

# SuperServer F617H6-FT+



## Key Features

**Hadoop, 4-Node 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. Expansion slot: 1 PCI-E 3.0 x16 (LP) and 1 PCI-E x8 (LP) via riser card
4. I/O ports: 2 GbE ports, 1 Built-in video, 1 COM port onboard, 2 USB 2.0 ports
5. Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port
6. 8 Fixed 3.5" SAS/SATA HDD Bays + 4 Fixed 3.5" SATA HDD Bays  
Additional 2 Fixed 2.5" SATA HDD Bays optional
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-F617H6-FT+** ■ SuperServer F617H6-FT+

### Motherboard

**Super X9DRFF-7+**

### Processor/Cache

#### CPU

- Dual Socket R (LGA 2011)
  - Intel® Xeon® processor E5-2600 and **E5-2600 v2** family† (up to 135W TDP \*)
- \* Please contact your Supermicro sales representative for additional details

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

**Cache** ■ Up to 30MB

**System Bus** ■ QPI up to 8 GT/s

### System Memory (per node)

- 16x 240-pin DDR3 DIMM sockets
- Up to 1TB DDR3 ECC LRDIMM

### Chassis

**Form Factor** ■ 4U Rackmount

**Model** ■ **CSE-F414IS-R1K62B**

### Dimensions

**Width** ■ 17.63" (448mm)

**Height** ■ 6.96" (177mm)

**Depth** ■ 35" (889mm)

**Weight** ■ Net Weight: 200 lbs (90.71 kg)  
■ Gross Weight: 240 lbs (108.86 kg)

**Available Colors** ■ Black

### Front Panel

**Buttons** ■ Power On/Off button  
■ System Reset button

**LEDs** ■ Power status LED  
■ 2x Network activity LEDs  
■ System Overheat LED  
■ Power fail LED

### Expansion Slots (per node)

|                        |   |
|------------------------|---|
| <b>Memory Capacity</b> | <ul style="list-style-type: none"> <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</li> <li>SATA 3.0 6Gbps with RAID 0, 1</li> </ul>  |
| <b>SAS</b>                 | <ul style="list-style-type: none"> <li>SAS2 (6Gbps) via LSI 2208</li> <li>HW RAID 0, 1, 5, 6, 10, 50, 60 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>AHCI SATA</b>            | <ul style="list-style-type: none"> <li>2x SATA 3.0 ports (6Gbps)</li> <li>4x SATA 2.0 ports (3Gbps)</li> </ul> <p>Note: 2 of the 4 SATA 2.0 ports are for optional 2x 2.5" HDDs</p> |
| <b>SAS</b>                  | <ul style="list-style-type: none"> <li>8x SAS2 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>3x USB 2.0 ports (2 rear + 1 Type A)</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>   |

|                    |   |
|--------------------|---|
| <b>PCI-Express</b> | <ul style="list-style-type: none"> <li>1x PCI-E 3.0 x16 Low-profile via riser card</li> <li>1x PCI-E 3.0 x8 Low-profile via riser card</li> </ul> |
|--------------------|---|

#### Drive Bays (per node)

|              |  |
|--------------|--|
| <b>Fixed</b> | <ul style="list-style-type: none"> <li>8x Fixed 3.5" SAS/SATA HDD trays</li> <li>4x Fixed 3.5" SATA HDD trays</li> <li>Additional 2 Fixed 2.5" SATA HDD Bays optional</li> </ul> |
|--------------|--|

#### 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> |
|-------------|--|

#### Power Supply

1620W high-efficiency redundant power supply w/ PMBus

|                  |   |
|------------------|---|
| <b>AC Input</b>  | <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>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>   |

#### Certification



**Platinum Certified**  
[ Test Report ]

#### 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-7+       | 4   | Super X9DRFF-7+ Motherboard   |
|                               | CSE-F414IS-R1K62B   | 1   | 4U Chassis  |
| <b>Backplane</b>              | BPN-SAS-816T-A3-O-P | 4   | 3x 3.5  |
| <b>Backplane</b>              | BPN-SAS-816T-A4-O-P | 8   | 1U Hadoop HDD backplane board - model A4 supports 4x 3.5  |
| <b>Backplane</b>              | BPN-ADP-F418L-O-P   | 4   | BPN;SASADP;SAS827-H8;H8DTT;cable req  |
| <b>Cable 1</b>                | CBL-0473L           | 16  | 21cm 30AWG SATA S-S cable   |
| <b>Cable 2</b>                | CBL-0483L           | 4   | 29cm 30AWG SATA S-S cable   |
| <b>Cable 3</b>                | CBL-PWEX-0485-01    | 4   | 8 pin (5A) to 2 2x2(50/60CM) and 2 SATA (26+16CM) one piece tooling connector power cable. 18AWG,HF,RoHS/REACH,PBF        |
| <b>Cable 4</b>                | CBL-PWEX-0511-01    | 4   | 8pin to 2x2pin (50cm) and 2 SATA power connectors 46/16cm one piece tooling connector Power cable,18AWG,HF,RoHS/REACH,PBF |
| <b>Cable 5</b>                | CBL-0481L           | 12  | 81CM 30AWG SATA S-S cable   |
| <b>Cable 6</b>                | CBL-0484L           | 16  | 55cm 30AWG SATA S-S cable   |
| <b>Riser Card</b>             | RSC-R1UFF-E8R-O-P   | 4   | RSC-R1UFF-E8R   |
| <b>Riser Card</b>             | RSC-R1UFF-E16-O-P   | 4   | 1U LHS FatTwin Riser Card with PCI-E x16  |
| <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>Heatsink / Retention</b>   | SNK-P0047PS         | 4   | 1U Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB  |
| <b>Power Supply</b>           | PWS-1K62P-1R        | 2   | 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>HDD Bracket</b>  | MCP-240-00134-0N or MCP-240-00145-0N | 2/node<br>12/node | FIXED 2.5 HDD bracket for add-on-card slot Swappable 2.5" HDD bracket. Replaces original 3.5" HDD space |
| <b>Software</b>     | SFT-OOB-LIC                          | 8                 | BIOS management capabilities  |
| <b>Software</b>     | SFT-DCMS-Single                      | -                 | Remote Management - Datacenter Package  |