

SuperServer 6028R-WTR



Integrated Board



Super X10DRW-i

**Views: | [Angled View](#) | [Top View](#) |
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Key Features

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. 8x 3.5" Hot-swap SAS/SATA HDD bays for Customizable Storage
4. Riser card support up to:
4x PCI-E 3.0 x8 (2 FHFL, 2 FHHL)
2x PCI-E 3.0 (Low-profile) slots
5. Intel® i350 Dual port GbE LAN
6. Integrated IPMI 2.0 and KVM with Dedicated LAN
7. I/O ports: 2x SuperDOM, 1x VGA, 2x COM, TPM 1.2, 6x USB 3.0 (4 rear, 2 via header)
8. 740W Redundant Power Supplies **Platinum Level (94%+)**

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

Specifications

Product SKUs

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

Motherboard

Super X10DRW-i

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/RDIMM

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

DIMM Sizes ■ RDIMM: 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 ■ SATA3 (6Gbps); 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 Controller
■ Virtual Machine Device Queues reduce I/O overhead
■ Supports 1GBASE-T, RJ45 output
■ 1x Realtek RTL8211E PHY (dedicated IPMI)

Video ■ ASPEED AST2400 BMC

Input / Output

SAS/SATA ■ Customizable storage

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

USB ■ 6x USB 3.0 ports (4 rear + 2 via header)

Video ■ 1x VGA port

Chassis

Form Factor ■ 2U Rackmount

Model ■ **CSE-825TQ-R740WB**

Dimensions and Weight

Width ■ 17.2" (437mm)

Height ■ 3.5" (89mm)

Depth ■ 25.5" (648mm)

Weight ■ Net Weight: 35 lbs (15.9 kg)
■ Gross Weight: 62 lbs (28.1 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
■ Universal Information (UID) LED

Expansion Slots

PCI-Express ■ 4x PCI-E 3.0 x8 slots (2x Full-height Full-length, 2x Full-height Half-length)
■ 2x PCI-E 3.0 slots (Low-profile)
■ [UIO AOC Compatibility Matrix](#)
(Both CPUs need to be installed for full access to PCI-E slots and onboard controllers. See manual block diagram and [AOC Support](#) for details.)

Drive Bays

Hot-swap ■ 8x 3.5" Hot-swap SAS / SATA HDD trays (ready for PCI-E storage controller card)

Backplane

1x 2U SAS backplane w/ Enclosure Management (SAS support requires optional SAS controller)

Peripheral Drives

DVD-ROM ■ Slim DVD-ROM drive (optional)

System Cooling

Fans ■ 3x 80mm 7,000 RPM 4-pin 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

Serial Port / Header	■ 1x Fast UART 16550 port / 1 Header
DOM	■ 2x SuperDOM (Disk on Module) ports

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 / 3.0 / 4.0
■ BIOS resume hot keys
■ 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)

Список деталей

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DRW-i	1	Super X10DRW-i Motherboard
	CSE-825TQ-R740WB	1	2U Chassis
Backplane	BPN-SAS-825TQ	1	8-port 2U TQ (W/ AMI 9072) backplane, support up to 8x 3.5-inch SAS/SATA HDD
Cable 1	CBL-CDAT-0661	2	CBL,SGPIO,2X4F TO 2X4F,P2.54,ROUND CABLE,40CM,28AWG
Cable 2	CBL-0186L	2	SATA,INT,ROUND,SET OF 4,ST-RA 56/45.5/35/23CM,26AWG
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1636-QRG	1	6028R-WTR(T) QRG,HF
Parts	MCP-160-81504-0B	1	Add-on Card (AOC) Mylar Sheet for SC815
Riser Card	RSC-R2UW-4E8	1	2U LHS WIO Riser card with four PCI-E x4 slots
Riser Card	RSC-R2UW-2E8R	1	2U RHS WIO Riser card with two PCI-E x8 slots
Heatsink / Retention	SNK-P0048PS	1	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
Heatsink / Retention	SNK-P0048PSC	1	2U Passive CPU Heat Sink for X9, X10 2U WIO/WIO+ Series Servers
Power Supply	PWS-741P-1R	2	1U740W Platinum Redundant Single Output
Rail Set	MCP-290-00053-0N	1 set	Rail set, quick/quick, default for 2,3U 17.2"W

Optional Parts List

	Part Number	Qty	Description
3.5" to 2.5" Converter Tray	MCP-220-00043-0N	-	Black Hot-swap Gen-4 2.5" to 3.5" HDD tray
DVD-ROM / DVD-RW	DVM-TEAC-DVD-SBT4	1	TEAC SLIM DVD ROM SATA DRIVE, HF, RoHS/REACH
	DVM-TEAC-DVDRW-SBT4	1	TEAC SLIM DVD-RW SATA DRIVE, RoHS
	DVM-PLDS-DVDRW-SBT5	1	PHILIPS SLIM BLACK DVD-RW SATA DRIVE, HF, RoHS/REACH
DVD-ROM Accessory	MCP-220-81502-0N	1	Slim SATA DVD mounting kit
Internal 2.5" HDD Tray (COM slot) Included	MCP-220-00023-01	1	Black USB dummy tray support 1x 2.5" slim HDD
Internal 2.5" HDD Tray (DVD Slot)	MCP-290-00036-0B	1	Black DVD dummy tray support 1x 2.5" slim HDD
USB/COM Port Tray (DVD Slot)	MCP-220-00114-0N	1	Black 2x USB 3.0/COM port tray in slim DVD bay
Cable for internal HDD	CBL-0489L	2	SATA,INT,ROUND,ST-RA,70CM,30AWG
	CBL-0082L	1	Y split , big 4 pin to two RA SATA power extension 15cm, 18AWG
CacheVault(s)	BTR-TFM8G-LSICVM02 & BKT-BBU-BRACKET-05	-	CacheVault for Broadcom 3108; SuperCap mounting bracket for PCI-E location
	BTR-TFM8G-LSICVM02 & MCP-240-00127-0N	-	CacheVault for Broadcom 3108; SuperCap mounting bracket for 2.5" HDD location
SuperCap for AOC-S2208L-H8IR	BTR-0024LH-LSI00297 & BKT-BBU-BRACKET-05	-	SuperCap TFM to be used w/ Supermicro AOC-S2208L-H8IR; SuperCap mounting bracket for PCI-E location
	BTR-0024LH-LSI00297 & MCP-240-00127-0N	-	SuperCap TFM to be used w/ Supermicro AOC-S2208L-H8IR; SuperCap mounting bracket for 2.5" HDD location

Storage Controller Card(s) & Cables(s)	AOM-S3108M-H8 & 2x CBL-SAST-0556	-	Supermicro Low Profile 12Gb/s Eight-Port SAS Internal Mezzanine RAID Adapter; RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3108L-H8IR-16DD & 2x CBL-SAST-0556		Standard LP, 8 internal ports (12Gb/s) Gen-3, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3008L-L8i & 2x CBL-SAST-0556		Standard LP, 8 internal ports (12Gb/s) Gen-3, 63HDD; RAID 0, 1, 10
	AOC-S3008L-L8e & 2x CBL-SAST-0556		Standard LP, 8 internal ports (12Gb/s) Gen-3, 122HDD; HBA
	AOC-S2308L-L8e & 2x CBL-SAST-0388L-02		Standard LP, 8 internal ports (6Gb/s) Gen-3, 122HDD; HBA
	AOC-S2308L-L8i & 2x CBL-SAST-0388L-02		Standard LP, 8 internal ports (6Gb/s) Gen-3, 63HDD; RAID 0, 1, 10
	AOC-S2208L-H8iR & 2x CBL-SAST-0388L-02		Standard LP, 8 internal ports (6Gb/s) Gen-3, 240HDD; RAID 0, 1, 5, 6, 10, 50, 60
	Network Card(s)	AOC-SGP-i2	-
AOC-SGP-i4			Standard LP, 4x GbE RJ45, PCI-E x4, Intel® i350
AOC-SG-i2			Standard LP, 2x GbE RJ45, PCI-E x4, Intel® 82575EB
AOC-SG-i4			Standard LP, 4x GbE RJ45, PCI-E x8, Intel® 82576EB
AOC-STG-b4S			Standard LP, 4x 10GbE SFP+, PCI-E x8, Broadcom® BCM57840S
AOC-STGN-i2S			Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel® 82599ES
AOC-STG-i2T			Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel® X540
AOC-STG-i2			Standard LP, 2x 10GbE CX4, PCI-E x8, Intel® 82598EB
Front Bezel	MCP-210-82503-0B	1	Black SC825 front bezel
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)