

SuperServer F628R3-RTB+



Integrated Board



[./products/motherboard/Xeon/C600/X10DRFR.cfm](#)

Super X10DRFR [./products/motherboard/Xeon/C600/X10DRFR.cfm](#)

Views: | [Angled \(node\)](#) [./a_images/products/views/F628R3-RTB_node_angle.jpg](#) | [Top \(node\)](#) [./a_images/products/views/F628R3-RTB_node_top.jpg](#) | [Angled Front \(system\)](#) [./a_images/products/views/F628R3-RTB_angleFront.jpg](#) | [Rear \(system\)](#) [./a_images/products/views/F628R3-RTB_rear.jpg](#) |

Key Features

4 Hot-plug System Nodes in 4U
Each node supports:

- 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 ; 16x DIMM slots
- 3. Expansion slots: 1 PCI-E 3.0 x16 (LP)
1 PCI-E 3.0 x8 (Micro Low Profile)
[See Cable Configuration Map](#)
- 4. I/O ports: 2 GbE ports, 1 Built-in video,
2 USB 3.0 ports
- 5. Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port
- 6. 6+2 3.5" Hot-swap SATA3 HDD Bays
- 7. 2x 80mm 11k RPM middle fans
- 8. 1280W Redundant Power Supplies
Platinum Level (95%)

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

[Tested M.2 List](#) [./en/support/resources/m2ssd?SystemID=84139&ProductName=SSF628R3-RTB+](#))

[Manuals](#)

[OS Certification Matrix](#) [./en/support/resources/certification/SYS-F628R3-RTB+](#))

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

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

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

Specifications

Product SKUs

SYS-F628R3-RTB+
SuperServer F628R3-RTB+ (Black)

Motherboard

Super X10DRFR
(</products/motherboard/Xeon/C600/X10DRFR.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, 1TB ECC RDIMM
Memory Type
2400†/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes
RDIMM: 64GB, 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
SATA 3.0 (6Gbps) w/ RAID 0, 1, 5, 10
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® i350-AM2 Dual Port Gigabit Ethernet
Virtual Machine Device Queues reduce I/O overhead
Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
1x Realtek RTL8201N PHY (dedicated IPMI)
Graphics
ASPEED AST2400 BMC

Input / Output (per node)

Serial ATA
10x SATA3 (6Gbps) ports
LAN
2x RJ45 Gigabit Ethernet LAN ports
1x RJ45 Dedicated IPMI LAN port

Chassis

Form Factor
4U Rackmount
Model
CSE-F424AS-R1K28BP

Dimensions and Weight

Width
17.63" (448mm)
Height
6.96" (177mm)
Depth
29" (737mm)
Package
28.3" (W) x 15.0" (H) x 42.4" (D)
Weight
Net Weight: 105 lbs (47.63 kg)
Gross Weight: 150 lbs (68.04 kg)
Available Colors
Black

Front Panel

Buttons
Power On/Off button
UID button
LEDs
Power status LED
Hard drive activity LED
2x Network activity LEDs
Information LED (UID, Fan failure, Overheat)

Expansion Slots (per node)

PCI-Express
1 PCI-E 3.0 x16 (LP) + 1 Micro LP
MicroLP Adapter Matrix
(/support/resources/AOC/MicroLP_Compatibility.cfm), (Network i options)

Drive Bays (per node)

Hot-swap
(6+2) 3.5" Hot-swap SATA3 HDD trays

Backplane

1x SAS/SATA backplane

System Cooling (per node)

Fans
2x 8cm 11k RPM middle fans

Power Supply

1280W Redundant High-efficiency Digital Power Supplies w/ PMBus 1.2
AC Input
1000W Output @ 100-140V, 8-12A, 50-60Hz
1280W Output @ 180-240V, 6-8A, 50-60Hz
DC Output
1000W: +12V/83A; +5Vsb/4A
1280W: +12V/106.7A, +5Vsb/4A

USB
2x USB 3.0 ports

VGA
1x VGA port

Management

Software
[SuperDoctor® 5 \(/products/nfo/SMS_SD5.cfm\)](#).
Watch Dog
NMI
IPMI 2.0
[SUM \(/products/nfo/SMS_SUM.cfm\)](#) and [SSM \(/products/nfo/SMS_SSM.cfm\)](#).
Power Configurations
ACPI / APM Power Management
Power-on mode for AC power recovery

Certification



(<http://www.plugloadsolutions.com/80PlusPowerSuppliesDetails.aspx?id=69&type=1>).
Platinum Certified
[\[Test Report \(/products/power supply/80PLUS/80PLUS_PWS-1K28P-SQ.ppt\) \]](#)

System BIOS

BIOS Type
128Mb SPI Flash EEPROM with AMI BIOS

BIOS Features
Plug and Play (PnP)
APM 1.2
PCI 2.2
ACPI 1.0 / 2.0
USB Keyboard support
SMBIOS 2.3
UEFI

Operating Environment / Compliance

RoHS
RoHS Compliant

Environmental Spec.
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:

Parts List

Certain products may not be available in your region

[Gold Series SKUs \(/en/products/gold-series\)](#)
