

SuperServer 6028R-TDWNR



Available Colors:

Black



Key Features

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v3 family; QPI up to 9.6GT/s
2. 8x 3.5" Hot-swap SATA3 + 4x 2.5" NVMe drive bays
3. Up to 1TB ECC DDR4 2133MHz; 16x DIMM sockets
4. 1x PCI-E 3.0 x16 (FHHL), 2x PCI-E 3.0 x8 (FHHL), and 1x PCI-E 3.0 (LP)
5. Intel® i350 Dual port GbE LAN
6. Integrated IPMI 2.0 and KVM with Dedicated LAN
7. I/O ports: 1x VGA, 2x USB 3.0, 2x USB 2.0 (rear)
8. 920W Redundant Power Supplies **Platinum Level (94%+)**

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-TDWNR**
- SuperServer 6028R-TDWNR (**Black**)

Motherboard

Super X10DDW-iN

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 Type**
- 2133/1866/1600MHz ECC DDR4 SDRAM 72-bit

Chassis

- Form Factor**
- 2U Rackmount

- Model**
- **CSE-826BAC4-R920WB**

Dimensions and Weight

- Width**
- 17.2" (437mm)
- Height**
- 3.5" (89mm)
- Depth**
- 25.5" (648mm)
- Package**
- 11.4" (H) x 26.7" (W) x 34.5" (D)
- Weight**
- Gross Weight: 64 lbs (29.0 kg)
 - Net Weight: 36 lbs (16.3 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

- 1 PCI-E 3.0 x16 slot

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	
Chipset	<ul style="list-style-type: none"> Intel® C612 Express chipset
SATA	<ul style="list-style-type: none"> SATA3 (6Gbps); 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® i350 Dual Port 10GBase-T Virtual Machine Device Queues reduce I/O overhead Supports 1GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output 1x Realtek RTL8211E PHY (dedicated IPMI)
Video	<ul style="list-style-type: none"> ASPEED AST2400 BMC
Input / Output	
SATA	<ul style="list-style-type: none"> 8x SATA 3.0 ports (6Gbps)
NVMe	<ul style="list-style-type: none"> 4x Internal NVMe ports
LAN	<ul style="list-style-type: none"> 2x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 2x USB 3.0 ports (rear) 2x USB 2.0 ports (rear)
Video	<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
DOM	<ul style="list-style-type: none"> 2x SuperDOM (Disk on Module) ports

- (Full-height Half-length)
- 2 PCI-E 3.0 x8 slots (Full-height Half-length)
- 1 PCI-E 3.0 slot (Low-profile)

PCI-Express

(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 SATA3 drive trays
 - 4x 2.5" NVMe drive trays

Backplane

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

System Cooling

- Fans**
- 3x 80mm 7,000 RPM 4-pin PWM fans

Power Supply with Power Distributor

920W high-efficiency AC-DC Redundant power supplies with PMBus and I2C

- AC Input**
- 100-240 V, 50-60 Hz, 11-4.5 Amp

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

- With Power Distributor**
- +5V: 45 Amp
 - +3.3V: 24 Amp
 - 12V: 0.6 Amp

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 resuce hot keys
 - USB Keyboard support
 - SMBIOS 2.3
 - UEFI

Operating Environment / Compliance

- RoHS**
- RoHS Compliant
- Environmental Spec.**
- Operating Temperature: 5°C to 40°C (41°F to 104°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 - (Items Included)			
	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DDW-CSE-826BAC4-R920WB	1	2U Chassis
Backplane	BPN-SAS3-826A-N4	1	2U Backplane for 3.5" HDD/SSD upto 8 x SAS3/SATA3 and 4 SAS3/SATA3/NVMe devices
Cable 1	CBL-SAST-0590	2	Internal Mini-SAS HD to Mini-SAS HD for PCIe SSD, Internal Mini-SAS HD cable for PCIe SSD NVMe, 12Gb/s, 70cm,30AWG
Cable 2	CBL-SAST-0623	2	Internal Mini-SAS HD cable for PCIe SSD NVMe, 12Gb/s, 45cm,30AWG,RoHS/REACH
Cable 3	CBL-SAST-0507-01	2	Internal Mini-SAS to Mini-SAS HD 80cm w/ SB, 30AWG,HF,RoHS/REACH,PBF
Riser Card	RSC-R2UW-2E8E16+-O-P	1	RSC-R2UW-2E8E16+
Riser Card	RSC-R2UW-E8R-UP-O-P	1	2U RHS WIO Riser Card with a PCI-E x8 for UP MBs (Rev 1.02)
Heatsink / Retention	SNK-P0048PS	2	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
Power Supply	PWS-920P-SQ	2	920W 1U Redundant PWS W/ Quiet Mode
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
Internal 3.5"/2.5" HDD Tray Included	MCP-220-82502-0B	2	Black fixed 3.5"/2.5" HDD tray or FDD dummy tray
Internal 2.5" HDD Tray Included (COM slot)	MCP-220-00023-01	1	Black USB dummy tray support 1x 2.5" slim HDD
DVD-ROM / DVD-RW	DVM-PNSC-DVD-SBT3 DVM-TEAC-DVD-SBT3 DVM-PLDS-DVDRW-SBT4 DVM-TEAC-DVDRW-SBT2	1	SLIM DVD-ROM / DVD-RW SATA DRIVE
DVD-ROM Accessory	MCP-220-81502-0N	1	Slim SATA DVD kit
USB/COM Port Tray	MCP-220-00007-01	1	Black USB/COM port tray
Internal 2.5" HDD Tray (DVD Slot)	MCP-290-00036-0B	1	Black DVD dummy tray support 1x 2.5" HDD
Network Card(s)	AOC-SGP-i2	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel®i350AM2
	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 x4, 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
Storage Controller Card(s)	AOM-S3108-H8	-	3108 based RAID with SAS-3 perf
	AOC-S3008L-L8e	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 122HDD, HBA
	AOC-S3008L-L8i	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 63HDD, RAID 0,1,1E
	AOC-S3108L-H8iR	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 240HDD, RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S2308L-L8e	-	Standard LP, 8 internal ports (6Gb/s) Gen-3, 122HDD, HBA
	AOC-S2308L-L8i	-	Standard LP, 8 internal ports (6Gb/s) Gen-3, 63HDD, RAID 0,1,1E
	AOC-S2208L-H8iR	-	Standard LP, 8 internal ports (6Gb/s) Gen-3, 240HDD, RAID 0, 1, 5, 6, 10, 50, 60
	AOC-SAS2LP-MV8	-	Standard LP, 8 internal ports (6Gb/s) Gen-2, HBA
	AOC-SAS2LP-H4iR	-	Standard LP, 4 internal & 4 external ports (6Gb/s) Gen-2, 240HDD, RAID 0, 1, 5, 6, 10, 50, 60
	AOC-SAS2LP-H8iR	-	Standard LP, 8 internal ports (6Gb/s) Gen-2, 240HDD, RAID 0, 1, 5, 6, 10, 50, 60
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)