

SuperServer 6028R-TR



Integrated Board



Super X10DRi

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® i350 Dual port GbE LAN

5. Intel C612 controller for 8 SATA3 ports; RAID 0, 1, 5, 10

6. 8x 3.5" Hot-swap SATA3 HDD Bays

7. 740W Redundant Power Supplies **Platinum Level** (94% efficiency)

Specifications

Product SKUs

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

Motherboard

Super X10DRi

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® i350 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** ■ ASPEED AST2400 BMC

Input / Output

- Serial ATA** ■ 8x SATA3 (6Gbps) ports
■ 2x SATA3 powered ports that support SATA DOM

- LAN** ■ 2x RJ45 Gigabit Ethernet LAN ports
■ 1x RJ45 Dedicated IPMI LAN port

Chassis

- Form Factor** ■ 2U Rackmount

- Model** ■ **CSE-825TQ-R740LPB**

Dimensions and Weight

- Width** ■ 17.2" (437mm)

- Height** ■ 3.5" (89mm)

- Depth** ■ 25.5" (647mm)

- Package** ■ 26" (H) x 11" (W) x 34.5" (D)

- Weight** ■ Net Weight: 35.5 lbs (16 kg)
■ Gross Weight: 69 lbs (31.2 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 PCIe 3.0 x16 (Low-profile)
■ 3x PCIe 3.0 x8 (Low-profile)

Drive Bays

- Hot-swap** ■ 8x 3.5" Hot-swap SATA HDD trays

Backplane

2U SAS/SATA backplane

System Cooling

- Fans** ■ 3x 80x80x38mm Counter-rotating PWM fans

Power Supply with Power Distributor

740W (1+1) Redundant high-efficiency power supply with PMBus

- AC Input** ■ 100-240 V, 50-60 Hz, 9-3.5 Amp

- DC Output** ■ 4 Amp @ +5V standby
■ 61.7 Amp @ +12V

Certification



Platinum Certified
[[Test Report](#)]

System BIOS

- BIOS Type** ■ 128Mb SPI Flash EEPROM with AMI® BIOS

USB	■ Rear USB: 2x USB 3.0 + 2x USB 2.0 ■ Front USB: 2x USB 2.0 ■ USB Header: 2x 3.0, 2x 2.0, 1x Type A
VGA	■ 1x VGA port
Serial Port / Header	■ 2x Fast UART 16550 serial ■ 2x COM Ports (1 rear, 1 header)
DOM	■ 2x SuperDOM (Disk on Module) ports

Management

Software	■ <u>SuperDoctor® 5</u> ■ Watch Dog ■ NMI, SPM, SUM ■ IPMI 2.0 ■ Intel Node Manager
Power Configurations	■ ACPI / APM Pow er Management ■ Pow er-on mode for AC pow er recovery

BIOS Features	■ 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
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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-X10DRi	1	Super X10DRi Motherboard
	CSE-825TQ-R740LPB	1	2U Chassis
Backplane	BPB-SAS-825TQ	1	8-port 2U TQ (W/ AMI 9072) backplane, support up to 8x 3.5-inch SAS/SATA HDD
Cable 1	CBL-0483L	2	SATA,INT,ROUND,ST-ST,29CM,30AWG
Cable 2	CBL-CDAT-0661	2	CBL,SGPIO,2X4F TO 2X4F,P2.54,ROUND CABLE,40CM,28AWG
Cable 3	CBL-0473L	2	SATA,INT,ROUND,ST-ST,21CM,30AWG
Cable 4	CBL-0484L	4	SATA,INT,ROUND,ST-ST,55CM,30AWG
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1575-QRG	1	SYS-6028R-TR/SYS-6028R-TRT, 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
Drive Tray(s)	MCP-220-00007-01	1	Black USB/COM port tray for SC825, 836
Power Supply	PWS-741P-1R	2	1U740W Platinum Redundant Single Output

Optional Parts List

	Part Number	Qty	Description
SLIM DVD ROM SATA DRIVE	-	-	SLIM DVD ROM SATA DRIVE
Cable 1	CBL-0210L	-	FDD, DVD, 4 pin power adapter cable, 8cm. 24AWG
Cable 2	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
Global Services & Support	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	OSNBD3/2/1	-	3/2/1-year onsite NBD service
Software	SFT-OOB-LIC • eStore	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)