

SuperServer F618H6-FTL+



Key Features

Hadoop, 4-Node Front I/O Each node supports:

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4[†]/ v3 family; QPI up to 9.6GT/s
2. Up to 2TB[†] ECC 3DS LRDIMM , up to DDR4- 2400[†]MHz ; 16x DIMM slots
3. 2x PCI-E 3.0 x8 (LP) slots
4. 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. 12 Fixed 3.5" SAS3/SATA3 HDD Bays
Optional 2.5" drives mounted in PCI-E
7. 2000W Redundant Power Supplies
Titanium Level (96%)

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

Specifications

Product SKUs

SYS-F618H6-FTL+	▪ SuperServer F618H6-FTL+
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Motherboard

Super X10DRFF-CG

Processor/Cache

CPU	▪ Intel® Xeon® processor E5-2600 v4 [†] / v3 family (up to 145W TDP) * ▪ Dual Socket R3 (LGA 2011)
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Cores / Cache	▪ Up to 22 Cores [†] / Up to 55MB [†] Cache
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System Bus	▪ QPI up to 9.6 GT/s
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Note	[†] BIOS version 2.0 or above is required
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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-F414IS2-R2K04B

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: 200 lbs (90.72 kg) ▪ Gross Weight: 240 lbs (108.86 kg)
Available Colors	▪ Black

Front Panel

Buttons	▪ Power On/Off button ▪ UID button
LEDs	▪ Power status LED ▪ 2x Network activity LEDs

Expansion Slots (per node)

PCI-Express	▪ 2x PCI-E 3.0 x8 Low-profile via riser card
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Capacity	<ul style="list-style-type: none"> Up to 2TB ECC 3DS LRDIMM, 1TB ECC RDIMM
Memory Type	<ul style="list-style-type: none"> 2400⁺/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	<ul style="list-style-type: none"> RDIMM: 64GB, 32GB, 16GB, 8GB, 4GB LRDIMM: 64GB, 32GB 3DS LRDIMM: 128GB
Memory Voltage	<ul style="list-style-type: none"> 1.2 V
Error Detection	<ul style="list-style-type: none"> Corrects single-bit errors

On-Board Devices

Chipset	<ul style="list-style-type: none"> Intel® C612 chipset
SAS	<ul style="list-style-type: none"> SAS3 (12Gbps) via LSI 3008 SW RAID 0, 1, 10 support
SATA	<ul style="list-style-type: none"> SATA3 (6Gbps) with RAID 0, 1, 5, 10
IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support ASPEED AST2400 BMC
Network Controllers	<ul style="list-style-type: none"> Intel® i350 Dual Port Gigabit Ethernet Virtual Machine Device Queues reduce I/O overhead Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output 1x Realtek RTL8211E PHY (dedicated IPMI)
Graphics	<ul style="list-style-type: none"> ASPEED AST2400 BMC

Input / Output (per node)

SAS	<ul style="list-style-type: none"> 8x SAS3 (12Gbps) ports
SATA	<ul style="list-style-type: none"> 10x SATA3 (6Gbps) ports
LAN	<ul style="list-style-type: none"> 2x RJ45 GbE ports 1x RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 2x USB 3.0 ports
VGA	<ul style="list-style-type: none"> 1x VGA port

Drive Bays (per node)

Fixed	<ul style="list-style-type: none"> 12x Fixed 3.5" SAS3/SATA3 HDD trays Optional 2.5" drives mounted in PCI-E slot
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System Cooling

Fans	<ul style="list-style-type: none"> 8x 8cm heavy duty fans and PWM fan speed control
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Power Supply (76mm Width)

2000W Redundant Power Supplies with PMBus

Total Output Power	<ul style="list-style-type: none"> 1000W/2000W
Dimension (W x H x L)	<ul style="list-style-type: none"> 76 x 40.4 x 336 mm
Input	<ul style="list-style-type: none"> 100-127 Vac / 12-9.5 A / 50-60 Hz 200-220 Vac / 10-9.5 A / 50-60 Hz 220-230 Vac / 10-9.8 A / 50-60 Hz 230-240 Vac / 10-9.8 A / 50-60 Hz 200-240 Vac / 11.8-10 A / 50-60 Hz (UL/cUL only)
+12V	<ul style="list-style-type: none"> Max: 83.3A & Min: 0A (100-127 Vac) Max: 150A & Min: 0A (200-220 Vac) Max: 165A & Min: 0A (220-230 Vac) Max: 166.7A & Min: 0A (230-240 Vac) Max: 166.7A & Min: 0A (200-240 Vac)(UL/cUL only)
+5Vsb	<ul style="list-style-type: none"> Max: 1A / Min: 0A
Output Type	<ul style="list-style-type: none"> 27 Pairs Gold Finger Connector

Certification	  <ul style="list-style-type: none"> UL/cUL/CB/BSMI/CE/CCC Titanium Level [Test Report]
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System BIOS

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

Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none"> Operating Temperature: 10°C to 35°C (50°F to 95°F) Non-operating Temperature: -40°C to 70°C (-40°F to 158°F) Operating Relative Humidity: 8% to 90% (non-condensing) Non-operating Relative Humidity: 5% to 95% (non-condensing)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DRFF-CG	4	Super X10DRFF-CG Motherboard
	CSE-F414IS2-R2K04B	1	4U Chassis
Backplane	BPN-ADP-F418L	4	BPN;SASADP;SAS827-H8;H8DTT;cable req
Backplane	BPN-SAS-801T-A1	4	1-Port 6G Backplane for 1x 3.5" SAS2/SATA3 HDD (Support HDD Power Cycle)
Backplane	BPN-SAS-801T-A4	8	4-Port 6G Backplane for 4x 3.5
Backplane	BPN-SAS-801T-A3-P	4	3-Port 6Gb/s Backplane for internal 3.5" SAS/SATA HDD/SSD with Power Reset and Temp Output Headers,HF
Cable 1	CBL-OTHR-0758	8	INT P0.3 40p to 40p HS FPC 85 ohms impedance,11cm,0.2mm thick,RoHS/REACH
Cable 2	CBL-SAST-0704	4	internal mini SAS HD to 4 SATA, 30/70/60/70cm, S. 30AWG [Amphenol],RoHS/REACH
Cable 3	CBL-0484L	12	55cm 30AWG SATA S-S cable
Cable 4	CBL-PWEX-0485-01	8	8 pin (5A) to 2 2x2(50/60CM) and 2 SATA (26+16CM) one piece tooling connector power cable. 18AWG,HF,RoHS/REACH,PBF
Cable 5	CBL-SAST-0703	4	internal mini SAS HD to 4 SATA, 23/13/23/13cm, S. 30AWG [Amphenol],RoHS/REACH
Cable 6	CBL-SAST-0624	4	70cm SATA cable S-S 30AWG,RoHS/REACH,PBF
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Riser Card	RSC-88-F1	4	LHS Riser Card with PCI-Ex8,RoHS/REACH (F1)
Riser Card	RSC-88-F2	4	,RoHS/REACH LHS 1U PCI-E x8 (F2)
Heatsink / Retention	SNK-P0047PS	4	1U Passive CPU Heat Sink for X9, X10 Systems Equipped w/ a Narrow ILM MB
Heatsink / Retention	SNK-P0047PSC	4	1U Passive Front CPU Heat Sink w/ a Side Air Channel for X9, X10 Systems Equipped with a Narrow ILM MB
Power Supply	PWS-2K04A-1R	2	AC-DC 2000W, Titanium Level, Redundancy, 1U, PMBus 1.2, +12V/+5Vsb, 360x76x40mm,HF,RoHS/REACH

Optional Parts List

	Part Number	Qty	Description
HDD Bracket	MCP-240-00134-0N or MCP-240-00145-0N	2/node 12/node	FIXED 2.5 HDD bracket for add-on-card slot Swappable 2.5" HDD bracket. Replaces original 3.5" HDD space
Software	SFT-OOB-LIC	8	OOB Management Package (per node license)
Software	SFT-DCMS-Single	8	DataCenter Management Package (per node license)
AOC	AOM-TPM-9655V-S	-	Based on AOM-TPM-9655V with Server TXT package,RoHS/REACH
AOC	AOM-TPM-9665V-S	-	Verical TPM TCG 2.0 Provisioned for server,RoHS/REACH