

SuperServer F628R3-R72B+



Views: | [Angled with Callout \(node\)](#) | [Top \(node\)](#) | [Angled Front \(system\)](#) | [Rear \(system\)](#) |



Key Features

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

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 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, 1 COM/Serial port, 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 SAS2/SATA3 HDD Bays
7. 2x 80mm 11k RPM middle fans
8. 1280W Redundant Power Supplies Platinum Level (95%)

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

Specifications

Product SKUs

SYS-F628R3-R72B+ ■ SuperServer F628R3-R72B+ (Black)

Motherboard

[Super X10DRFR](#)

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.

Chassis

Form Factor ■ 4U Rackmount
Model ■ CSE-F424AS-R1K28B



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
■ System Reset button
■ Power status LED

System Memory	
Memory Capacity	<ul style="list-style-type: none"> 16x 288-pin DDR4 DIMM slots Up to 1TB ECC LRDIMM, 512GB ECC RDIMM
Memory Type	<ul style="list-style-type: none"> 2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	<ul style="list-style-type: none"> RDIMM: 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 chipset
SATA	<ul style="list-style-type: none"> SATA3 (6Gbps) with RAID 0, 1, 5, 10
SAS	<ul style="list-style-type: none"> SAS2 via LSI 2208 (1GB cache) HW RAID 0, 1, 5, 6, 10, 50, 60 support
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-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	<ul style="list-style-type: none"> ASPEED AST2400 BMC
Input / Output (per node)	
Serial ATA	<ul style="list-style-type: none"> 8x SATA3 (6Gbps) ports 2x SATA3 powered ports that support SATA DOM
SAS	<ul style="list-style-type: none"> 8x SAS2 (6Gbps) ports
LAN	<ul style="list-style-type: none"> 2x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 2x USB 3.0 ports
VGA	<ul style="list-style-type: none"> 1x VGA port
Serial Port / Header	<ul style="list-style-type: none"> 1x Fast UART 16550 port
Management	
Software	<ul style="list-style-type: none"> SuperDoctor® 5 Watch Dog NMI IPMI 2.0 SMCBU and SMM
Power Configurations	<ul style="list-style-type: none"> ACPI / APM Power Management Power-on mode for AC power recovery

LEDs	<ul style="list-style-type: none"> Hard drive activity LED 2x Network activity LEDs System Overheat LED Power fail LED
Expansion Slots (per node)	
PCI-Express	<ul style="list-style-type: none"> 1 PCI-E 3.0 x16 (LP) + 1 Micro LP MicroLP Adapter Matrix (Networking options)
Drive Bays (per node)	
Hot-swap	<ul style="list-style-type: none"> (6+2) 3.5" Hot-swap SAS/SATA HDD trays
Backplane	
1x SAS/SATA backplane	
System Cooling (per node)	
Fans	<ul style="list-style-type: none"> 2x 8cm 11k RPM middle fans
Power Supply	
1280W Redundant High-efficiency Digital Power Supplies w/ PMBus 1.2	
AC Input	<ul style="list-style-type: none"> 1000W Output @ 100-140V, 8-12A, 50-60Hz 1280W Output @ 180-240V, 6-8A, 50-60Hz
DC Output	<ul style="list-style-type: none"> 1000W: +12V/83A; +5Vsb/4A 1280W: +12V/106.7A, +5Vsb/4A
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 2.2 ACPI 1.0 / 2.0 USB Keyboard support SMBIOS 2.3 UEFI
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-X10DRFR	4	Super X10DRFR Motherboard
	CSE-F424AS-R1K28B	1	4U Chassis
Backplane	BPN-ADP-S2208L-H8IR	4	BPN-ADP-S2208L-H8IR-O-P; SAS AOC for FAT TWIN
Backplane	BPN-SAS-F424-A2	4	2x 3.5
Backplane	BPN-ADP-F418LS	4	Power Distribution Board for X10DRFR,RoHS/REACH,PBF
Backplane	BPN-SAS-F424-A6	4	6x 3.5
Cable 1	CBL-0118L-03	4	lpass to 4 SATA cable 23CM, W / 25.5cm SB, S, 30AWG
Cable 2	CBL-0486L	8	2x2 to 2x2 15cm power cable HF. 18AWG
Cable 3	CBL-0157L-02	4	8 pin to 8 pin ribbon SGPIO cable with tube, 27cm, PBF
Cable 4	CBL-0480L	4	4 pins to 4 pins 40cm PDB to MB power cable HF. 18AWG
Cable 5	CBL-OTHR-0022L	4	20 to 20 pin cable for BPN-ADP-F418LS,7.5cm, 28AWG,RoHS/REACH,PBF
Cable 6	CBL-0226L	8	43CM SATA ROUND S-RA PBF 26AWG
Cable 7	CBL-0483L	8	29cm 30AWG SATA S-S cable
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1648-QRG	1	Quick Reference Guide for SYS-F628R3-RTB+/R72B+,HF,RoHS/REACH
Heatsink / Retention	SNK-P0048P	4	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Square ILM MB
Heatsink / Retention	SNK-P0048PS	4	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
Power Supply	PWS-1K28P-SQ	4	1U 1280W, redundant single output power supply

Optional Parts List			
	Part Number	Qty	Description
Software	SFT-OOB-LIC	4	OOB Management Package (per node license)
Software	SFT-DCMS-Single	4	DataCenter Management Package (per node license)