

# X9QRI-F+

[Products](#) ▶ [Motherboards](#) ▶ [Xeon® Boards](#) ▶ [[X9QRI-F+](#)]



## Key Features

1. Quad socket R (LGA 2011) supports Intel® Xeon® processor E5-4600 v2 (12-Core)\*\* or E5-4600 (8-Core) family, w/ QPI up to 8.0 GT/s
2. Intel® C602 chipset
3. Up to 1TB\* DDR3 1866MHz ECC Registered DIMM; 32x DIMM slots  
\* Depends on memory configuration
4. Expansion slots:  
2x PCI-E 3.0 x16 and 2x PCI-E 3.0 x8
5. Intel® i350 Dual port GbE LAN
6. 2x SATA3 ports + 4x SATA2 ports
7. Integrated IPMI 2.0 + KVM over LAN
8. 8x USB 2.0 ports  
(4 rear, 3 front + 1 Type A)

## Links & Resources

- ▶ [Tested Memory List](#)
- ▶ [Tested HDD / SSD List](#)
- ▶ [Motherboard Manual](#)
- ▶ [Update Your BIOS](#)
- ▶ [BMC/IPMI Firmware](#)
- ▶ [Download the Latest Drivers and Utilities](#)
- ▶ [Download Driver CD](#)
- ▶ [Heat Sink Compatibility](#)
- ▶ [OS Compatibility](#)

## Specifications

**Product SKUs - Discontinued SKU (EOL). Please contact sales-rep for alternative options.**

**MBD-X9QRI-F+ -B** ■ X9QRI-F+ (Bulk Pack)

### Physical Stats

**Form Factor** ■ Proprietary  
**Dimensions** ■ 16.4" x 16.79" (41.66cm x 42.65cm)

### Processor/Cache

**CPU** ■ Intel® Xeon® processor E5-4600 v2 (12-Core)\*\* or E5-4600 (8-Core) family  
■ Quad Socket R (LGA 2011)  
  
\*\* BIOS rev. 3.0 or above is needed to support Ivy Bridge-EP 4S.

**Cache** ■ Up to 30MB  
**System Bus** ■ QPI up to 8 GT/s

### System Memory

**Memory Capacity** ■ 32x 240-pin DDR3 DIMM slots  
■ Supports up to 1TB DDR3 ECC Registered memory (RDIMM) in 32 DIMM slots  
**Memory Type** ■ 1866/1600/1333/1066/800MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs  
**DIMM Sizes** ■ 32GB, 16GB, 8GB, 4GB, 2GB, 1GB  
**Memory Voltage** ■ 1.5 V, 1.35 V  
**Error Detection** ■ Corrects single-bit errors  
■ Detects double-bit errors (using ECC memory)

### On-Board Devices

**Chipset** ■ Intel® C602 chipset  
**SATA** ■ SATA 2.0 3Gb/s with RAID 0, 1, 5, 10  
■ SATA 3.0 6Gb/s with 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  
■ Nuvoton WPCM450 BMC  
**Network** ■ Intel® i350 Dual port GbE LAN

### Chassis (Optimized for X9QRI-F+)

**1U Chassis** ■ CSE-818A-1K43LPB  
■ (rev. M required, Air Shroud MCP-310-81809-0B)  
**2U Chassis** ■ CSE-828TQ-R1K43LPB  
■ (rev. M required, Air Shroud MCP-310-82805-0B)  
**Tower / 4U Rackmount** ■ CSE-418E16-R1K62B  
■ CSE-418E16-R1K62B2  
■ CSE-748TQ-R1K43B  
■ CSE-848E16-R1K62B  
■ (for SC748, rev. M required, Air Shroud MCP-310-74805-0B)  
■ (for SC848 & 418, rev. M required, Air Shroud MCP-310-84803-0B)  
**Important Chassis Notes** ■ To support the new generation Intel® Xeon® processor-based motherboards, **Revision M** chassis is recommended. Please talk to your sales representative for details.

### SuperServer(s) with X9QRI-F+

**Model(s)** ■ SYS-8047R-TRF+  
■ SYS-8017R-TF+

### Expansion Slots

**PCI-Express** ■ 2x PCI-E 3.0 x16 slots  
■ 2x PCI-E 3.0 x8 slots

### System BIOS

**BIOS Type** ■ 16MB SPI Flash EEPROM with AMI BIOS  
■ 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  
**BIOS Features**

### Management

**Software** ■ IPMI (Intelligent Platform Management Interface) v1.5 / 2.0 with KVM support  
■ [SuperDoctor® III](#)  
■ Watch Dog

<b>Controllers</b>	<ul style="list-style-type: none"> <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 RTL8201F PHY (dedicated IPMI)</li> </ul>
<b>Video</b>	<ul style="list-style-type: none"> <li>G200 (Nuvoton WPCM450 BMC with graphic controller)</li> </ul>
<b>Super I/O</b>	<ul style="list-style-type: none"> <li>Nuvoton W83527HG</li> </ul>
<b>Input / Output</b>	
<b>SATA</b>	<ul style="list-style-type: none"> <li>2x SATA 3.0 ports (6Gb/s)</li> <li>4x SATA 2.0 ports (3Gb/s)</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>8x USB 2.0 ports total (4 rear + 3 front + 1 Type A)</li> </ul>
<b>Video</b>	<ul style="list-style-type: none"> <li>1x VGA port</li> </ul>
<b>Serial Port / Header</b>	<ul style="list-style-type: none"> <li>2x Fast UART 16550 ports: 1 rear and 1 header</li> </ul>
<b>DOM</b>	<ul style="list-style-type: none"> <li>1 DOM (Disk on Module) power connector</li> </ul>

<b>Power Configurations</b>	<ul style="list-style-type: none"> <li>NMI</li> <li>Optional IPMI 1.5 / 2.0</li> <li>ACPI / APM Power Management</li> <li>Main Switch Override Mechanism</li> <li>CPU Fan auto-off in sleep mode</li> <li>Power-on mode for AC power recovery</li> </ul>
<b>PC Health Monitoring</b>	
<b>Voltage</b>	<ul style="list-style-type: none"> <li>Monitors for CPU Cores, +1.8V, +3.3V, +5V, ±12V, +3.3V Standby, +5V Standby, VBAT, HT, Memory, Chipset Voltages.</li> <li>5 Phase-switching voltage regulator</li> </ul>
<b>FAN</b>	<ul style="list-style-type: none"> <li>10x 4-pin fan headers</li> <li>10x fans with tachometer monitoring</li> <li>Status monitor for speed control</li> <li>Status monitor for on/off control</li> <li>Low noise fan speed control</li> <li>Pulse Width Modulated (PWM) fan connectors</li> </ul>
<b>Temperature</b>	<ul style="list-style-type: none"> <li>Monitoring for CPU and chassis environment</li> <li>CPU thermal trip support</li> <li>Thermal Control for 8x Fan Connectors</li> <li>1°C temperature sensing logic</li> <li>Thermal Monitor 2 (TM2) support</li> <li>PECI</li> </ul>
<b>LED</b>	<ul style="list-style-type: none"> <li>CPU / System Overheat LED</li> </ul>
<b>Other Features</b>	<ul style="list-style-type: none"> <li>Chassis intrusion detection</li> <li>Chassis intrusion header</li> <li>SDDC Support</li> </ul>

Note: For optimized or compatible chassis, additional parts may be required, please check with Supermicro sales rep

## Parts List

### Parts List (retail)

	Part Number	Qty	Description
<b>X9QRi-F+</b>	MBD-X9QRi-F+	1	X9QRi-F+ Motherboard
<b>Manual</b>	Manual ID# 1324	1	Motherboard Manual
<b>I/O Cables</b>	CBL-0044L	6	SATA CABLE 61CM FLAT S-S PBF
<b>I/O Shield</b>	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.

[Terms & Conditions](#) | 
 [Privacy](#) | 
 [Investor Relations](#) | 
 [Jobs](#) | 
 [Site Map](#)  
[SuperServer®](#) | 
 [Motherboard](#) | 
 [Chassis](#) | 
 [Rack Cabinet](#) | 
 [SuperBlade®](#) | 
 [Embedded](#) | 
 [Networking](#) | 
 [Storage](#) | 
 [Accessories](#) | 
 [AMD Solution](#) | 
 [Power Supplies](#)

Copyright © 2020 Super Micro Computer, Inc.

Information in this document is subject to change without notice.

Other products and companies referred to herein are trademarks or registered trademarks of their respective companies or mark holders.