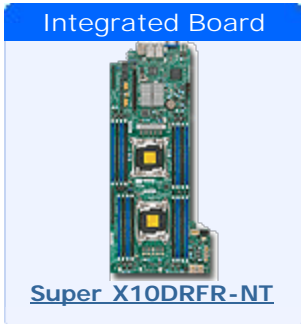


# SuperServer F628R3-R72BPT+



## 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 10GBase-T, 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-R72BPT+	▪ SuperServer F628R3-R72BPT+ (Black)
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### Motherboard

[Super X10DRFR-NT](#)

### Processor/Cache

CPU	▪ Intel® Xeon® processor E5-2600 v3 family (up to 145W TDP) * ▪ Dual Socket R3 (LGA 2011)
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Cores / Cache	▪ Up to 18 Cores / Up to 45MB Cache
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System Bus	▪ QPI up to 9.6 GT/s
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Note	* Please contact Supermicro Technical Support for additional information about frequency optimized CPUs and specialized system optimization.
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### System Memory

Memory	▪ 16x 288-pin DDR4 DIMM slots
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### 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
LEDs	▪ Power status LED ▪ Hard drive activity LED ▪ 2x Network activity LEDs ▪ System Overheat LED ▪ Power fail LED

Capacity	<ul style="list-style-type: none"> <li>Up to 1TB ECC LRDIMM, 512GB ECC RDIMM</li> </ul>
Memory Type	<ul style="list-style-type: none"> <li>2133/1866/1600MHz ECC DDR4 SDRAM 72-bit</li> </ul>
DIMM Sizes	<ul style="list-style-type: none"> <li>RDIMM: 32GB, 16GB, 8GB, 4GB</li> <li>LRDIMM: 64GB, 32GB</li> </ul>
Memory Voltage	<ul style="list-style-type: none"> <li>1.2 V</li> </ul>
Error Detection	<ul style="list-style-type: none"> <li>Corrects single-bit errors</li> </ul>

#### On-Board Devices

Chipset	<ul style="list-style-type: none"> <li>Intel® C612 chipset</li> </ul>
SATA	<ul style="list-style-type: none"> <li>SATA3 (6Gbps) with RAID 0, 1, 5, 10</li> </ul>
SAS	<ul style="list-style-type: none"> <li>SAS2 via LSI 2208 (1GB cache)</li> <li>HW RAID 0, 1, 5, 6, 10, 50, 60 support</li> </ul>
IPMI	<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>
Network Controllers	<ul style="list-style-type: none"> <li>Intel® X540 Dual Port 10GBase-T</li> <li>Virtual Machine Device Queues reduce I/O overhead</li> <li>Supports 10GBASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output</li> <li>1x Realtek RTL8201N PHY (dedicated IPMI)</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>ASPEED AST2400 BMC</li> </ul>

#### Input / Output (per node)

Serial ATA	<ul style="list-style-type: none"> <li>8x SATA3 (6Gbps) ports</li> <li>2x SATA3 powered ports that support SATA DOM</li> </ul>
SAS	<ul style="list-style-type: none"> <li>8x SAS2 (6Gbps) ports</li> </ul>
LAN	<ul style="list-style-type: none"> <li>2x RJ45 10GBase-T ports</li> <li>1x RJ45 Dedicated IPMI LAN port</li> </ul>
USB	<ul style="list-style-type: none"> <li>2x USB 3.0 ports</li> </ul>
VGA	<ul style="list-style-type: none"> <li>1x VGA port</li> </ul>
Serial Port / Header	<ul style="list-style-type: none"> <li>1x Fast UART 16550 port</li> </ul>

#### Management

Software	<ul style="list-style-type: none"> <li><a href="#">SuperDoctor® 5</a></li> <li>Watch Dog</li> <li>NMI</li> <li>IPMI 2.0</li> <li>SMCBU and SMM</li> </ul>
Power Configurations	<ul style="list-style-type: none"> <li>ACPI / APM Power Management</li> <li>Power-on mode for AC power recovery</li> </ul>

#### Expansion Slots (per node)

PCI-Express	<ul style="list-style-type: none"> <li>1 PCI-E 3.0 x16 (LP) + 1 Micro LP</li> <li><a href="#">MicroLP Adapter Matrix</a> (Networking options)</li> </ul>
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#### Drive Bays (per node)

Hot-swap	<ul style="list-style-type: none"> <li>(6+2) 3.5" Hot-swap SAS/SATA HDD trays</li> </ul>
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#### Backplane

1x SAS/SATA backplane
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#### System Cooling (per node)

Fans	<ul style="list-style-type: none"> <li>2x 8cm 11k RPM middle fans</li> </ul>
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#### Power Supply

1280W Redundant High-efficiency Digital Power Supplies w/ PMBus 1.2	
AC Input	<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>
DC Output	<ul style="list-style-type: none"> <li>1000W: +12V/83A; +5Vsb/4A</li> <li>1280W: +12V/106.7A, +5Vsb/4A</li> </ul>
Certification	  Platinum Certified [ <a href="#">Test Report</a> ]

#### System BIOS

BIOS Type	<ul style="list-style-type: none"> <li>128Mb SPI Flash EEPROM with AMI BIOS</li> </ul>
BIOS Features	<ul style="list-style-type: none"> <li>Plug and Play (PnP)</li> <li>APM 1.2</li> <li>PCI 2.2</li> <li>ACPI 1.0 / 2.0</li> <li>USB Keyboard support</li> <li>SMBIOS 2.3</li> <li>UEFI</li> </ul>

#### Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
Environmental Spec.	<ul style="list-style-type: none"> <li>Operating Temperature: 5°C to 40°C (41°F to 104°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-X10DRFR-NT	4	Super X10DRFR-NT Motherboard
	CSE-F424AS-R1K28B	1	4U Chassis
<b>Backplane</b>	BPN-ADP-F418LS	4	Power Distribution Board for X10DRFR,RoHS/REACH,PBF
<b>Backplane</b>	BPN-ADP-S2208L-H8IR	4	BPN-ADP-S2208L-H8IR-O-P; SAS AOC for FAT TWIN
<b>Backplane</b>	BPN-SAS-F424-A2	4	2x 3.5
<b>Backplane</b>	BPN-SAS-F424-A6	4	6x 3.5
<b>Cable 1</b>	CBL-0226L	8	43CM SATA ROUND S-RA PBF 26AWG
<b>Cable 2</b>	CBL-0118L-03	4	lpass to 4 SATA cable 23CM, W / 25.5cm SB, S, 30AWG
<b>Cable 3</b>	CBL-0480L	4	4 pins to 4 pins 40cm PDB to MB power cable HF. 18AWG
<b>Cable 4</b>	CBL-0486L	8	2x2 to 2x2 15cm power cable HF. 18AWG
<b>Cable 5</b>	CBL-OTHR-0022L	4	20 to 20 pin cable for BPN-ADP-F418LS,7.5cm, 28AWG,RoHS/REACH,PBF
<b>Cable 6</b>	CBL-0157L-02	4	8 pin to 8 pin ribbon SGPIO cable, 27cm, PBF
<b>Cable 7</b>	CBL-0483L	8	29cm 30AWG SATA S-S cable
<b>Label</b>	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
<b>Manual</b>	MNL-1649-QRG	1	Quick Reference Guide for SYS-F628R3-RTBPT+/R72BPT+,HF,RoHS/REACH
<b>Heatsink / Retention</b>	SNK-P0048PS	4	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
<b>Heatsink / Retention</b>	SNK-P0048P	4	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Square ILM MB
<b>Power Supply</b>	PWS-1K28P-SQ	4	1U 1280W, redundant single output power supply

### Optional Parts List

	Part Number	Qty	Description
<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)