

SuperServer F628R3-FC0+



Key Features

4 Hot-plug System Nodes in 4U Front I/O. 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. 2x PCI-E 3.0 x8 (Low Profile) slots
4. Front I/O ports: 2 GbE LAN, 2 USB 3.0, and 1 VGA connector
5. Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port
6. 2x 3.5" Hot-swap SAS3 (12Gbps) HDDs via LSI 3008
7. 1280W Redundant Power Supplies Platinum Level (95%)

[▶ Drivers & Utilities](#)
[▶ BIOS](#)
[▶ IPMI](#)
[▶ Tested Memory](#)
[▶ Manuals](#)
[▶ OS Certification Matrix](#)
[▶ Quick-References Guide](#)
[▶ Drive Options](#)

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-FC0+

- SuperServer F628R3-FC0+ (Black)

Motherboard

Super X10DRFF-CG

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

Chassis

Form Factor

- 4U Rackmount

 Model

- CSE-F424AL-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

Expansion Slots (per node)

Memory Capacity	<ul style="list-style-type: none"> 16x 288-pin DDR4 DIMM slots Up to 2TB[†] ECC 3DS LRDIMM, 1TB ECC RDIMM
Memory Type	<ul style="list-style-type: none"> 2400[†]/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	<ul style="list-style-type: none"> RDIMM: 64GB, 32GB, 16GB, 8GB, 4GB LRDIMM: 64GB, 32GB 3DS LRDIMM: 128GB
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
SAS	<ul style="list-style-type: none"> SAS3 (12Gbps) via LSI 3008 SW RAID 0, 1 support
SATA	<ul style="list-style-type: none"> SATA3 (6Gbps) with RAID 0, 1
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 Dual Port Gigabit Ethernet Virtual Machine Device Queues reduce I/O overhead Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output 1x Realtek RTL8211E PHY (dedicated IPMI)
Graphics	<ul style="list-style-type: none"> ASPEED AST2400 BMC

Input / Output (per node)

SAS	<ul style="list-style-type: none"> 2x SAS3 (12Gbps) 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

PCI-Express	<ul style="list-style-type: none"> 2x PCI-E 3.0 x8 (Low Profile) slots
-------------	---

Drive Bays (per node)

Hot-swap	<ul style="list-style-type: none"> 2x 3.5" Hot-swap SAS3 HDD trays
----------	---

Backplane

1x SAS3/SATA3 backplane

System Cooling

Fans	<ul style="list-style-type: none"> 8x 8cm 9.5K heavy duty, hot swappable fans with air shroud and PWM fan speed control
------	--

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 2.3 ACPI 1.0 / 2.0 / 3.0 / 4.0 USB Keyboard support SMBIOS 2.7.1 UEFI 2.3.1

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)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DRFF-CG	4	Super X10DRFF-CG Motherboard
	CSE-F424AL-R1K28BP	1	4U Chassis
Backplane	BPN-ADP-F418L	4	BPN;SASADP;SAS827-H8;H8DTT;cable req
Backplane	BPN-SAS3-F424-A2	4	2-port Fat Twin SAS3 12Gbps backplane, support up to 2x 3.5-inch SAS3/SATA3 HDD/SSD
Cable 1	CBL-0460L-02	4	8 pin Male to two 4 pin Male power cable, 10cm and 7cm. 18AWG
Cable 2	CBL-SAST-0706	4	Internal RA reverse Mini-SAS HD to Mini-SAS HD 11cm,30AWG,12Gb/s [Amphenol],RoHS/REACH
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1786-QRG	1	Quick Reference Guide for F628R3-FC0+ / FC0PT+
Heatsink / Retention	SNK-P0048PS	8	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)