

SuperServer 2028R-C1RT



Integrated Board



[_\(/products/motherboard/Xeon/C600/X10DRH-](#)

[CT.cfm\)](#)

[X10DRH-CT \(/products/motherboard/Xeon/C600/X10DRH-CT.cfm\)](#)

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 **2TB[†]** ECC 3DS LRDIMM , up to DDR4- **2400[†]**MHz ; 16 DIMM slots
- 3. 1 PCI-E 3.0 x16, 6 PCI-E 3.0 x8 slots
- 4. 8x 2.5" SAS3 and 8x 2.5" SATA3 Hot-swap Drive Bays
- 5. Integrated IPMI 2.0 with KVM and Dedicated LAN
- 6. Intel® X540 Dual port 10GBase-T
- 7. I/O ports: 2 SuperDOM, 1 VGA, 2 COM, 2 USB 3.0, 4 USB 2.0
- 8. 3 high-performance 8cm PWM fans
- 9. 920W Redundant Power Supplies **Platinum Level** (94%)

Available Colors: Black 

[Drivers & Utilities](#) [BIOS](#) [IPMI](#) [Tested Memory](#) [Manuals](#)

[OS Certification Matrix](#)
[\(/support/resources/OS/OS Certification Intel.cfm?MProduct_Name=SYS%2D2028R%2DC1RT\)](#)

[Quick-References Guide](#) [Drive Options](#)

[Network Card \(AOC\) Matrix \(/zh_tw/support/resources/aoc/standard?show=SELECT&type=MS\)](#)

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

Specifications

Product SKUs

SYS-2028R-C1RT
SuperServer 2028R-C1RT (Black)

Motherboard

Super X10DRH-CT
(/products/motherboard/Xeon/C600/X10DRH-CT.cfm)

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
16x 288-pin DDR4 DIMM slots
Up to 2TB[†] ECC 3DS LRDIMM, 512GB 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
8 SATA3 (6Gbps) ports

Chassis

Form Factor
2U Rackmount
Model
CSE-213AC-R920LPB (**/products/chassis/2u/213/sc213r920lpb.cfm**)

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 lbs (17.4 kg)
Gross Weight: 63 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
1 PCI-E 3.0 x16
6 PCI-E 3.0 x8 (Low-profile AOC)

Drive Bays

Hot-swap
8x 2.5" SAS3 and 8x 2.5" SATA3 Hot-swap drive bays
Peripheral
Optional DVD-ROM drive supports 1x slim or 1x 5.25" DVD drive

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 PM
AC Input
100-240 V, 50-60 Hz, 11-4.5 Amp
DC Output
4 Amp @ +5V standby
75 Amp @ +12V

1/17/24, 5:45 PM	2028R-C1RT 2U SuperServers Products Super Micro Computer, Inc.
SAS 8 SAS3 (12Gbps) ports	Certification  (http://www.plugloadsolutions.com/80PlusPowerSupply?id=69&type=2). Platinum Certified  [Test Report (http://products/powersupply/80PLUS/80PLUS_PWS1R.pdf).]
LAN 2 RJ45 10GBase-T ports 1 RJ45 Dedicated IPMI LAN port	
USB 2 USB 3.0 ports (2 rear) 4 USB 2.0 ports (2 rear, 2 front) 1 USB Type A	
Video 1 VGA Connector	
Serial Port / Header 2 Fast UART 16550 serial 2 COM Ports (1 rear, 1 front)	

System BIOS

BIOS Type
128Mb SPI Flash EEPROM with AMI® BIOS

BIOS Features
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

PC Health Monitoring

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

FAN
Total of five 4-pin PWM fans
5 fans with tachometer monitoring
Status monitor for speed control
Status monitor for on/off control
Low noise fan speed control

Temperature
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
Power Fail / Overheat LED
Suspend-state Indicator LED
UID LED

Other Features
SDDC Support

Parts List

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:

Global SKU ([/zh_tw/products/SMC_global_skus](http://zh_tw/products/SMC_global_skus))