40CM,28AWG
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1578-QRG	1	SYS-6028R-T/SYS-6028R-TT, QRG,HF,RoHS/REACH,PBF
Parts	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
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

Optional Parts List

	Part Number	Qty	Description
Storage Controller Card(s) & Cables(s)	AOC-S3008L-L8i & 2x CBL-SAST-0699	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 63HDD; RAID 0, 1, 10
	AOC-S3008L-L8e & 2x CBL-SAST-0699	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 122HDD; HBA
	AOC-S3108L-H8IR & 2x CBL-SAST-0699	-	Standard LP, 8 internal ports (12Gb/s) 8x Gen3; RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3108L-H8IR-16DD & 2x CBL-SAST-0699	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60
Cable 1	CBL-0341L	-	USB 2.0,INT,LCD,DVD,1X4/P2.54 TO 2X5/P2.54,70CM,28/24AWG
Peripheral Drive 1	CDM-USATA-G	-	mini-SATA to USB adapter for slim DVD
Peripheral Drive 2	DVM-TEAC-DVD-SBT3	-	BLACK TEAC SLIM DVD ROM SATA DRIVE ROHS,HF,RoHS/REACH,PBF
Global Services & Support	<u>OS4HR3/2/1</u>	-	3/2/1-year onsite 24x7x4 service
	<u>OSNBD3/2/1</u>	-	3/2/1-year onsite NBD service
Software	<u>SFT-OOB-LIC</u> • <i>eStore</i>	1	OOB Management Package (per node license)
Software	<u>SFT-DCMS-Single</u>	1	DataCenter Management Package (per node license)