



FatTwin™

Evolutionary 4U Twin Architecture

Intel® Xeon® Processor E5-2600 v2 Product Family (Ivy Bridge) Support!

16% Lower Power Consumption
30% More Storage Capacity

New!



4 Nodes in 4U
8 Hot-swap 3.5" HDDs per 1U



8 Nodes in 4U
6 Hot-swap 2.5" HDDs per 1/2U



GPU FatTwin™
6 GPU/Xeon Phi™ cards per node

Optimized Design for Data Centers

- Data Center / Cloud / Hadoop applications
- HPC / GPU / Xeon Phi™ applications
- Science / Research environments
- Finance / Oil & Gas markets
- Standard 19" rack cabinet support

Higher Performance-per-Watt / per-Dollar

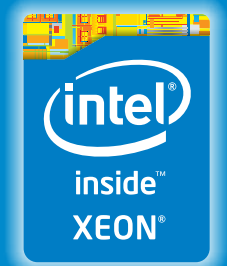
- Minimum fan power required
- High-efficiency motherboard design
- Minimum power distribution loss
- **Redundant Platinum Level (95%+) Digital high-efficiency power supplies**
- **High-efficiency Battery Backup Power (BBP™) support eliminates bulky UPS systems**
- **56Gb/s ConnectX-3 FDR InfiniBand or 10GbE options**

Best Performance

- **8 hot-swap 3.5" HDDs supported in 1/2 of 2U (1U)**
- 6 GPUs supported in 1/2 of 4U (2U)
- 135W highest-end CPUs supported
- 16 DIMMs per node supported
- **1/2U node option supported**

Free-Air Cooling / PUE Optimized

- Efficient air cooling design
- **135W CPU supported @ 35°C**
- **130W CPU supported @ 47°C**
- **Optimized for free-air cooling (PUE~1.1)**



8-Node Front I/O Highest Density & Efficiency!

Up to 2x 2.5" HDDs per Node, Up to 512GB DDR3-1866 MHz in 8 DIMMs/Node, Redundant Platinum Level Power Supplies, SAS 2.0 and SATA 3.0 (6Gbps), Up to 135W* CPU support
Intel® Xeon® Processor E5-2600 v2 Product Family (Ivy Bridge) Support!



SYS-F617R2-FT
SYS-F617R2-F73



SYS-F617R3-FT



Rear View



Rear View

MODEL	SYS-F617R2-FT/ F73 (8 DP Nodes, Front I/O)	SYS-F617R3-FT (8 DP Nodes, Front I/O)
Processor	Octal set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families; Up to 135W* CPU support	Octal set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families; Up to 135W* CPU support
Server board	-FT: SUPER® X9DRFF -F73: SUPER® X9DRFF-7	SUPER® X9DRFF
Chipset	Intel® C602 Chipset	Intel® C602 Chipset
Memory	Octal set of up to 512GB ECC LRDIMM, 256GB ECC RDIMM, or 64GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 8 DIMM slots	Octal set of up to 512GB ECC LRDIMM, 256GB ECC RDIMM, or 64GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 8 DIMM slots
Expansion Slots	Octal set of 1 PCI-E 3.0 x16 (low-profile) via riser card	Octal set of 1 PCI-E 3.0 x16 (low-profile) via riser card
Onboard RAID	-FT: Octal set of Intel C602 controller for 2 SATA3 (6Gbps); RAID 0,1 -F73: Octal set of LSI® 2308 controller for 2 SAS 2.0 (6Gbps) ports; RAID 0,1	Octal set of Intel C602 controller for 2 SATA3 (6Gbps); RAID 0,1
Networking	Octal set of Dual LAN ports with Intel® 82574L Gigabit Ethernet controller	Octal set of Dual LAN ports with Intel® 82574L Gigabit Ethernet controller
VGA	Octal set of Matrox® G200eW video controller	Octal set of Matrox® G200eW video controller
Manageability	Octal set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Octal set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	R2-FT: Octal set of 2x 2.5" hot-swap SATA drive bays R2-F73: Octal set of 2x 2.5" hot-swap SAS2 drive bays	Octal set of 2x 3.5" fixed SATA drive bays
Power Supply	4x 1620W Redundant Platinum Level (94%+) power supplies with I ² C & PMBus	4x 1620W Redundant Platinum Level (94%+) power supplies with I ² C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud & PWM fan speed control	8x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448mm W x 177mm H x 737mm D (17.63" W x 6.96" H x 29" D)	4U Rackmount 448mm W x 177mm H x 737mm D (17.63" W x 6.96" H x 29" D)

* Please contact your Supermicro sales representative for additional details

4-Node Front I/O Highest Power Efficiency!

Up to 4x 3.5" or 8x 2.5" HDDs per Node, Up to 512GB DDR3-1866 MHz in 8 DIMMs/Node, Redundant Platinum Level Power Supplies, SAS 2.0 and SATA 3.0 (6Gbps), Up to 135W* CPU support
Intel® Xeon® Processor E5-2600 v2 Product Family (Ivy Bridge) Support!



SYS-F627R3-FT
SYS-F627R3-F73



SYS-F627R2-F73



Rear View



Rear View

MODEL	SYS-F627R3-FT/F73 (4 DP Nodes, Front I/O)	SYS-F627R2-F73 (4 DP Nodes, Front I/O)
Processor	Quad set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families; Up to 135W* CPU support	Quad set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families; Up to 135W* CPU support
Server board	-FT: SUPER® X9DRFF -F73: SUPER® X9DRFF-7	SUPER® X9DRFF-7
Chipset	Intel® C602 Chipset	Intel® C602 Chipset
Memory	Quad set of up to 512GB ECC LRDIMM, 256GB ECC RDIMM, or 64GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 8 DIMM slots	Quad set of up to 512GB ECC LRDIMM, 256GB ECC RDIMM, or 64GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 8 DIMM slots
Expansion Slots	Quad set of 1 PCI-E 3.0 x16 (low-profile) via riser card	Quad set of 1 PCI-E 3.0 x16 (low-profile) via riser card
Onboard RAID	-FT: Quad set of Intel C602 controller for 2 SATA3 (6Gbps) and 2 SATA2 (3Gbps) ports; RAID 0,1,5,10; -F73: Quad set of LSI® 2308 controller for 4 SAS 2.0 (6Gbps) ports; RAID 0,1,10;	Quad set of LSI® 2308 controller for 8 SAS 2.0 (6Gbps) ports; RAID 0,1,10
Networking	Quad set of Dual LAN ports with Intel® 82574L Gigabit Ethernet controller	Quad set of Dual LAN ports with Intel® 82574L Gigabit Ethernet controller
VGA	Quad set of Matrox® G200eW video controller	Quad set of Matrox® G200eW video controller
Manageability	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	R3-FT: Quad set of 4x 3.5" hot-swap SATA drive bays R3-F73: Quad set of 4x 3.5" hot-swap SAS2 drive bays	Quad set of 8x 2.5" hot-swap SAS2 drive bays
Power Supply	4x 1280W Redundant Platinum Level (95%+) Digital power supplies with i²C & PMBus	4x 1280W Redundant Platinum Level (95%+) Digital power supplies with i²C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud & PWM fan speed control	8x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448mm W x 177mm H x 737mm D (17.63" W x 6.96" H x 29" D)	4U Rackmount 448mm W x 177mm H x 737mm D (17.63" W x 6.96" H x 29" D)

* Please contact your Supermicro sales representative for additional details

8-Node Rear I/O

Up to 6x 2.5" HDDs per Node, Up to 1TB DDR3-1866 MHz in 16 DIMMs/Node,
 Redundant Platinum Level Power Supplies, SAS 2.0 and SATA 3.0 (6Gbps)
 Intel® Xeon® Processor E5-2600 v2 Product Family (Ivy Bridge) Support!



SYS-F617R2-RT+



SYS-F617R2-R72+



Rear View



Rear View



MODEL	SYS-F617R2-RT+ (8 DP Nodes, Rear I/O, 16 DIMMs)	SYS-F617R2-R72+ (8 DP Nodes, Rear I/O, 16 DIMMs)
Processor	Octal set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families; Up to 115W CPUs supported @ 35°C	Octal set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families; Up to 115W CPUs supported @ 35°C
Server board	SUPER® X9DRFR	SUPER® X9DRFR
Chipset	Intel® C602 Chipset	Intel® C602 Chipset
Memory	Octal set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots	Octal set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots
Expansion Slots	Octal set of 1 PCI-E 3.0 x16 (low-profile) via riser card and 1 Micro low-profile PCI-E 3.0 x8	Octal set of 1 PCI-E 3.0 x16 (low-profile) via riser card and 1 Micro low-profile PCI-E 3.0 x8
Onboard RAID	Octal set of Intel C602 controller for 2 SATA3 (6Gbps) and 4 SATA2 (3Gbps) ports; RAID 0,1,5,10	Octal set of LSI® 2208 controller for 6 SAS 2.0 (6Gbps) ports; RAID 0,1,5,6,10,50
Networking	Octal set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller	Octal set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller
VGA	Octal set of Matrox® G200eW video controller	Octal set of Matrox® G200eW video controller
Manageability	Octal set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Octal set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Octal set of 6x 2.5" hot-swap SATA drive bays	Octal set of 6x 2.5" hot-swap SAS2 drive bays
Power Supply	4x 1620W Redundant Platinum Level (94%+) power supplies with I ² C & PMBus	4x 1620W Redundant Platinum Level (94%+) power supplies with I ² C & PMBus
Cooling System	Octal set of 3x 40mm counter-rotating fans with air shroud & PWM fan speed control	Octal set of 3x 40mm counter-rotating fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448mm W x 177mm H x 737mm D (17.63" W x 6.96" H x 29" D)	4U Rackmount 448mm W x 177mm H x 737mm D (17.63" W x 6.96" H x 29" D)

* Please contact your Supermicro sales representative for additional details

4-Node Rear I/O Up to 14 Hot-swap 2.5" HDDs per 1U

Up to 14x 2.5" HDDs per Node, Up to 1TB DDR3-1866 MHz in 16 DIMMs/Node, Redundant Platinum Level Power Supplies, SAS 2.0 and SATA 3.0 (6Gbps)
Intel® Xeon® Processor E5-2600 v2 Product Family (Ivy Bridge) Support!



SYS-F627R2-RT+
SYS-F627R2-RTB+

4-Node Rear I/O 8 Hot-swap 3.5" HDDs per 1U

Up to 8x 3.5" HDDs per Node, Up to 1TB DDR3-1866 MHz in 16 DIMMs/Node, Redundant Platinum Level Power Supplies, SAS 2.0 and SATA 3.0 (6Gbps)
Intel® Xeon® Processor E5-2600 v2 Product Family (Ivy Bridge) Support!



SYS-F627R3-RTB+
SYS-F627R3-R72B+



SYS-F627R2-RTB+ Rear View



SYS-F627R2-RT+ Rear View



Rear View



MODEL	SYS-F627R2-RTB+ SYS-F627R2-RT+ <i>(Up to 14 Hot-swap 2.5" HDDs per 1U, 4 DP Nodes, Rear I/O, 16 DIMMs)</i>	SYS-F627R3-RTB+ SYS-F627R3-R72B+ <i>(Up to 8 Hot-swap 3.5" HDDs per 1U, 4 DP Nodes, Rear I/O, 16 DIMMs)</i>
Processor	Quad set of Dual Intel® Xeon Processor E5-2600 and E5-2600 v2 product families; Up to 130W CPUs supported @ 47°C; or 135W CPUs supported @ 35°C*	Quad set of Dual Intel® Xeon Processor E5-2600 and E5-2600 v2 product families; Up to 130W CPUs supported @ 47°C; or 135W CPUs supported @ 35°C*
Server board	SUPER [®] X9DRFR	SUPER [®] X9DRFR
Chipset	Intel® C602 Chipset	Intel® C602 Chipset
Memory	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots
Expansion Slots	-RTB+: Quad set of 1 PCI-E 3.0 x16 (low-profile) and 1 Micro low-profile PCI-E 3.0 x8; -RT+: Quad set of 2 PCI-E 3.0 x8 (FH, HL) and 1 Micro low-profile PCI-E 3.0 x8	Quad set of 1 PCI-E 3.0 x16 (low-profile) and 1 Micro low-profile PCI-E 3.0 x8
Onboard RAID	-RTB+: Quad set of LSI® 2308 controller for 2 SATA3 (6Gbps) RAID 0,1 and 4 SATA2 (3Gbps) ports; RAID 0,1,5,10; 8 SAS2 (6Gbps) ports; RAID 0,1,5,10,50,60 -RT+: Quad set of Intel C602 controller for 2 SATA3 (6Gbps), RAID 0,1; and 2 SATA2 (3Gbps) ports, RAID 0,1; 8 SAS2 (6Gbps) ports; RAID 0,1,5,10,50,60	-RTB+: Quad set of Intel C602 controller for 2 SATA3 (6Gbps) and 4 SATA2 (3Gbps) ports; RAID 0,1,5,10 2 SATA2 (3Gbps) ports; RAID 0,1; -R72B+: Quad set of LSI® 2208 controller for 8 SAS 2.0 (6Gbps) ports; RAID 0,1,5,6,10,50,60
Networking	Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller	Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller
VGA	Quad set of Matrox® G200eW video controller	Quad set of Matrox® G200eW video controller
Manageability	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	-RT+: Quad set of 12x 2.5" hot-swap SAS/SATA drive bays -RTB+: Quad set of 12x 2.5" front + 2x 2.5"/3.5" rear hot-swap SAS/SATA drive bays	-RTB+: Quad set of 8x 3.5" hot-swap SATA drive bays -R72B+: Quad set of 8x 3.5" hot-swap SAS2 drive bays
Power Supply	4x 1280W Redundant Platinum Level (95%+) Digital power supplies with I ² C & PMBus	4x 1280W Redundant Platinum Level (95%+) Digital power supplies with I ² C & PMBus
Cooling System	Quad set of 2x 80mm heavy duty fans with air shroud & PWM fan speed control	Quad set of 2x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448mm W x 177mm H x 737mm D (17.63" W x 6.96" H x 29" D)	4U Rackmount 448mm W x 177mm H x 737mm D (17.63" W x 6.96" H x 29" D)

* Please contact your Supermicro sales representative for additional details

8-Node 16 DIMMs, Front I/O

Up to 2x 3.5" or 4x 2.5" HDDs per Node, Up to 1TB DDR3-1866 MHz in 16 DIMMs/Node, Redundant Platinum Level Power Supplies, SAS 2.0 and SATA 3.0 (6Gbps) Intel® Xeon® Processor E5-2600 v2 Product Family (Ivy Bridge) Support!



SYS-F617R2-FT+
SYS-F617R3-FT+



SYS-F617R2-FT+/FTPT+/F72+
4x 2.5" HDDs per Node



SYS-F617R3-FT+ /FTPT+
2x 3.5" HDDs per Node



Rear View

MODEL	SYS-F617R2-FT+/FTPT+/F72+ (8 DP Nodes, Front I/O, 16 DIMMs & 4x 2.5" HDDs per Node)	SYS-F617R3-FT+ /FTPT+ (8 DP Nodes, Front I/O, 16 DIMMs & 2x 3.5" HDDs per Node)
Processor	Octal set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families	Octal set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families
Server board	-FT+: SUPER® X9DRFF-i+ -FTPT+: SUPER® X9DRFF-iT+ -F72+: SUPER® X9DRFF-7+	-FT+: SUPER® X9DRFF-i+ -FTPT+: SUPER® X9DRFF-iT+
Chipset	Intel® C602 Chipset	Intel® C602 Chipset
Memory	Octal set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots	Octal set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots
Expansion Slots	Octal set of 1 PCI-E 3.0 x16 (low-profile), and 1 PCI-E 3.0 x8 (low-profile) via riser cards	Octal set of 1 PCI-E 3.0 x16 (low-profile), and 1 PCI-E 3.0 x8 (low-profile) via riser cards
Onboard RAID	-FT+/FTPT+: Octal set of Intel C602 controller for 2 SATA3 (6Gbps) and 2 SATA2 (3Gbps) ports; RAID 0,1,5,10; -F72+: Octal set of LSI® 2208 controller for 4 SAS 2.0 (6Gbps) ports; RAID 0,1,5,6,10,50	Octal set of Intel C602 controller for 2 SATA3 (6Gbps) ports; RAID 0,1
Networking	-FT+/F72+: Octal set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller; -FTPT+: Octal set of Dual 10GBase-T with Intel® X540 Gigabit Ethernet controller	-FT+: Octal set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller; -FTPT+: Octal set of Dual 10GBase-T with Intel® X540 Gigabit Ethernet controller
VGA	Octal set of Matrox® G200eW video controller	Octal set of Matrox® G200eW video controller
Manageability	Octal set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Octal set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Octal set of 4x 2.5" fixed SAS2/SATA drive bays	Octal set of 2x 3.5" fixed SATA drive bays
Power Supply	4x 1620W Redundant Platinum Level (94%+) power supplies with I²C & PMBus	4x 1620W Redundant Platinum Level (94%+) power supplies with I²C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud & PWM fan speed control	8x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448mm W x 177mm H x 737mm D (17.63"W x 6.96"H x 29"D)	4U Rackmount 448mm W x 177mm H x 737mm D (17.63"W x 6.96"H x 29"D)

* Please contact your Supermicro sales representative for additional details

4-Node 16 DIMMs, Front I/O

Up to 2x 3.5" or 6x 2.5" HDDs per Node, Up to 1TB DDR3-1866 MHz in 16 DIMMs per Node, Redundant Platinum Level Power Supplies, SAS 2.0 and SATA 3.0 (6Gbps)

Intel® Xeon® Processor E5-2600 v2 Product Family (Ivy Bridge) Support!



Rear View

SYS-F627R2-FT+ / SYS-F627R2-F72+
SYS-F627R2-F72PT+ / SYS-F627R2-FTPT+

4-Node 16 DIMMs, Front I/O

Up to 2x 3.5" or 6x 2.5" HDDs per Node, Up to 1TB DDR3-1866 MHz in 16 DIMMs per Node, Redundant Platinum Level Power Supplies, SAS 2.0 and SATA 3.0 (6Gbps)

Intel® Xeon® Processor E5-2600 v2 Product Family (Ivy Bridge) Support!



Rear View

SYS-F627R3-FT+ / SYS-F627R3-F72+
SYS-F627R3-F72PT+ / SYS-F627R3-FTPT+



MODEL	SYS-F627R2-FT+ / SYS-F627R2-F72+ SYS-F627R2-F72PT+ / SYS-F627R2-FTPT+ (4 DP Nodes, Front I/O, 16 DIMMs, 6x 2.5" HDDs per Node)	SYS-F627R3-FT+ / SYS-F627R3-F72+ SYS-F627R3-F72PT+ / SYS-F627R3-FTPT+ (4 DP Nodes, Front I/O, 16 DIMMs, 2x 3.5" HDDs per Node)
Processor	Quad set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families	Quad set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families
Server board	-FT+: SUPER [®] X9DRFF-i+ -F72+: SUPER [®] X9DRFF-7+ -F72PT+: SUPER [®] X9DRFF-7T+ -FTPT+: SUPER [®] X9DRFF-iT+	-FT+: SUPER [®] X9DRFF-i+ -F72+: SUPER [®] X9DRFF-7+ -F72PT+: SUPER [®] X9DRFF-7T+ -FTPT+: SUPER [®] X9DRFF-iT+
Chipset	Intel® C602 Chipset	Intel® C602 Chipset
Memory	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots
Expansion Slots	Quad set of 1 PCI-E 3.0 x16 (low-profile), 1 PCI-E 3.0 x8 and 1 PCI-E 2.0 x4 (low-profile)	Quad set of 1 PCI-E 3.0 x16 (low-profile), 1 PCI-E 3.0 x8 and 1 PCI-E 2.0 x4 (low-profile)
Onboard RAID	-FT+ / -FTPT+: Quad set of Intel C602 controller for 2 SATA3 (6Gbps) and 4 SATA2 (3Gbps) ports; RAID 0,1,5,10; -F72+ / -F72PT+: Quad set of LSI® 2208 controller for 6 SAS 2.0 (6Gbps) ports; RAID 0,1,5,6,10,50	-FT+ / -FTPT+: Quad set of Intel C602 controller for 2 SATA3 (6Gbps) ports; RAID 0,1; -F72+ / -F72PT+: Quad set of LSI® 2208 controller for 2 SAS 2.0 (6Gbps) ports; RAID 0,1
Networking	-FT+ / -F72+: Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller -FTPT+ / -F72PT+: Quad set of Dual 10GBase-T with Intel® X540 Gigabit Ethernet controller	-F72PT+ / -FTPT+: Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller -F72PT+ / -FTPT+: Quad set of Dual 10GBase-T with Intel® X540 Gigabit Ethernet controller
VGA	Quad set of Matrox® G200eW video controller	Quad set of Matrox® G200eW video controller
Manageability	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	-FT+ / -FTPT+: Quad set of 6x 2.5" hot-swap SATA drive bays -F72+ / -F72PT+: Quad set of 6x 2.5" hot-swap SAS2 drive bays	-FT+ / -FTPT+: Quad set of 2x 3.5" hot-swap SATA drive bays -F72+ / -F72PT+: Quad set of 2x 3.5" hot-swap SAS2 drive bays
Power Supply	4x 1280W Redundant Platinum Level (95%+) Digital power supplies with I ² C & PMBus	4x 1280W Redundant Platinum Level (95%+) Digital power supplies with I ² C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud & PWM fan speed control	8x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448mm W x 177mm H x 737mm D (17.63"W x 6.96"H x 29"D)	4U Rackmount 448mm W x 177mm H x 737mm D (17.63"W x 6.96"H x 29"D)

* Please contact your Supermicro sales representative for additional details

2 DP Nodes, 6 GPU/Xeon Phi™ Cards per Node

12x PCI-E 3.0 x16 supports 12 Double-Width GPU/Xeon Phi™ Cards,
 Up to 8x 2.5" HDDs per Node, 1TB DDR3-1866 MHz in 16 DIMMs per Node,
 Redundant Platinum Level Power Supplies, SAS 2.0 and SATA 3.0 (6Gbps)
 Intel® Xeon® Processor E5-2600 v2 Product Family (Ivy Bridge) Support!



Up to 8x 2.5" HDDs per Node



Rear View

MODEL	SYS-F647G2-F73+ SYS-F647G2-F73PT+ <i>(2 DP Nodes, 12 GPU/Xeon Phi™ cards, Front I/O, 16 DIMMs)</i>	SYS-F647G2-FT+ SYS-F647G2-FTPT+ <i>(2 DP Nodes, 12 GPU/Xeon Phi™ cards, Front I/O, 16 DIMMs)</i>
Processor	Twin set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families; Up to 130W CPU	Twin set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families; Up to 130W CPU
Server board	-F73+: SUPER® X9DRFF-7G+ -F73PT+: SUPER® X9DRFF-7TG+	-FT+: SUPER® X9DRFF-iG+ -FTPT+: SUPER® X9DRFF-iTG+
Chipset	Intel® C602 Chipset	Intel® C602 Chipset
Memory	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots
Expansion Slots	Twin set of 6 PCI-E 3.0 x16 (FH, FL, Double Wide) for GPU/Xeon Phi; 2 PCI-E 3.0 x8 (FH, HL)	Twin set of 6 PCI-E 3.0 x16 (FH, FL, Double wide) for GPU/Xeon Phi; 2 PCI-E 3.0 x8 (FH, HL)
Onboard RAID	Twin set of LSI® 2308 for 8 SAS 2.0; RAID 0,1,10	Twin set of C602 for 2 SATA3 and 4 SATA2; RAID 0,1,5,10
Networking	-F73+: Twin set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller -F73PT+: Twin set of Dual 10GBase-T with Intel® X540 10GbE controller	-FT+: Twin set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller -FTPT+: Twin set of Dual 10GBase-T with Intel® X540 10GbE controller
VGA	Twin set of Matrox G200eW	Twin set of Matrox G200eW
Manageability	Twin set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Twin set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Twin set of 8x 2.5" hot-swap SAS2 drive bays	Twin set of 6x 2.5" hot-swap SATA drive bays
Power Supply	4x 2000W Redundant Platinum Level (94%+) power supplies with I²C & PMBus	4x 2000W Redundant Platinum Level (94%+) power supplies with I²C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud & PWM fan speed control	8x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448mm W x 177mm H x 889mm D (17.63" W x 6.96" H x 35" D) (Recommend 48" depth rack)	4U Rackmount 448mm W x 177mm H x 889mm D (17.63" W x 6.96" H x 35" D) (Recommend 48" depth rack)

* Please contact your Supermicro sales representative for additional details

4 DP Nodes, 3 GPU/Xeon Phi™ Cards per Node

12x PCI-E 3.0 x16 supports 12 Double-Width GPU/Xeon Phi™ Cards,
 Up to 2x 3.5" or 6x 2.5" HDDs per Node, 1TB DDR3-1866 MHz in 16 DIMMs per Node,
 Redundant Platinum Level Power Supplies, SAS 2.0 and SATA 3.0 (6Gbps)
 Intel® Xeon® Processor E5-2600 v2 Product Family (Ivy Bridge) Support!



SYS-F627G2-FT+
SYS-F627G2-F73+

SYS-F627G2-FTPT+
SYS-F627G2-F73PT+



SYS-F627G3-FT+
SYS-F627G3-F73+

SYS-F627G3-FTPT+
SYS-F627G3-F73PT+

MODEL	SYS-F627G2-FT+/FTPT+ SYS-F627G2-F73+/F73PT+ <i>(4 DP Nodes, 12 GPU/Xeon Phi™ cards, Front I/O, 16 DIMMs)</i>	SYS-F627G3-FT+/FTPT+ SYS-F627G3-F73+/F73PT+ <i>(4 DP Nodes, 12 GPU/Xeon Phi™ cards, Front I/O, 16 DIMMs)</i>
Processor	Quad set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families	Quad set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families
Server board	-FT+: SUPER® X9DRFF-iG+ -F73+: SUPER® X9DRFF-7G+ -FTPT+: SUPER® X9DRFF-iTG+ -F73PT+: SUPER® X9DRFF-7TG+	-FT+: SUPER® X9DRFF-iG+ -F73+: SUPER® X9DRFF-7G+ -FTPT+: SUPER® X9DRFF-iTG+ -F73PT+: SUPER® X9DRFF-7TG+
Chipset	Intel® C602 Chipset	Intel® C602 Chipset
Memory	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots
Expansion Slots	Quad set of 3 PCI-E 3.0 x16 support 3 double width GPU/Xeon Phi™ cards; and 2 PCI-E 3.0 x8 (low-profile)	Quad set of 3 PCI-E 3.0 x16 support 3 double width GPU/Xeon Phi™ cards; and 2 PCI-E 3.0 x8 (low-profile)
Onboard RAID	-FT+/-FTPT+: Quad set of C602 for 2 SATA3 and 4 SATA2; RAID 0,1,5,10 -F73+/F73PT+: Quad set of LSI® 2308 for 6 SAS 2.0; RAID 0,1,10	-FT+/-FTPT+: Quad set of C602 for 2 SATA3; RAID 0,1 -F73+/F73PT+: Quad set of LSI® 2308 for 2 SAS 2.0; RAID 0,1
Networking	-FT+/-F73+: Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller -FTPT+/-F73PT+: Quad set of Dual 10GBase-T with Intel® X540 10GbE controller	-FT+/-F73+: Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller -FTPT+/-F73PT+: Quad set of Dual 10GBase-T with Intel® X540 10GbE controller
VGA	Quad set of Matrox G200eW	Quad set of Matrox G200eW
Manageability	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	-FT+/-FTPT+: Quad set of 6x2.5" hot-swap SATA drive bays -F73+/F73PT+: Quad set of 6x2.5" hot-swap SAS2 drive bays	-FT+/-FTPT+: Quad set of 2x 3.5" hot-swap SATA drive bays -F73+/F73PT+: Quad set of 2x 3.5" hot-swap SAS2 drive bays
Power Supply	4x 1620W Redundant Platinum Level (94%+) power supplies with i²C & PMBus	4x 1620W Redundant Platinum Level (94%+) power supplies with i²C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud& PWM fan speed control	8x 80mm heavy duty fans with air shroud& PWM fan speed control
Form Factor	4U Rackmount 448mm W x 177mm H x 889mm D (17.63" W x 6.96" H x 35" D) (Recommend 48" depth rack)	4U Rackmount 448mm W x 177mm H x 889mm D (17.63" W x 6.96" H x 35" D) (Recommend 48" depth rack)

* Please contact your Supermicro sales representative for additional details

4-Node HADOOP, 14 HDDs

Up to 12x 3.5" + 2x 2.5" HDDs per Node, 1TB DDR3-1866 MHz in 16 DIMMs per Node,
 Redundant Platinum Level Power Supplies
 Intel® Xeon® Processor E5-2600 v2 Product Family (Ivy Bridge) Support!



SYS-F617H6-FTL+
 SYS-F617H6-FTPTL+

SYS-F617H6-FT+
 SYS-F617H6-FTPT+

Rear View

MODEL	SYS-F617H6-FTL+ SYS-F617H6-FTPTL+ <i>(Hadoop, 4-Node Front I/O, 16 DIMMs)</i>	SYS-F617H6-FT+ SYS-F617H6-FTPT+ <i>(Hadoop, 4-Node Front I/O, 16 DIMMs)</i>	SYS-F517H6-FT <i>(UP, Hadoop, 4-Node Front I/O, 4 DIMMs)</i>
Processor	Quad set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families	Quad set of Dual Intel® Xeon® Processor E5-2600 and E5-2600 v2 product families	Quad set of Single Intel® Xeon® E3-1200 & E3-1200 v2 families
Server board	FTL+: SUPER® X9DRFF-7G+ FTPTL+: SUPER® X9DRFF-7TG+	FT+: SUPER® X9DRFF-7+ FTPT+: SUPER® X9DRFF-7T+	SUPER® X9SCFF-F
Chipset	Intel® C602 Chipset	Intel® C602 Chipset	Intel® C204 Chipset
Memory	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, or 128GB ECC/non-ECC UDIMM; DDR3 up to 1866MHz, in 16 DIMM slots	Quad set of up to 32GB DDR3 ECC 1333MHz / 1600MHz UDIMMs in 4 DIMM sockets
Expansion Slots	Quad set of 1 PCI-E 3.0 x8 (low-profile) and 1 PCI-E 2.0 x4 (low-profile) via riser card	Quad set of 1 PCI-E 3.0 x16 (low-profile) and 1 PCI-E 3.0 x8 (low-profile) via riser card	Quad set of 1 PCI-E 3.0 x16 (low-profile) and 2 (x8) Micro-LP PCI-E 3.0 slots
Onboard RAID	Quad set of LSI® 2308 for 8 SAS 2.0; RAID 0,1,10; Quad set of C602 for 2 SATA3 and 2 SATA2; RAID 0,1,5,10	Quad set of LSI® 2208 for 8 SAS 2.0; RAID 0,1,5,6,10,50,60; Quad set of C602 for 2 SATA3 and 2 SATA2; RAID 0,1,5,10	Quad set of LSI® 2308 for 8 SAS 2.0; RAID 0,1,5,6,10,50,60; Quad set of C602 for 2 SATA3 and 2 SATA2; RAID 0,1,5,10
Networking	FTL+: Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller FTPTL+: Quad set of Dual 10GBase-T with Intel® X540 10GbE controller	FT+: Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller FTPT+: Quad set of Dual 10GBase-T with Intel® X540 10GbE controller	Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller
VGA	Quad set of Matrox G200eW	Quad set of Matrox G200eW	Quad set of Matrox G200eW
Manageability	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Quad set of 12x 3.5 fixed SAS2/SATA drive bays; Quad set of 2x 2.5 fixed SAS2/SATA drive bays (optional)	Quad set of 12x 3.5 fixed SAS2/SATA drive bays; Quad set of 2x 2.5 fixed SAS2/SATA drive bays (optional)	Quad set of 12x 3.5 fixed SAS2/SATA drive bays; Quad set of 2x 2.5 fixed SAS2/SATA drive bays;
Power Supply	2x 1620W Redundant Platinum Level (94%+) power supplies with I ² C & PMBus	2x 1620W Redundant Platinum Level (94%+) power supplies with I ² C & PMBus	2x 1620W Redundant Platinum Level (94%+) power supplies with I ² C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud & PWM fan speed control 4U Rackmount	8x 80mm heavy duty fans with air shroud & PWM fan speed control 4U Rackmount	8x 80mm heavy duty fans with air shroud & PWM fan speed control 4U Rackmount
Form Factor	448mm W x 177mm H x 889mm D (17.63" W x 6.96" H x 35" D)(Recommend 48" depth rack)	448mm W x 177mm H x 889mm D (17.63" W x 6.96" H x 35" D) (Recommend 48" depth rack)	448mm W x 177mm H x 889mm D (17.63" W x 6.96" H x 35" D)(Recommend 48" depth rack)

* Please contact your Supermicro sales representative for additional details

FatTwin™ supports MicroLP Network Cards



Model	AOC-CIBQ-m1	AOC-CIBF-m1	AOC-CTG-i2T	AOC-CTG-i2S	AOC-CTG-i1S	AOC-CGP-i2
Form Factor	MicroLP	MicroLP	2U MicroLP	MicroLP	MicroLP	MicroLP
Description	Single-port IB QDR/ 10G Ethernet	Single-port IB FDR/40G Ethernet	Dual-port 10GbE 10GBase-T	Dual-port 10GbE SFP+	Single-port 10GbE SFP+	Dual-port GbE
Interface	PCI-E 3.0 x8	PCI-E 3.0 x8	PCI-E 2.0 x8	PCI-E x8	PCI-E x8	PCI-E x4
Port	1 QSFP port / 2 USB ports	1 QSFP port / 2 USB ports	2 RJ45 ports	2 SFP+ ports / 2 USB ports	1 SFP+ port / 2 USB ports	2 RJ45 ports
Speed	40Gb/port (IB) or 10Gb/port (Ethernet)	56Gb/port (IB) or 40Gb/port (Ethernet)	10Gb/port	10Gb/port	10Gb/port	1Gb/port
Controller	Mellanox [®] ConnectX-3 QDR	Mellanox [®] ConnectX-3 FDR	Intel [®] X540	Intel [®] 82599ES	Intel [®] 82599EN	Intel [®] i350
Dimension (LxW) (without end brackets)	4.45" x 1.32" (11.3 x 3.35cm)	4.45" x 1.32" (11.3 x 3.35cm)	4.8" x 3.0" (12.32 x 7.66cm)	4.45" x 1.32" (11.3 x 3.35cm)	4.45" x 1.32" (11.3 x 3.35cm)	4.45" x 1.32" (11.3 x 3.35cm)
F617R2-R72+ (FatTwin 8 Nodes)	Compatible with 1U bracket	Compatible with 1U bracket	Compatible with 1U bracket	Compatible with 1U bracket	Compatible with 1U bracket	Compatible with 1U bracket
F617R2-RT+* (FatTwin 8 Nodes)	Compatible with 1U bracket	Compatible with 1U bracket	Compatible with 1U bracket	Compatible with 1U bracket	Compatible with 1U bracket	Compatible with 1U bracket
F627R3-R72B+ (FatTwin 4 Nodes)	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket
F627R3-RTB+* (FatTwin 4 Nodes)	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 1U bracket	Compatible with 2U bracket
F627R2-RTB+* (FatTwin 4 Nodes)	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket
F627R2-RT+* (FatTwin 4 Nodes)	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket	Compatible with 2U bracket

Accessory Modules

MCP-240-42408-0N-PAC	Mounting bracket for the Intel [®] Xeon Phi™ co-processor card for configurations using the Xeon Phi™
MCP-220-93801-0B	HDD hot swap bracket that includes the 3.5" to 2.5" adapter plate
MCP-240-00134-0N	Adapter bracket to mount a 2.5" drive into an IO expansion slot
MCP-240-00131-1N	Adapter bracket to mount a 2.5" drive on to a 3.5" drive bay in the FatTwin Hadoop.
MCP-220-00044-0N	Adapter bracket to mount two 2.5" drives on to a 3.5" drive tray in the F617R3
SFT-OOB-LIC	License key for enabling OOB BIOS management
SFT-DCMS-Single	Datacenter Server Management Software Package

* Uses 2 right angle SATA cables (CBL-0231L)

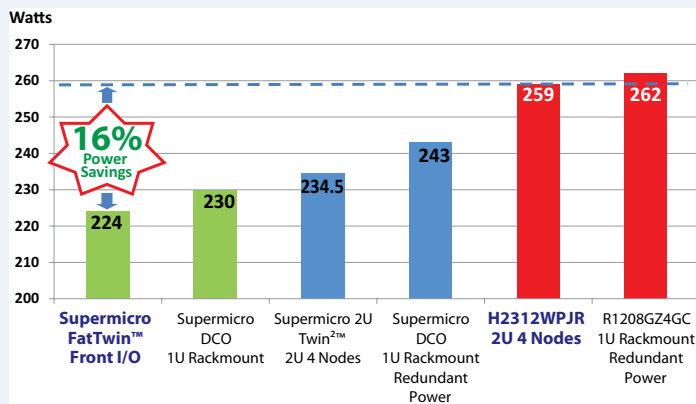
SUPERMICR[®] FatTwin[™] Power Savings

Due to its efficient component and system cooling technologies, advanced circuit designs, and optimized resource sharing architecture, the Supermicro FatTwin[™] server improves power efficiency, cost-effectiveness, and reliability. The FatTwin[™] modular architecture not only maximizes I/O capacity and performance, but also makes the system highly flexible to configure and exceptionally easy to maintain.

Supermicro optimizes FatTwin[™] thermal airflow via an innovative chassis mechanical architecture. Advanced circuit designs for motherboard and power distribution with redundant Platinum Level high-efficiency (95%+) digital switching power supplies allow the system to deliver by far the highest energy efficiencies without sacrificing system performance. The FatTwin[™] is designed to operate within an extended ambient temperature range (0 °C to 47 °C), ideal in higher ambient temperature Data Center and free-air cooled environments, to help further reduce energy consumption and reliance on costly traditional air conditioning.

Based on a case study, the Supermicro FatTwin[™] outperforms a competitor's 2U 4-node server system in terms of power efficiency. For a 10,000 node implementation, the Total Cost of Ownership (TCO) savings of the Supermicro FatTwin[™] during a 4-year server lifetime is substantial, saving \$5,250,000 over the 2U 4-node server. These savings from the Supermicro FatTwin[™] are clearly significant and highly attractive for data center customers. For details, please refer to: <http://www.supermicro.com/products/nfo/FatTwin.cfm>

Server Power Per Node



FatTwin[™] TCO Savings per Node (4 Years)

	FatTwin [™] Power Savings per Node	FatTwin [™] TCO Savings per Node	FatTwin [™] TCO Savings per 10K Nodes
H2312WPJR	35W	\$525	\$5,250,000
R1208GZ4GC	38W	\$570	\$5,700,000

Lowest Power per Node for Data Centers

Idle	50% Load (Est.)	100% Load	Software & CPU Configuration
45W	95W (113W*)	170W (202W*)	LINPACK, Xeon [®] E5-2620, 2.00GHz, 6C, 95W
45W	130W (155W*)	233W (275W*)	LINPACK, Xeon [®] E5-2660, 2.20GHz, 8C, 95W

* Turbo Mode Enabled



Supermicro FatTwin[™] 4-Node, Front I/O

\$500 Savings

Per Node (4 Years)

FatTwin[™] - Evolutionary 4U Twin Architecture

16% Lower Power Consumption
Compared to competitor's 2U 4-node system

30% More Storage Capacity

MKT-0005-06/2014 Rev. 8

www.supermicro.com/FatTwin

