

# SuperServer F628R2-FT+



## 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<sup>†</sup>/ v3 family; QPI up to 9.6GT/s
2. Up to **2TB**<sup>†</sup> ECC 3DS LRDIMM , up to DDR4- **2400**<sup>†</sup>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. 6x 2.5" Hot-swap SATA3 HDDs
7. 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

<b>SYS-F628R2-FT+</b>	▪ SuperServer F628R2-FT+ ( <b>Black</b> )
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### Motherboard

#### Super X10DRFF-IG

### Processor/Cache

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

### Chassis

<b>Form Factor</b>	▪ 4U Rackmount
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<b>Model</b>	▪ <b>CSE-F424BF-R1K28B</b>
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### Dimensions and Weight

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

<b>Buttons</b>	▪ Power On/Off button ▪ UID button
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<b>LEDs</b>	▪ Power status LED ▪ Hard drive activity LED ▪ 2x Network activity LEDs
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### Expansion Slots (per node)

<b>Memory Capacity</b>	16x 288-pin DDR4 DIMM slots <ul style="list-style-type: none"> <li>Up to 2TB<sup>†</sup> ECC 3DS LRDIMM, 1TB ECC RDIMM</li> </ul>
<b>Memory Type</b>	<ul style="list-style-type: none"> <li>2400<sup>†</sup>/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit</li> </ul>
<b>DIMM Sizes</b>	<ul style="list-style-type: none"> <li>RDIMM: 64GB, 32GB, 16GB, 8GB, 4GB</li> <li>LRDIMM: 64GB, 32GB</li> <li>3DS LRDIMM: 128GB</li> </ul>
<b>Memory Voltage</b>	<ul style="list-style-type: none"> <li>1.2 V</li> </ul>
<b>Error Detection</b>	<ul style="list-style-type: none"> <li>Corrects single-bit errors</li> </ul>
<b>On-Board Devices</b>	
<b>Chipset</b>	<ul style="list-style-type: none"> <li>Intel® C612 chipset</li> </ul>
<b>SATA</b>	<ul style="list-style-type: none"> <li>SATA3 (6Gbps) with RAID 0, 1, 10</li> </ul>
<b>IPMI</b>	<ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> <li>ASPEED AST2400 BMC</li> </ul>
<b>Network Controllers</b>	<ul style="list-style-type: none"> <li>Intel® i350 Dual Port Gigabit Ethernet</li> <li>Virtual Machine Device Queues reduce I/O overhead</li> <li>Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output</li> <li>1x Realtek RTL8211E PHY (dedicated IPMI)</li> </ul>
<b>Graphics</b>	<ul style="list-style-type: none"> <li>ASPEED AST2400 BMC</li> </ul>
<b>Input / Output (per node)</b>	
<b>SATA</b>	<ul style="list-style-type: none"> <li>6x SATA3 (6Gbps) ports</li> </ul>
<b>LAN</b>	<ul style="list-style-type: none"> <li>2x RJ45 Gigabit Ethernet LAN ports</li> <li>1x RJ45 Dedicated IPMI LAN port</li> </ul>
<b>USB</b>	<ul style="list-style-type: none"> <li>2x USB 3.0 ports</li> </ul>
<b>VGA</b>	<ul style="list-style-type: none"> <li>1x VGA port</li> </ul>

<b>PCI-Express</b>	<ul style="list-style-type: none"> <li>2x PCI-E 3.0 x8 (Low Profile) slots</li> </ul>
<b>Drive Bays (per node)</b>	
<b>Hot-swap</b>	<ul style="list-style-type: none"> <li>6x 2.5" Hot-swap SATA3 HDD trays</li> </ul>
<b>Backplane</b>	
1x SATA3 backplane	
<b>System Cooling</b>	
<b>Fans</b>	<ul style="list-style-type: none"> <li>8x 8cm 9.5K heavy duty, hot swappable fans with air shroud and PWM fan speed control</li> </ul>
<b>Power Supply</b>	
1280W Redundant High-efficiency Digital Power Supplies w/ PMBus 1.2	
<b>AC Input</b>	<ul style="list-style-type: none"> <li>1000W Output @ 100-140V, 8-12A, 50-60Hz</li> <li>1280W Output @ 180-240V, 6-8A, 50-60Hz</li> </ul>
<b>DC Output</b>	<ul style="list-style-type: none"> <li>1000W: +12V/83A; +5Vsb/4A</li> <li>1280W: +12V/106.7A, +5Vsb/4A</li> </ul>
<b>Certification</b>	  <b>Platinum Certified [ Test Report ]</b>
<b>System BIOS</b>	
<b>BIOS Type</b>	<ul style="list-style-type: none"> <li>128Mb SPI Flash EEPROM with AMI BIOS</li> </ul>
<b>BIOS Features</b>	<ul style="list-style-type: none"> <li>Plug and Play (PnP)</li> <li>APM 1.2</li> <li>PCI 2.3</li> <li>ACPI 1.0 / 2.0 / 3.0 / 4.0</li> <li>USB Keyboard support</li> <li>SMBIOS 2.7.1</li> <li>UEFI 2.3.1</li> </ul>
<b>Operating Environment / Compliance</b>	
<b>RoHS</b>	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
<b>Environmental Spec.</b>	<ul style="list-style-type: none"> <li>Operating Temperature: 10°C to 35°C (50°F to 95°F)</li> <li>Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5% to 95% (non-condensing)</li> </ul>

### Parts List

Parts List - (Items Included)			
	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X10DRFF-IG	4	Super X10DRFF-IG Motherboard
	CSE-F424BF-R1K28B	1	4U Chassis
<b>Backplane</b>	BPN-ADP-F418L	4	BPN;SASADP;SAS827-H8;H8DTT;cable req
<b>Backplane</b>	BPN-SAS-F424-B6	4	6x hot swappable 2.5
<b>Cable 1</b>	CBL-0157L-02	8	8 pin to 8 pin ribbon SGPIO cable, 27cm, PBF
<b>Cable 2</b>	CBL-0473L	24	21cm 30AWG SATA S-S cable
<b>Cable 3</b>	CBL-0460L-02	4	8 pin Male to two 4 pin Male power cable, 10cm and 7cm. 18AWG
<b>Label</b>	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
<b>Manual</b>	MNL-1738-QRG	1	Quick Reference Guide for F628R2-FT+ / FTPT+

<b>Heatsink / Retention</b>	SNK-P0048PS	8	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
<b>Power Supply</b>	PWS-1K28P-SQ	4	1U 1280W, redundant single output power supply

#### Optional Parts List

	<b>Part Number</b>	<b>Qty</b>	<b>Description</b>
<b>Software</b>	SFT-OOB-LIC	4	OOB Management Package (per node license)
<b>Software</b>	SFT-DCMS-Single	4	DataCenter Management Package (per node license)