

SuperServer 5018R-WR



Integrated Board



Super X10SRW-F

Key Features

- 1. Single socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4†/ v3 family; QPI up to 9.6GT/s
- 2. Intel® C612 chipset
- 3. 4x 3.5" Hot-swap SATA3 drive bays
- 4. 1x Slim DVD-ROM drive bay
- 5. Up to **1TB†** ECC 3DS LRDIMM , up to DDR4- **2400†**MHz ; 8x DIMM slots
- 6. 2x PCI-E 3.0 x16 FHFL, 1x PCI-E 3.0 x8 LPHL (3x AOC slots total)
- 7. Intel® i350-AM2 Dual port GbE LAN
- 8. Integrated IPMI 2.0 and KVM with Dedicated LAN
- 9. I/O ports: 1x VGA, 2x COM, 2x USB 3.0, 2x USB 2.0
- 10. 500W Redundant Power Supplies **Platinum Level (94%+)**

Available Colors: Black 

- [▶ Drivers & Utilities](#) [▶ BIOS](#) [▶ IPMI](#) [▶ Tested Memory](#) [▶ Manuals](#)
[▶ OS Certification Matrix](#) [▶ Quick-References Guide](#) [▶ Drive Options](#) [▶ Network Card \(AOC\) Matrix](#)

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

Specifications

Product SKUs

SYS-5018R-WR	■ SuperServer 5018R-WR (Black)
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Motherboard

Super X10SRW-F

Processor

CPU	■ Intel® Xeon® processor E5-2600 v4 [†] / v3, E5-1600 v4 [†] / v3 family (up to 145W TDP ^{**}) ■ Single Socket R3 (LGA 2011)
Core / Cache	■ Up to 22 Cores [†] / Up to 55MB [†] Cache
Note	[†] BIOS version 2.0 or above is required
Note	^{**} Motherboard supports this maximum TDP. Please verify your system can thermally support

System Memory

Memory Capacity	■ 8x 288-pin DDR4 DIMM slots ■ Up to 1TB ECC 3DS LRDIMM ■ Up to 512GB ECC LRDIMM ■ Up to 256GB ECC RDIMM
Memory Type	■ 2400 [†] / 2133/1866/1600MHz ECC DDR4 SDRAM 72-bit, 288-pin (RDIMM / LRDIMM) / 284-pin gold-plated DIMMs
DIMM Sizes	■ 3DS LRDIMM: 128GB ■ LRDIMM: 64GB, 32GB ■ RDIMM: 32GB, 16GB, 8GB, 4GB
Memory Voltage	■ 1.2 V
Error Detection	■ Corrects single-bit errors ■ Detects double-bit errors (using ECC memory)

On-Board Devices

Chipset	■ Intel® C612 chipset
SATA	■ SATA3 (6Gbps) via C612 controller ■ RAID 0, 1, 5, 10 support
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-AM2 Dual Port Gigabit Ethernet ■ Virtual Machine Device Queues reduce I/O overhead ■ Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
Video	■ ASPEED AST2400 BMC

Input / Output

SATA	■ 4x SATA3 (6Gbps) ports
LAN	■ 2x RJ45 Gigabit Ethernet LAN ports ■ 1x RJ45 Dedicated IPMI LAN port
USB	■ 2x USB 3.0 ports (2 rear) ■ 2x USB 2.0 ports (2 rear)

Chassis

Form Factor	■ 1U Rackmount
Model	■ CSE-815TQ-R500WB

Dimensions

Height	■ 1.7" (43mm)
Width	■ 17.2" (437mm)
Depth	■ 25.6" (650mm)
Weight	■ Net Weight: 23.5 lbs (10.7 kg) ■ Gross Weight: 36 lbs (16.3 kg)
Available Colors	■ Black

Front Panel

Buttons	■ Power On/Off button ■ System Reset button
LEDs	■ Power LED ■ Hard drive activity LED ■ 2x Network activity LEDs ■ System Information LED

Expansion Slots

PCI-Express	■ Total of 3 Add-on card slots: ■ 2x PCI-E 3.0 x16 (FH, FL) slots ■ 1x PCI-E 3.0 x8 (LP, HL) slot
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Drive Bays

Hot-swap	■ 4x 3.5" Hot-swap drive bays
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Peripheral Drives

Optional	■ 1x slim DVD-ROM drive bay
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Backplane

SAS/SATA HDD Backplane (SAS support requires optional SAS controller)
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System Cooling

Fans	■ 4x 40x28mm 4-pin PWM Cooling Fans
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Power Supply

500W Redundant Power Supplies with PMBus	
Total Output Power	■ 500W: 100 – 240Vac
Dimension (W x H x L)	■ 54.5 x 40.25 x 320 mm
Input	■ 100-240Vac, 50-60Hz, 6.1-2.6A
+12V	■ Max: 42A / Min: 0.5A
+5Vsb	■ Max: 4A / Min: 0A
Output Type	■ Gold Finger Connector Mating with Molex 45984-4343
With Power Distributor	■ +5V: 25A ■ +3.3V: 12A ■ -12V: 0.6A

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

PC Health Monitoring

Voltage	■ Monitors for CPU Cores, +3.3V, +5V, +12V, +5V Standby, VBAT, HT, Memory, Chipset Voltages.
FAN	■ Total of 6 fan headers supporting up to 6 fans ■ 6 fans with tachometer status monitoring ■ Status monitor for speed control ■ Status monitor for on/off control ■ Low noise fan speed control ■ Pulse Width Modulated (PWM) fan connectors
Temperature	■ Monitoring for CPU and chassis environment ■ CPU thermal trip support ■ I ² C temperature sensing logic ■ Thermal Monitor 2 (TM2) support ■ PECI
LED	■ System Information LED ■ Suspend static indicator LED ■ UID/Remote UID
Other Features	■ Chassis intrusion detection ■ Chassis intrusion header ■ RoHS, Halogen Free

Certification



Platinum Certified
[[Test Report](#)]

System BIOS

BIOS Type	■ 8MB SPI Flash EEPROM with AMI BIOS
BIOS Features	■ DMI 2.3 ■ PCI 2.3 ■ ACPI 1.0 / 2.0 ■ USB Keyboard support ■ SMBIOS 2.3

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-X10SRW-F	1	Super X10SRW-F Motherboard
	CSE-815TQ-R500WB	1	1U Chassis
Backplane	BPN-SAS-815TQ	1	4-port 1U TQ backplane (W/ enclosure management), support up to 4x 3.5-inch SAS/SATA HDD
Cable 1	CBL-0180L-01	1	SATA,INT,ROUND,SET OF 4,ST-RA 70/59/48/38CM,26AWG
Cable 2	CBL-CDAT-0662	1	CBL,SGPIO,2X4F TO 2X4F,P2.54,ROUND CABLE,61.5CM,28AWG
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1771-QRG	1	5018R-WR, QRG,HF,RoHS/REACH
Riser Card	RSC-R1UW-2E16	1	1U LHS WIO Riser card with two PCI-E x16 slots
Riser Card	RSC-R1UW-E8R	1	1U RHS WIO Riser card with one PCI-E x8 slot
Heatsink / Retention	SNK-P0047PS	1	1U Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
Power Supply	PWS-504P-1R	2	500W 1U Redundant PWS W/ 54.5MM Wide
Fan	FAN-0086L4	4	40x56, 4 Pin PWM
Air Shroud	MCP-310-19002-0N	1	SC815/113/116 Intel DP X9, X8 PC air shroud, 12x13MB

Optional Parts List

	Part Number	Qty	Description
2.5" to 3.5" 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-SBT5	1	TEAC slim DVD-ROM SATA drive
	DVM-PLDS-DVDRW-SBT5	1	PHILIPS slim DVD-RW SATA drive
DVD-ROM Accessory	MCP-220-81502-0N	1	Slim SATA DVD mounting kit
Internal 2.5" HDD Tray (FDD slot)	MCP-220-83601-0B	1	Black FDD 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
Cable for internal HDD	CBL-0484L	2	55cm 30AWG SATA straight to straight cable
	CBI-0289L	1	Y split, big 4 pin to two RA SATA power extension 30cm
Hot-swap 2.5" kit (FDD slot)	MCP-220-81504-0N	1	Single slim 2.5" SAS3 (12Gb/s) hot swap in slim FDD form factor
Hot-swap 2.5" kit (DVD slot)	MCP-220-81506-0N	1	Single slim 2.5" SAS3 (12Gb/s) hot swap in slim DVD form factor
Cooling Fan	FAN-0086L4	-	40x40x56mm 12K-11K RPM Counter-rotating Fan
Storage Controller card & cable	AOC-S3108L-H8iR & 1x CBL-SAST-0556	-	Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8, RAID controller, RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3108L-H8iR-16DD & 1x CBL-SAST-0556		Standard LP, 8 Internal ports (12Gb/s) PCI-E 3.0 x8, 16HDD RAID controller, RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3008L-L8i & 1x CBL-SAST-0556		Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 63HDD, RAID 0, 1, 10
	AOC-S3008L-L8e & 1x CBL-SAST-0556		Standard LP, 8 internal ports (12Gb/s) PCI-E 3.0 x8, 122HDD HBA
	AOC-S3008L-L8e & 1x CBL-SAST-0556		
CacheVault	BTR-CV3108-1U1	-	CacheVault for Broadcom 3108 with SuperCap mounting in 1Y 40x56 fan tray
	BTR-TFM8G-LSICVM02 & BKT-BBU-BRACKET-05	-	CacheVault for Broadcom 3108 with SuperCap mounting bracket for PCI-E location
Network Card(s)	AOC-SGP-i2	-	Standard LP, 2x GbE RJ45, PCI-E x4, Intel i350-AM2
	AOC-SGP-i4	-	Standard LP, 4x GbE RJ45, PCI-E x4, Intel i350
	AOC-STGN-i2S	-	Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel 82599ES
	AOC-STGF-i2S	-	Standard LP, 2x 10GbE SFP+, PCI-E x8, Intel X710-BM2
	AOC-STG-B4S	-	Standard LP, 4x 10GbE SFP+, PCI-E x8, Broadcom BCM57840S
	AOC-STGS-i2T	-	Standard LP, 2x 10GbE RJ45, PCI-E x8, Intel X550-AT2
	AOC-S25G-b2S	-	Standard LP, 2x 25GbE SFP28, PCI-E x8, Broadcom BCM57414
	AOC-S25G-m2S	-	Standard LP, 2x 25GbE SFP28, PCI-E x8, Mellanox CX-4 LX

Front Bezels	CSE-PTFB-813LB	-	Black front bezels
	CSE-PTFB-813-02B	-	Black Front Bezel w/ Round Venting Holes
TPM security module	AOM-TPM-9665V	1	TPM 2.0, vertical form factor
	AOM-TPM-9655V	1	TPM 1.2, vertical form factor
Global Services & Support	QS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	QSNBD3/2/1	-	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)