

SuperServer 1028R-TDW



Integrated Board



Super X10DDW-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 Full-height Half-length, 1x PCI-E 3.0 Low-profile
4. 8x 2.5" Hot-swap SATA HDD bays
5. Intel® i350 Dual port Gigabit Ethernet
6. I/O ports: 2x SuperDOM, 1x VGA, 1x COM, 2x USB 3.0, 2x USB 2.0
7. 600W High-efficiency Digital-switching Power Supply; **Platinum Level**

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-TDW**
- SuperServer 1028R-TDW (**Black**)

Motherboard

Super X10DDW-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**
- 2133/1866/1600MHz ECC DDR4 SDRAM 72-bit

Chassis

- Form Factor**
- 1U Rackmount
- Model**
- **CSE-113TQ-600WB**

Dimensions and Weight

- Width**
- 17.2" (437mm)
- Height**
- 1.7" (43mm)
- Depth**
- 25.6" (650mm)
- 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
 - 1x PCI-E 3.0 Low-profile slot

DIMM Sizes	<ul style="list-style-type: none"> ▪ DIMM: 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 LAN ▪ Virtual Machine Device Queues reduce I/O overhead ▪ Supports 10GBASE-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"> ▪ 8x SATA3 (6Gbps) ports
LAN	<ul style="list-style-type: none"> ▪ 2x RJ45 Gigabit Ethernet ports ▪ 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> ▪ 3x USB 3.0 ports (2 rear + 1 Type A) ▪ 4x USB 2.0 ports (2 rear + 2 via headers)
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
Management	
Software	<ul style="list-style-type: none"> ▪ Intel® Node Manager ▪ SuperDoctor® 5 ▪ IPMI 2.0 ▪ NMI ▪ SPM ▪ SUM ▪ Watch Dog
Power Configurations	<ul style="list-style-type: none"> ▪ ACPI / APM Power Management ▪ Power-on mode for AC power recovery

Drive Bays	
Hot-swap	<ul style="list-style-type: none"> ▪ 8x 2.5" Hot-swap SATA HDD trays
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 with Digital Switching Control & PMBus 1.2	
600W AC power supply w/ PFC (24-pin)	
AC Voltage	<ul style="list-style-type: none"> ▪ 100-240 V, 50-60 Hz, 7.5 Amp max
+5V	<ul style="list-style-type: none"> ▪ 18 Amp
+5V standby	<ul style="list-style-type: none"> ▪ 3 Amp
+12V	<ul style="list-style-type: none"> ▪ 49 Amp
-12V	<ul style="list-style-type: none"> ▪ 0.5 Amp
+3.3V	<ul style="list-style-type: none"> ▪ 15 Amp
Certification	  Platinum Certified [Test Report]
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
Operating Environment / Compliance	
RoHS	<ul style="list-style-type: none"> ▪ RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none"> ▪ 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

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DDW-i	1	Super X10DDW-i Motherboard
	CSE-113TQ-600WB	1	1U Chassis
Backplane	BPN-SAS-113TQ-O-P	1	BPN-SAS-113TQ-O-P
Cable 1	CBL-0296L	1	4 pin to 4 pin fan extension cord, for PWM fan. 23cm. 24AWG
Cable 2	CBL-SAST-0659	2	RA IPASS TO 4 SATA, 70/70/75/75cm w/75cm SB, 30AWG,RoHS/REACH
Riser Card	RSC-R1UW-2E16-O-P	1	RSC-R1UW-2E16-O-P
Riser Card	RSC-R1UW-E8R-O-P	1	RSC-R1UW-E8R-O-P
Heatsink / Retention	SNK-P0047PS	2	1U Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
Power Supply	PWS-605P-1H	1	1U 600W Multi Output Power Supply PMbus
Air Shroud	MCP-310-19001-0N	1	SC815/113/116 Intel DP X9, X8 PC air shroud,1368x13/12x13MB
Cable 3	CBL-0335L	1	FRONT CTL CABLE 20 PIN TO 20 PIN W/TUBE,70CM,PBF. 28AWG
Cable 4	CBL-0160L	1	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
Peripheral Drive 1	MCP-290-00036-0B	1	Black DVD dummy tray support 1x2.5 HDD for SC113,815,825,836
Fan 1	FAN-0086L4	4	40x56 4Pin PWM, Primary for SC815, Secondary for SC818, 825M
Drive Tray(s)	MCP-220-00047-0B	8	Black gen 3rd hot-swap 2.5inch HDD tray
Mounting Rails	MCP-290-00111-0N	1set	Inner rail, extension, long, screw type
Mounting Rails	MCP-290-00101-0N	1set	Outer rail, screw type, 25.6\ to 33.05"
Mounting Rails	MCP-290-00107-0N	1set	Inner rail, front, short, screw type

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
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