

SuperServer 2028R-C1RT4+



Integrated Board



X10DRC-T4+

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.

Key Features

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4[†]/ v3 family; QPI up to 9.6GT/s
2. Up to **3TB[†]** ECC 3DS LRDIMM , up to DDR4- **2400[†]**MHz ; 24 DIMM slots
3. 2x PCI-E 3.0 x16, 3x PCI-E 3.0 x8, and 1x PCI-E 2.0 x4 (in x8) slot
4. 8x 2.5" SAS3 and 8x 2.5" SATA3 Hot-swap Drive Bays
5. Quad 10GBase-T ports w/ Intel X540
6. I/O ports: 2 SuperDOM, 1 VGA, 2 COM, 2 USB 3.0 (rear), 4 USB 2.0 (2 rear, 2 front), 1 Type A
7. 3 high-performance 8cm PWM fans
8. 920W Redundant Power Supplies **Platinum Level** (94%)

Specifications

Product SKUs

- SYS-2028R-C1RT4+** ■ SuperServer 2028R-C1RT4+ (Black)

Motherboard

Super X10DRC-T4+

Processor/Cache

- CPU** ■ Intel® Xeon® processor E5-2600 v4†/ v3 family (up to 145W TDP) *
■ Dual Socket R3 (LGA 2011)
- Cores / Cache** ■ Up to **22 Cores**† / Up to **55MB**† Cache
- System Bus** ■ QPI up to 9.6 GT/s
- Note** † BIOS version 2.0 or above is required
- Note** * Please contact Supermicro Technical Support for additional information about frequency optimized CPUs and specialized system optimization.

System Memory

- Memory Capacity** ■ 24x 288-pin DDR4 DIMM slots
■ Up to 3TB† ECC 3DS LRDIMM, 768GB ECC RDIMM
- Memory Type** ■ **2400**†/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
- DIMM Sizes** ■ RDIMM: 32GB, 16GB, 8GB, 4GB
■ LRDIMM: 64GB, 32GB
■ 3DS LRDIMM: 128GB
- Memory Voltage** ■ 1.2 V
- Error Detection** ■ Corrects single-bit errors

On-Board Devices

- Chipset** ■ Intel® C612 chipset
- SATA** ■ SATA3 (6Gbps); RAID 0, 1, 5, 10
- SAS** ■ Broadcom 3108 SAS3 (12Gbps) controller;
HW RAID 0, 1, 5, 6, 10, 50, 60
- 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® X540 10GBase-T
■ Virtual Machine Device Queues reduce I/O overhead
■ Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
- Graphics** ■ ASPEED AST2400 BMC

Input / Output

- SATA** ■ 10 SATA3 (6Gbps) ports
- SAS** ■ 8 SAS3 (12Gbps) ports
■ SuperCap option support
- LAN** ■ 4 RJ45 10GBase-T ports
■ 1 RJ45 Dedicated IPMI LAN port

Chassis

- Form Factor** ■ 2U Rackmount
- Model** ■ **CSE-213AC-R920LPB**

Dimensions and Weight

- Height** ■ 3.5" (89mm)
- Width** ■ 17.2" (437mm)
- Depth** ■ 24.8" (630mm)
- Package** ■ 10.5" (H) x 26.5" (W) x 38" (D)
- Weight** ■ Net Weight: 38.5 lbs (17.5 kg)
■ Gross Weight: 63.5 lbs (28.8 kg)
- Available Color** ■ Black

Front Panel

- Buttons** ■ Power On/Off button
■ System Reset button
- LEDs** ■ Power LED
■ Hard drive activity LED
■ 2 Network activity LEDs
■ System Overheat LED / Fan fail LED / UID LED

Expansion Slots

- PCI-Express** ■ 2 PCI-E 3.0 x16 slots
■ 3 PCI-E 3.0 x8 slots
■ 1 PCI-E 2.0 x4 (in x8 slot)

Drive Bays

- Hot-swap** ■ 8x 2.5" SAS3 and 8x 2.5" SATA3 Hot-swap drive bays

System Cooling

- Fans** ■ 3 heavy duty 8cm fans with optimal fan speed control

Power Supply with Power Distributor

920W high-efficiency (94%+) 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

Certification



Platinum Certified
[**Test Report**]

PC Health Monitoring

- CPU** ■ Monitors for CPU Cores, +1.5V, +3.3V, +5V, +12V, +5 Stdby, +3.3 Stdby, VBAT, Memory Voltages.
■ CPU Core 6-Phase-switching voltage regulator

USB	<ul style="list-style-type: none"> ■ 2 USB 3.0 ports (rear) ■ 4 USB 2.0 ports (2 rear, 2 front) ■ 1 Type A
Video	<ul style="list-style-type: none"> ■ 1 VGA Connector
Serial Port / Header	<ul style="list-style-type: none"> ■ 2 Fast UART 16550 serial ■ 2 COM Ports (1 rear, 1 front)
System BIOS	
BIOS Type	<ul style="list-style-type: none"> ■ 128Mb SPI Flash EEPROM with UEFI BIOS
BIOS Features	<ul style="list-style-type: none"> ■ Plug and Play (PnP) ■ APM 1.2 ■ DMI 2.3 ■ PCI 2.2 ■ ACPI 1.0 / 2.0 ■ USB Keyboard support ■ Hardware BIOS Virus protection ■ SMBIOS 2.3 ■ UEFI ■ RTC (Real Time Clock) Wakeup

FAN	<ul style="list-style-type: none"> ■ Total of five 4-pin PWM fans ■ 5x fans with tachometer monitoring ■ Status monitor for speed control ■ Status monitor for on/off control ■ Low noise fan speed control
Temperature	<ul style="list-style-type: none"> ■ Monitoring for CPU and chassis environment ■ CPU thermal trip support ■ Thermal Control for 10x Fan Connectors ■ PSU I²C temperature sensing logic ■ Thermal Monitor 2 (TM2) support ■ PECI
LED	<ul style="list-style-type: none"> ■ Power Fail / Overheat LED ■ Suspend-state Indicator LED ■ UID LED
Other Features	<ul style="list-style-type: none"> ■ SDDC Support

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)

Список деталей

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DRC-T4+	1	Super X10DRC-T4+ Motherboard
	CSE-213AC-R920LPB	1	2U Black SC218G Chassis
Backplane	BPN-SAS3-213A	1	16-port 2U SAS3 12Gbps direct-attached backplane, support up to 16x 2.5-inch SAS3/SATA3 HDD/SSD
Cable 1	CBL-SAST-0631	2	MINI SAS HD-4 SATA,6G,INT,RF,Cross Over,55CM,55CM SB,30AWG
Cable 2	CBL-SAST-0614	2	MINI SAS HD, 12G,INT,ST-RA,40CM,30AWG
Cable 3	CBL-SAST-0591	2	MINI SAS HD-4 SATA,6G,INT,RF,Cross Over,75CM,75CM SB,30AWG
Cable 4	CBL-SAST-0568	2	MINI SAS HD, 12G,INT,35CM,30AWG
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1595-QRG	1	SYS-2028R-C1RT4+/SYS-2028R-C1R4+, QRG,HF,RoHS/REACH,PBF
Parts	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
Heatsink / Retention	SNK-P0048P	2	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Square ILM MB
Drive Tray(s)	MCP-220-00007-01	1	Black USB/COM port tray for SC825, 836
Power Supply	PWS-920P-1R	2	1U REDUNDANT 920W PMBus 94% EFFICIENCY

Optional Parts List

	Part Number	Qty	Description
Storage Controller Card(s) & Cables(s)	AOC-S3008L-L8i & 2x CBL-SAST-0531-01	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 63HDD; RAID 0, 1, 10
	AOC-S3008L-L8e & 2x CBL-SAST-0531-01	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 122HDD; HBA
	AOC-S3108L-H8IR & 2x CBL-SAST-0531-01	-	Standard LP, 8 internal ports (12Gb/s) 8x Gen3; RAID 0, 1, 5, 6, 10, 50, 60
	AOC-S3108L-H8IR-16DD & 2x CBL-SAST-0531-01	-	Standard LP, 8 internal ports (12Gb/s) Gen-3, 16HDD; RAID 0, 1, 5, 6, 10, 50, 60
Global Services & Support	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	OSNBD3/2/1	-	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)