

# SuperServer F627G3-F73+



## Integrated Board



Super X9DRFF-7G+

### Available Colors:

Black



## Key Features

### 4 Hot-plug System Nodes in 4U Front I/O. Each node supports:

1. Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and **E5-2600 v2** family†
2. Up to 1TB ECC DDR3, up to 1866MHz; 16x DIMM sockets
3. 3x PCI-E 3.0 x16 slots (support 3x Double-width GPU/Xeon Phi cards), 2x PCI-E 3.0 x8 slots
4. Front I/O ports: 2 GbE LAN, 2 USB 2.0, 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 SAS HDDs; SAS2 support via LSI 2308
7. 1620W Redundant Power Supplies **Platinum Level (94%+)**

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

## Specifications

### Product SKUs

#### SYS-F627G3-F73+

- SuperServer F627G3-F73+ (Black)

### Motherboard

#### Super X9DRFF-7G+

### Processor/Cache

- CPU**
- Dual Socket R (LGA 2011)
  - Intel® Xeon® processor E5-2600 and **E5-2600 v2** family† (up to 130W TDP)

**Note** † BIOS version 3.0 or above is required

- Cache**
- Up to 30MB

### System Bus

- QPI up to 8 GT/s

### GPU/Xeon Phi Support

- 3x Double-width GPU/Xeon Phi per node (total of 12x GPU/Xeon Phi cards in 4U)
- Supports Intel Xeon Phi
- Supports NVIDIA K10/K20/K20X (Kepler), K1/K2, and M2090/M2075

### Chassis

#### Form Factor

- 4U Rackmount

#### Model

- **CSE-F424AG-R1K62B**

### Dimensions

- Width**
- 17.63" (448mm)

- Height**
- 6.96" (177mm)

- Depth**
- 35" (889mm)

- Package**
- 25.6" (W) x 11.8" (H) x 48.0" (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
- System Overheat / Power Fail LED
- UID LED

### Expansion Slots (per node)

- 3x PCI-E 3.0 x16 slots

## System Memory (per node)

<b>Memory Capacity</b>	<ul style="list-style-type: none"><li>16x 240-pin DDR3 DIMM sockets</li><li>Up to 1TB DDR3 ECC LRDIMM</li><li>Up to 512GB DDR3 ECC Registered memory (RDIMM)</li><li>Up to 128GB DDR3 ECC Un-Buffered memory (UDIMM)</li></ul>
<b>Memory Type</b>	<ul style="list-style-type: none"><li>1866/1600/1333/1066/800MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs</li></ul>
<b>DIMM Sizes</b>	<ul style="list-style-type: none"><li>32GB, 16GB, 8GB, 4GB, 2GB, 1GB</li></ul>
<b>Memory Voltage</b>	<ul style="list-style-type: none"><li>1.5 V, 1.35 V</li></ul>
<b>Error Detection</b>	<ul style="list-style-type: none"><li>Corrects single-bit errors</li><li>Detects double-bit errors (using ECC memory)</li></ul>

## On-Board Devices

<b>Chipset</b>	<ul style="list-style-type: none"><li>Intel® C602 Chipset</li></ul>
<b>AHCI SATA</b>	<ul style="list-style-type: none"><li>SATA 2.0 3Gbps with RAID 0, 1, 5, 10</li><li>SATA 3.0 6Gbps with RAID 0, 1</li></ul>
<b>SAS</b>	<ul style="list-style-type: none"><li>SAS2 via LSI 2308</li><li>SW RAID 0, 1, 10 support</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>Nuvoton WPCM450 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 RTL8201F PHY (dedicated IPMI)</li></ul>
<b>Graphics</b>	<ul style="list-style-type: none"><li>Matrox G200eW</li></ul>

## Input / Output (per node)

<b>SAS</b>	<ul style="list-style-type: none"><li>6x SAS 2.0 ports (6Gbps)</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 2.0 ports</li></ul>
<b>VGA</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>1x Fast UART 16550 port</li></ul>

## Expansion Slots (per node)

<b>PCI-Express</b>	<ul style="list-style-type: none"><li>3x PCI-E 3.0 x16 (support 3x Double-width GPU/Xeon Phi)</li><li>2x PCI-E 3.0 x8 slots</li></ul>
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## Drive Bays (per node)

<b>Hot-swap</b>	<ul style="list-style-type: none"><li>2x 3.5" Hot-swap SAS HDD bays</li></ul>
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## System Cooling

<b>Fans</b>	<ul style="list-style-type: none"><li>8x 8cm heavy duty fans with air shroud and PWM fan speed control</li></ul>
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## Power Supply

	<p>1620W high-efficiency redundant power supply w/ PMBus</p> <ul style="list-style-type: none"><li>1000W Output @ 100-120V, 12-10A, 50-60Hz</li><li>1200W Output @ 120-140V, 12-10A, 50-60Hz</li><li>1620W Output @ 180-240V, 10.5-8A, 50-60Hz</li></ul>
<b>AC Input</b>	<ul style="list-style-type: none"><li>1000W: +12V/84A; +5Vsb/4A</li><li>1200W: +12V/100A; +5Vsb/4A</li><li>1620W: +12V/150A; +5Vsb/4A</li></ul>
<b>DC Output</b>	<ul style="list-style-type: none"><li>1000W: +12V/84A; +5Vsb/4A</li><li>1200W: +12V/100A; +5Vsb/4A</li><li>1620W: +12V/150A; +5Vsb/4A</li></ul>

<b>Certification</b>	  <b>Platinum Certified</b> [ Test Report ]
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## System BIOS

<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 2.2</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

<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-X9DRFF-7G+	4	Super X9DRFF-7G+ Motherboard
	CSE-F424AG-R1K62B	1	4U Chassis
<b>Backplane</b>	BPN-ADP-2UGPU-O-P	4	Backplan adapter card for 2UGPU
<b>Backplane</b>	BPN-ADP-F418L-O-P	4	BPN;SASADP;SAS827-H8;H8DTT;cable req
<b>Backplane</b>	BPN-SAS-F424-A2	4	2x 3.5
<b>Cable 1</b>	CBL-0460L-02	4	8 pin Male to two 4 pin Male power cable, 10cm and 7cm. 18AWG
<b>Cable 2</b>	CBL-0473L	8	21cm 30AWG SATA S-S cable
<b>Riser Card</b>	RSC-R2UFF-2E16B-O-P	4	RSC-R2UFF-2E16
<b>Riser Card</b>	RSC-R2UFF-E16A-O-P	4	RSC-R2UFF-E16A
<b>Heatsink / Retention</b>	SNK-P0047PS	4	1U Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
<b>Heatsink / Retention</b>	SNK-P0047PSC	4	1U Passive Front CPU Heat Sink w/ a Side Air Channel for X9, X10 Systems Equipped with a Narrow ILM MB
<b>Power Supply</b>	PWS-1K62P-1R	4	1620W REDUNDANT POWER MODULE
<b>Mounting Rail</b>	MCP-290-41803-0N	1	Fat twin F418 / F424 Rail set support 28-33.5 inch depth rail,RoHS/REACH,PBF

Optional Parts List			
	Part Number	Qty	Description
<b>Bracket for Xeon Phi</b>	MCP-240-42408-0N-PACK	4	System default installed brackets for Nvidia GPUs. This bracket must be ordered if Xeon Phi (MIC) will be implemented
<b>Internal Fan</b>	FAN-0150L4	8	Rear internal fan for cooling enhancement
<b>UIO AOC bracket cover</b>	MCP-240-42412-0N	4	Front bracket cover for UIO Add-On-Card
<b>Software</b>	SFT-OOB-LIC	4	BIOS management capabilities
<b>Software</b>	SFT-DCMS-Single	-	Remote Management - Datacenter Package

**Note:** Power redundancy is based on configuration. For more information, please refer to user manual.