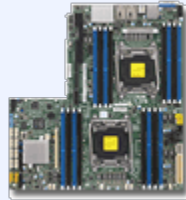


SuperServer 1028R-WTR



Integrated Board



Super X10DRW-i



Key Features

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v3 family; QPI up to 9.6GT/s
2. Up to 1TB ECC DDR4 2133MHz; 16x DIMM sockets
3. 2x PCI-E 3.0 x16 (FHHL), 1x PCI-E 3.0 x8 Mezzanine for HBA cards
4. 10x Hot-swap 2.5" SAS/SATA HDD bays
5. Intel® i350 Dual port GbE LAN
6. I/O ports: 2x SuperDOM, 1x VGA, 1x COM, 6x USB 3.0 (4 rear, 2 front)
7. 2x SuperDOM (Disk on Module) ports
8. 700W Redundant Power Supplies **Platinum Level** High-efficiency

Available Colors:

Black



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

Specifications

Product SKUs

- SYS-1028R-WTR** ■ SuperServer 1028R-WTR (**Black**)

Motherboard

Super X10DRW-i

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** ■ 133/1866/1600MHz ECC DDR4 SDRAM 72-bit

Chassis

- Form Factor** ■ 1U Rackmount

- Model** ■ **CSE-116TQ-R706WB**

Dimensions and Weight

- Width** ■ 17.2" (437mm)

- Height** ■ 1.7" (43mm)

- Depth** ■ 23.5" (597mm)

- Gross Weight** ■ 46 lbs (20.9kg)

- Available Colors** ■ Black

Front Panel


- Buttons** ■ Power On/Off button
 ■ UID button

- LEDs** ■ Power status LED
 ■ HDD activity LED
 ■ 2x Network activity LEDs
 ■ Universal Information (UID) LED

Expansion Slots

- PCI-Express** ■ 2x PCI-E 3.0 x16 full-height, Half-length slots

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 Gigabit Ethernet Controller Virtual Machine Device Queues reduce I/O overhead Supports 10BASE-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	
Serial ATA	<ul style="list-style-type: none"> 10x SATA3 (6Gbps) 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"> 6x USB 3.0 ports (4 rear + 2 via header)
Video	<ul style="list-style-type: none"> 1x VGA port
Serial Port / Header	<ul style="list-style-type: none"> 1x Fast UART 16550 header
DOM	<ul style="list-style-type: none"> 2x SuperDOM (Disk on Module) ports
PC Health Monitoring	
Voltage	<ul style="list-style-type: none"> Monitors for CPU Cores, +1.8V, +3.3V, +5V, +12V, +3.3V Standby, +5V Standby, VBAT, Memory Voltages. 5+1 Phase-switching voltage regulator
FAN	<ul style="list-style-type: none"> 6x 4-pin fan headers (up to 6 fans) 6x fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors
Temperature	<ul style="list-style-type: none"> Monitoring for CPU and chassis environment CPU thermal trip support Thermal Control for 8x Fan Connectors Thermal Monitor 2 (TM2) support PECI
LED	<ul style="list-style-type: none"> CPU / System Overheat LED Suspend static indicator LED UID/Remote UID
Other Features	<ul style="list-style-type: none"> Chassis intrusion detection Chassis intrusion header SDDC Support RoHS

Drive Bays	
Hot-swap	<ul style="list-style-type: none"> 10x Hot-swap 2.5" SAS / SATA HDD trays (connected to onboard storage controller)
Backplane	
SAS/SATA HDD Backplane	
System Cooling	
Fans	<ul style="list-style-type: none"> 5x 4cm heavy-duty counter-rotating fans w/ air shroud and optimal fan speed control
Power Supply	
700W/750W Redundant AC-DC high-efficiency power supply with PMBus and I2C	
AC Voltage	<ul style="list-style-type: none"> 700W: 100 - 140 V, 50-60 Hz 750W: 200 - 240V, 50-60 Hz
DC Output +5V standby	<ul style="list-style-type: none"> 3 Amp
DC Output +12V	<ul style="list-style-type: none"> 700W: 58 Amp @ 100-140V 750W: 62 Amp @ 200-240V
Certification	 Platinum Certified (Cert. in progress)
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
Management	
Software	<ul style="list-style-type: none"> SuperDoctor® 5 Watch Dog NMI 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
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-X10DRW-i	1	Super X10DRW-i Motherboard
	CSE-116TQ-R706WB	1	1U Chassis
Backplane	BPN-SAS-116TQ	1	BPN-SAS-116TQ
Cable 1	CBL-CDAT-0662	1	8 pin to 8 pin round SGPIO cable, 61.5cm, 28AWG, pinout 1-1,RoHS/REACH
Cable 2	CBL-SAST-0640	2	38cm SATA cable S-RA 30AWG,RoHS/REACH
Cable 3	CBL-SAST-0641	2	45cm SATA cable S-RA 30AWG,RoHS/REACH
Cable 4	CBL-CDAT-0660	1	8 pin to 8 pin round SGPIO cable, 27cm, 28AWG, pinout 1-1,RoHS/REACH
Cable 5	CBL-CDAT-0661	1	8 pin to 8 pin round SGPIO cable, 40cm, 28AWG, pinout 1-1,RoHS/REACH
Cable 6	CBL-0488L	2	55cm SATA cable S-RA 30AWG
Cable 7	CBL-0483L	2	29cm 30AWG SATA S-S cable
Cable 8	CBL-SAST-0639	2	31cm SATA cable S-RA 30AWG,RoHS/REACH
Riser Card	RSC-R1UW-2E16-O-P	1	RSC-R1UW-2E16-O-P
Heatsink / Retention	SNK-P0047PSC	1	1U Passive Front CPU Heat Sink w/ a Side Air Channel for X9, X10 Systems Equipped with a Narrow ILM MB
Heatsink / Retention	SNK-P0057PS	1	1U High Performance Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
Power Supply	PWS-706P-1R	2	1U 750W redundant power width 54.5mm(Platinum),HF,RoHS/REACH,PBF

Optional Parts List

	Part Number	Qty	Description
Cable for Storage Controller Card Connection	CBL-0343L-01	1	IPASS to 4 SATA Cable, 30AWG 76/66/54/45CM, W/ 66CM
Rail Set	MCP-290-00063-0N	1 set	Rail set, quick/quick, for 1U 17.2"W SC113
CacheVault(s)	BTR-TFM8G-LSICVM02	-	CacheVault for AOM LSI 3108 (LSICVM02)
CacheVault Installation Kits	MCP-240-00127-0N	-	SuperCap installation kit for thick 2.5" HDD location
	BKT-BBU-BRACKET-05	-	SuperCap installation kit for PCI-E location
Onsite Service Program	QS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
Onsite Service Program	OSNBD3/2/1	-	3/2/1-year onsite NBD service
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)	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