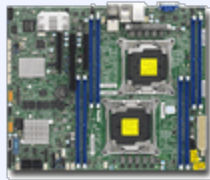


# SuperServer 1028R-MCT



## Integrated Board



Super X10DRL-CT

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. Up to 512GB ECC DDR4 2133MHz; 8x DIMM slots
3. 1x PCI-E 3.0 x8 FHHL Expansion slot
4. 8x 2.5" Hot-swap SAS/SATA HDD bays
5. SAS3 (12Gbps) via LSI 3108
6. Intel® i210 Dual GbE LAN ports; Intel® X540 Dual 10GBase-T ports
7. I/O ports: 2x SuperDOM, 1x VGA, 2x USB 3.0
8. 600W High-efficiency Power Supply Platinum Level Certified
9. Optional 2x 2.5" NVMe drives support

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-MCT ■ SuperServer 1028R-MCT (Black)

### Motherboard

Super X10DRL-CT

### 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 Supermicro Technical Support for additional information about frequency optimized CPUs and specialized system optimization.

### System Memory

- Memory Capacity ■ 8x 288-pin DDR4 DIMM slots  
 ■ Up to 512GB ECC LRDIMM, 256GB ECC RDIMM

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

- DIMM ■ RDIMM: 32GB, 16GB, 8GB, 4GB

### Chassis

- Form Factor ■ 1U Rackmount

- Model ■ CSE-113MFAC2-605CB

### Dimensions and Weight

- Width ■ 17.2" (437mm)

- Height ■ 1.7" (43mm)

- Depth ■ 19.98" (508mm)

- Gross Weight ■ 38 lbs (17.24 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 ■ 1x PCI-E 3.0 x8 Full-height, Half-length slot

Sizes	<ul style="list-style-type: none"> <li>LRDIMM: 64GB, 32GB</li> </ul>
Memory Voltage	<ul style="list-style-type: none"> <li>1.2 V</li> </ul>
Error Detection	<ul style="list-style-type: none"> <li>Corrects single-bit errors</li> </ul>
<b>On-Board Devices</b>	
Chipset	<ul style="list-style-type: none"> <li>Intel® C612 chipset</li> </ul>
SAS	<ul style="list-style-type: none"> <li>SAS3 (12Gbps) via LSI 3108</li> <li>RAID 0, 1, 5, 6, 10, 50, 60 support</li> <li>2GB DDR3 Cache</li> </ul>
SATA	<ul style="list-style-type: none"> <li>SATA3 (6Gbps); RAID 0, 1, 5, 10</li> </ul>
IPMI	<ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> <li>ASPEED AST2400 BMC</li> </ul>
Network Controllers	<ul style="list-style-type: none"> <li>Intel® X540 10GBase-T controller</li> <li>Intel® i210 Gigabit Ethernet controller</li> <li>Supports 10GBASE-T, 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output</li> <li>1x Realtek RTL8211E PHY (dedicated IPMI)</li> </ul>
Video	<ul style="list-style-type: none"> <li>ASPEED AST2400 BMC</li> </ul>
<b>Input / Output</b>	
SAS	<ul style="list-style-type: none"> <li>8x SAS3 (12Gbps) ports</li> </ul>
Serial ATA	<ul style="list-style-type: none"> <li>6x SATA3 (6Gbps) ports</li> <li>I-SATA 4 and I-SATA 5 support SATA DOM</li> </ul>
LAN	<ul style="list-style-type: none"> <li>2x RJ45 10GBase-T LAN ports</li> <li>2x RJ45 Gigabit Ethernet LAN ports</li> <li>1x RJ45 Dedicated IPMI LAN port</li> </ul>
USB	<ul style="list-style-type: none"> <li>2x USB 3.0 ports (rear + 2 via header)</li> <li>3x USB 2.0 ports (2 via header + 1 Type A)</li> </ul>
Video	<ul style="list-style-type: none"> <li>1x VGA port</li> </ul>
Serial Port / Header	<ul style="list-style-type: none"> <li>1x COM port (1 header)</li> </ul>
DOM	<ul style="list-style-type: none"> <li>2x SuperDOM (Disk on Module) ports</li> </ul>
<b>Management</b>	
Software	<ul style="list-style-type: none"> <li>IPMI 2.0</li> <li><a href="#">SPM</a></li> <li><a href="#">SUM</a></li> <li><a href="#">SuperDoctor® 5</a></li> <li>Intel® Node Manager 3.0</li> <li>Watch Dog</li> </ul>
Power Configurations	<ul style="list-style-type: none"> <li>ACPI Power Management</li> <li>Power-on mode for AC power recovery</li> </ul>

Drive Bays	<ul style="list-style-type: none"> <li>8x 2.5" Hot-swap SAS/SATA HDD trays</li> </ul>
<b>Peripheral Drives</b>	
DVD-ROM	<ul style="list-style-type: none"> <li>Slim DVD-ROM drive (optional)</li> </ul>
<b>Backplane</b>	
SAS/SATA HDD Backplane	
Optional 2x 2.5" NVMe drives	
<b>System Cooling</b>	
Fans	<ul style="list-style-type: none"> <li>4x 4cm high performance PWM fans with optimal fan speed control</li> </ul>
<b>Power Supply with Digital Switching Control &amp; PMBus 1.2</b>	
600W AC power supply w/ PFC (24-pin)	
AC Voltage	<ul style="list-style-type: none"> <li>100-240 V, 50-60 Hz, 7.5 Amp max</li> </ul>
+5V	<ul style="list-style-type: none"> <li>18 Amp</li> </ul>
+5V standby	<ul style="list-style-type: none"> <li>3 Amp</li> </ul>
+12V	<ul style="list-style-type: none"> <li>49 Amp</li> </ul>
-12V	<ul style="list-style-type: none"> <li>0.5 Amp</li> </ul>
+3.3V	<ul style="list-style-type: none"> <li>15 Amp</li> </ul>
Certification	 <ul style="list-style-type: none"> <li>Platinum Certified [ <a href="#">Test Report</a> ]</li> </ul>
<b>System BIOS</b>	
BIOS Type	<ul style="list-style-type: none"> <li>128Mb SPI Flash EEPROM with AMI BIOS</li> </ul>
BIOS Features	<ul style="list-style-type: none"> <li>Plug and Play (PnP)</li> <li>PCI 2.3</li> <li>ACPI 3.0 / 4.0</li> <li>USB Keyboard support</li> <li>SMBIOS 2.7.1</li> <li>UEFI 2.3.1</li> </ul>
<b>Operating Environment / Compliance</b>	
RoHS	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
Environmental Spec.	<ul style="list-style-type: none"> <li>Operating Temperature: 10°C to 35°C (50°F to 95°F)</li> <li>Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5% to 95% (non-condensing)</li> </ul>

## Parts List

Parts List - (Items Included)			
	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DRL-CT	1	Super X10DRL-CT Motherboard
	CSE-113MFAC2-605CB	1	1U Chassis
Backplane	BPN-SAS3-113A-N2	1	1U SAS3 6x2.5" SAS3 HDD/SSD and 2x2.5" NVMe/SATA Storage Devices,
Cable 1	CBL-SAST-0568	1	Internal Mini-SAS HD to Mini-SAS HD 35cm,30AWG,12Gb/s,HF,RoHS/REACH,PBF

Cable 2	CBL-SAST-0550	1	Internal Mini-SAS HD to Mini-SAS HD 25cm,30AWG,HF,RoHS/REACH,PBF
Riser Card	RSC-RR1U-E8-O-P	1	RSC-RR1U-E8 (Rev 4.00)
Heatsink / Retention	SNK-P0047PD	2	1U Passive Custom CPU Heat Sink for X9DRL, X10DRL Related Systems
Power Supply	PWS-605P-1H	1	1U 600W Multi Output Power Supply PMbus
Fan 1	FAN-0154L4	4	40x40x28 mm, 22.5K RPM, SC813MF Middle Cooling Fan,RoHS/REACH
Mounting Rails	MCP-290-00107-0N	1set	Inner rail, front, short, screw type
Mounting Rails	MCP-290-00102-0N	1set	Outer rail, quick-release type, 25.6
Mounting Rails	MCP-290-00110-0N	1set	Inner rail, extension (quick) for 1U 17.2
Air Shroud	MCP-310-19015-0N	1	SC813M,SC113M, DP X9DRL-EF/ X9DRL-7F/ X10DRL-i, X9/X10 mylar air shroud, 12"x10" MB,RoHS/REACH
I/O Shield	MCP-260-00061-0N	1	1U I/O Shield for X9DB3/X9DBI/X9DB3-F/X9DBI-F/X10DRL-CT with EMI Gasket,RoHS/REACH

#### Optional Parts List

	Part Number	Qty	Description
Cable	CBL-SAST-0590	1	Internal Mini-SAS HD cable for PCIe SSD NVMe, 12Gb/s, 70cm,30AWG
Cable	CBL-SAST-0658	1	Internal Mini-SAS HD cable for PCIe SSD NVMe, 12Gb/s, 60cm,30AWG
NVMe AOC card	AOC-SLG3-2E4R	1	NVMe AOC by 8
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-STGN-i1S	-	Standard LP, 1x 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	
DVD-ROM / DVD-RW	DVM-PNSC-DVD-SBT3	-	BLACK PANASONIC SLIM DVD ROM SATA DRIVE
	DVM-TEAC-DVD-SBT3	-	BLACK TEAC SLIM DVD ROM SATA DRIVE
	DVM-PLDS-DVDRW-SBT4	-	PHILIPS SLIM BLACK DVD-RW SATA DRIVE
	DVM-TEAC-DVDRW-SBT2	-	BLACK TEAC SLIM DVD-RW SATA DRIVE
DVD-ROM Accessory	MCP-220-81502-0N	-	Slim SATA DVD kit for SC213,219,813,815,818,819,825,828,829,836,842
Onsite Service Program	<a href="#">OS4HR3/2/1</a>	-	3/2/1-year onsite 24x7x4 service
Onsite Service Program	<a href="#">OSNBD3/2/1</a>	-	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)