SUPERMICRO®

Twin Evolution

Best Performance-Per-Watt
Best Performance-Per-Dollar
Best Performance-Per-Sq. Ft.
6x 3.5" HDDs Per Node

1U Twin™
2 DP Nodes in 1U
6015TW-INF

1U Twin™
8 HDD Drives
1025TC-10G

1U Twin™
Dual Xeon® 5500
1026TT

First 1U Dual DP Node Server Design in the Industry
"Innovation Excellence" Intel® Server Award

2U Twin²™
4 Independent Hot-pluggable DP Nodes and Redundant Hot-pluggable Power Supplies in 2U
6026TT

Front

Rear

2U Twin
2 DP Nodes, each node has 6 SATA HDDs & 2 PCI-E x8 Gen 2
6026TT-HD

Optimized HPC and Datacenter Rackmount Server Solutions

- Up to 6 hot-pluggable 3.5" HDDs per 1U node (12x 3.5" HDDs total)
- Hot-pluggable, cable-less Xeon® DP nodes (2U Twin²™ and 2U Twin)
- Up to 96 GB of Reg. ECC DDR3 memory in 12 DIMMs
- QDR or DDR InfiniBand connectivity options
- Redundant Gold Level power supplies
- High-efficiency serverboard VRMs (90%+) and cooling subsystem designs
- Onboard IPMI 2.0 + KVM with dedicated LAN

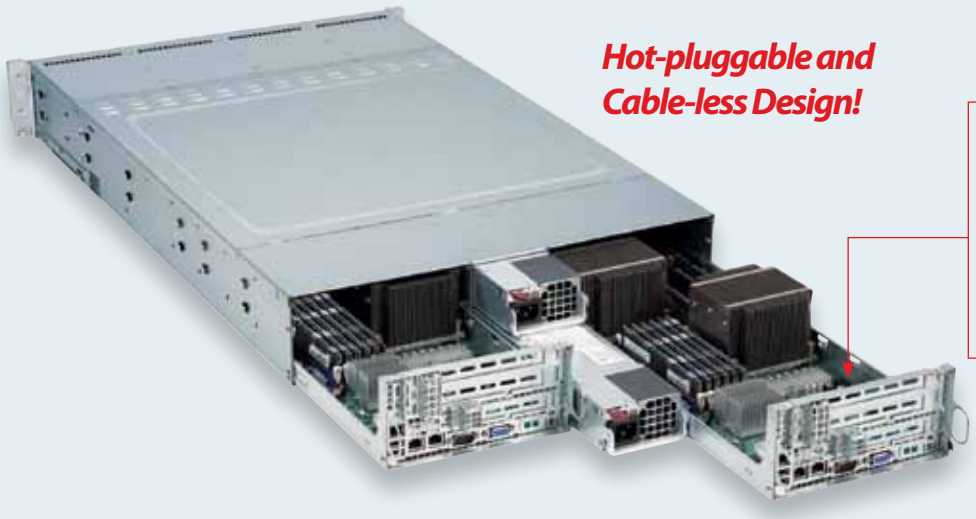
80 PLUS™ GOLD

www.supermicro.com/2UTWIN

New!

2U Twin

2 Hot-pluggable DP Nodes & Gold Level Power Supplies
6x 3.5" Hot-swap HDDs per 1U Node



Hot-pluggable and Cable-less Design!

Supports 2 PCI-E 2.0 FH/HL add-on cards per node

*Optional GPU Solution: supports 1x double-width GPU or 2x FH/FL cards per node**

12x 3.5" hot-swap SATA hard drives support (6x per node)

- 2x Hot-pluggable systems (nodes) share one 2U chassis
- 2x Two Intel® Quad-core/Dual-core Xeon® processor 5500 series
- Intel® 5500/5520 chipset with QPI up to 6.4 GT/s
- 2x Up to 96GB† of DDR3 Reg. ECC 1333/1066/800 MHz DIMMs
- 2x Two PCI-E 2.0 x8 (FH/HL)
- 2x Onboard Mellanox ConnectX QDR/DDR InfiniBand Controllers (HDIBQF/HDIBXF versions only)
- 2x Support for 6x 3.5" hot-swap SATA HDDs
- 2x Dual LAN w/ Intel® Gigabit Ethernet controllers
- 2x Matrox G200eW graphics controllers
- 2x sets of rear I/O ports including 2 USB, VGA, COM, 2 LAN ports, 1 IPMI dedicated LAN port
- 4x 8cm heavy-duty PWM fans w/optimal fan speed control
- 2x Onboard IPMI with virtual media over LAN & KVM-over-LAN
- 1400W high-efficiency Gold Level power supply w/ PMbus (Redundant for R models)
- 2x Independent power controls

6026TT-HD(TRF/IBXRF/IBQRF)

Applications
Ideal for HPC cluster computer nodes, data farm, front-end server, and other computing intensive applications

Processor Support
Twin sets of two Intel® Quad-Core/Dual-Core Xeon® processor 5500 series with QPI up to 6.4 GT/s

Chipset
Intel® 5500/5520 chipset
2x Twin motherboards (X8DTT-HF+ / X8DTT-HIBXF+ / X8DTT-HIBQF+)

System Memory
Twin sets of 12 DIMM sockets for up to 96GB† of Reg. ECC DDR3 1333/1066/800 memory

Expansion Slots
Twin sets of 2 PCI-E x8 (FH/HL) via riser cards

Onboard SATA/RAID
Twin sets of Intel® controllers for 6 SATA (3 Gbps);
RAID 0, 1, 5, 10 (Windows)
RAID 0, 1, 10 (Linux)

Power Supply
1400W Gold Level power supply w/PMbus (Redundant power supply for R models)

Onboard LAN/VGA
Twin sets of Dual Gigabit LANs with Intel® 82574L Ethernet controllers;
Mellanox ConnectX QDR/DDR InfiniBand controllers (HDIBQF/HDIBXF versions only)
Twin sets of Matrox G200eW graphics controllers

Drive Bays
Twin sets of 6x 3.5" hot-swap SATA drive bays (6 for each node)

Cooling System
4x 8cm heavy duty PWM fans w/optimal fan speed control

Manageability
Twin sets of IPMI 2.0, Media/KVM over LAN
SuperDoctor®III, Watch Dog

Form Factor: 2U Rackmount
17.2"W x 3.5"H x 28.5"D (437W x 89H x 724D mm)

Optimized Motherboard *(Hot-pluggable, Cable-less)*
6026TT-HDTRF: X8DTT-HF+
6026TT-HDIBXRF: X8DTT-HIBXF+
6026TT-HDIBQRF: X8DTT-HIBQF+

Optimized Chassis: CSE-827HD-R1400B

** GPU solution for OEM only: 6026GT-HTRF / -HIBXRF / -HIBQRF*
† Please check "Tested Memory List" on Supermicro website for compatibility

Unrivaled Efficiency and Performance, Cost-effective with High Reliability/Density

2U Twin²™

Hot-pluggable
4 Independent DP Nodes and Redundant Hot-swap Power Supplies in 2U

2U Twin²™

4 Independent DP Nodes in 2U

1U Twin™

2 DP Nodes in 1U
8x 2.5" HDD Drives

1U Twin™

2 DP Nodes in 1U
4x 3.5" HDD Drives

6026TT-H (IBQRF/IBXRF/TRF) 6026TT-B (IBQRF/IBXRF/TRF) 2026TT-H (IBQRF/IBXRF/TRF)	6026TT-IBQF / IBXF / TF	1026TT-IBQF / IBXF / TF	6016TT-IBQF / IBXF / TF
Two Quad-Core/Dual Core Intel® Xeon® processor 5500 series up to 95W per Node	Two Quad-Core/Dual Core Intel® Xeon® processor 5500 series up to 95W per Node	Two Quad-Core/Dual Core Intel® Xeon® processor 5500 series up to 95W per Node	Two Quad-Core/Dual Core Intel® Xeon® processor 5500 series up to 95W per Node
HPC cluster computer nodes, data center, data farm, front-end server and other high performance computing intensive applications	HPC cluster computer nodes, data center, data farm, front-end server and other high performance computing intensive applications	HPC cluster computer nodes, data center, data farm, front-end server and other high performance computing intensive applications	HPC cluster computer nodes, data center, data farm, front-end server and other high performance computing intensive applications
• Four hot-pluggable nodes in 2U • 6x HDD per node (2026TT-H series) • Up to 32 cores in 2U • Gold Level high-efficiency power supply with PMBus support • Double density and computing power • Independent power control & UID function • Independent cooling control • Highest power utilization • Reduce power cables and power strips • Save maintenance/management costs	• Four nodes in 2U • Up to 32 cores in 2U • Gold Level high-efficiency power supply with PMBus support • Double density and computing power • Independent power control & UID function • Independent cooling control • Highest power utilization • Reduce power cables and power strips • Save maintenance/management costs	• Two nodes in 1U • Up to 16 cores in 1U • Gold Level high-efficiency power supply • Double density and computing power • InfiniBand support • Independent power control • Independent cooling control • Higher power utilization increases power efficiency • Reduce power cables and power strips • Save maintenance/management costs	• Two nodes in 1U • Up to 16 cores in 1U • Gold Level high-efficiency power supply • Double density and computing power • InfiniBand support • Independent power control • Independent cooling control • Higher power utilization increases power efficiency • Reduce power cables and power strips • Save maintenance/management costs
Intel® 5500/5520 chipset with QPI up to 6.4GT/s per Node	Intel® 5500/5520 chipset with QPI up to 6.4GT/s per Node	Intel® 5500/5520 chipset with QPI up to 6.4GT/s per Node	Intel® 5500/5520 chipset with QPI up to 6.4GT/s per Node
Quad sets of 96GB† DDR3 Reg. ECC; 24GB Unb. ECC/Non-ECC 1333/1066/800 MHz SDRAM in 12 DIMMs	Quad sets of 96GB† DDR3 Reg. ECC; 24GB Unb. ECC/Non-ECC 1333/1066/800 MHz SDRAM in 12 DIMMs	Twin sets of 96GB† DDR3 Reg. ECC; 24GB Unb. ECC/Non-ECC 1333/1066/800 MHz SDRAM in 12 DIMMs	Twin sets of 96GB† DDR3 Reg. ECC; 24GB Unb. ECC/Non-ECC 1333/1066/800 MHz SDRAM in 12 DIMMs
Quad sets of PCI-E 2.0 x16 Quad sets of ConnectX™ QDR InfiniBand (IBQF version) Quad sets of ConnectX™ DDR InfiniBand (IBXF version)	Quad sets of PCI-E 2.0 x16 Quad sets of ConnectX™ QDR InfiniBand (IBQF version) Quad sets of ConnectX™ DDR InfiniBand (IBXF version)	Twin sets of PCI-E 2.0 x16 Twin sets of ConnectX™ QDR InfiniBand (IBQF version) Twin sets of ConnectX™ DDR InfiniBand (IBXF version)	Twin sets of PCI-E 2.0 x16 Twin sets of ConnectX™ QDR InfiniBand (IBQF version) Twin sets of ConnectX™ DDR InfiniBand (IBXF version)
Quad sets of Intel® ICH10R for 6 SATA (3 Gbps) RAID 0, 1, 5, 10 (Windows) RAID 0, 1, 10 (Linux)	Quad sets of Intel® ICH10R for 6 SATA (3 Gbps) RAID 0, 1, 5, 10 (Windows) RAID 0, 1, 10 (Linux)	Twin sets of Intel® ICH10R for 6 SATA (3 Gbps) RAID 0, 1, 5, 10 (Windows) RAID 0, 1, 10 (Linux)	Twin sets of Intel® ICH10R for 6 SATA (3 Gbps) RAID 0, 1, 5, 10 (Windows) RAID 0, 1, 10 (Linux)
Quad sets of Dual LAN with Intel® 82576 (BIBQF and BIBXF version) or 82574L (BTF version) Gigabit Ethernet controller Quad sets of Matrox G200eW graphics	Quad set of Dual LAN with Intel® 82576 (IBQF and IBXF version) or 82574L (TF version) Gigabit Ethernet controller Quad sets of Matrox G200eW graphics	Twin sets of Dual LAN with Intel® 82576 (IBQF and IBXF version) or 82574L (TF version) Gigabit Ethernet controller Twin sets of Matrox G200eW graphics	Twin sets of Dual LAN with Intel® 82576 (IBQF and IBXF version) or 82574L (TF version) Gigabit Ethernet controller Twin sets of Matrox G200eW graphics
Quad sets of BMC supporting IPMI 2.0, Media/KVM over LAN SuperDoctor®III, Watch Dog	Quad sets of BMC supporting IPMI 2.0, Media/KVM over LAN SuperDoctor®III, Watch Dog	Twin sets of BMC supporting IPMI 2.0, Media/KVM over LAN SuperDoctor®III, Watch Dog	Twin sets of BMC supporting IPMI 2.0, Media/KVM over LAN SuperDoctor®III, Watch Dog
Quad sets of 3x 3.5" hot-swap SATA HDDs (6026TT) Quad sets of 6x 2.5" hot-swap SATA HDDs (2026TT) *(Coming Soon!)*	Quad sets of 3x 3.5" hot-swap SATA drive bays	Twin sets of 4x 2.5" hot-swap SATA drive bays	Twin sets of 2x 3.5" hot-swap SATA drive bays
1400W Gold Level high-efficiency power supply with PMBus (redundant power optional)	1400W Gold Level high-efficiency power supply with PMBus (redundant power optional)	1200W Gold Level high-efficiency power supply with PMBus	1200W Gold Level high-efficiency power supply with PMBus
Twin sets of 2x 8cm heavy duty PWM fans w/ optimal fan speed control	Twin sets of 2x 8cm heavy duty PWM fans w/ optimal fan speed control	Twin sets of 3x 40x56mm counter-rotating PWM fans w/ optimal fan speed control per node	Twin sets of 3x 40x56mm counter-rotating PWM fans w/ optimal fan speed control per node
2U Rackmount 17.2"W x 3.5"H x 28.5"D (437 x 89 x 724 mm)	2U Rackmount 17.2"W x 3.5"H x 28.5"D (437 x 89 x 724 mm)	1U Rackmount 17.2"W x 1.7"H x 27.75"D (437 x 43 x 705 mm)	1U Rackmount 17.2"W x 1.7"H x 27.75"D (437 x 43 x 705 mm)
Optimized Twin motherboards: 6026TT-H(IBQ(R)F/IBX(R)F/T(R)F) *(Hot-pluggable, Cable-less)*: X8DTT-HIBQF / X8DTT-HIBXF / X8DTT-HF 6026TT-B(IBQ(R)F/IBX(R)F/T(R)F): X8DTT-IBQF / X8DTT-IBXF / X8DTT-F	**Optimized Twin motherboards:** 6026TT-IBQ(R)F: X8DTT-IBQF 6026TT-IBX(R)F: X8DTT-IBXF 6026TT-TF: X8DTT-F	**Optimized Twin motherboards:** 1026TT-IBQF: X8DTT-IBQF 1026TT-IBXF: X8DTT-IBXF 1026TT-TF: X8DTT-F	**Optimized Twin motherboards:** 6016TT-IBQF: X8DTT-IBQF 6016TT-IBXF: X8DTT-IBXF 6016TT-TF: X8DTT-F
Optimized Chassis: CSE-827H-(R)1400B	**Optimized Chassis:** CSE-827T-1400B	**Optimized Chassis:** CSE-809T-1200B	**Optimized Chassis:** CSE-808T-1200B

SUPERMICRO®

Twin Family - *Broadest Twin solution building blocks for best application optimization*

The Supermicro **Twin Family** is truly revolutionary. With four DP nodes in a 2U space, the **2U Twin²™** delivers world-class performance and energy efficiency in a small but powerful package. The new **2U Twin** with two hot-swap motherboard modules in 2U supports two PCI-E 2.0 FH/HL add-on cards per node. This newest addition to the Twin Family can optionally support 1 double-width GPU card per node and provides 6x hot-swap 3.5" SAS/SATA HDD bays with SESII support per 1U server node (12x HDDs total). Optimized redundant Gold Level power and cooling make the **2U Twin** and **2U Twin²™** the best choices for HPC, datacenter, and cost-effective blade applications. Together with the award-winning **1U Twin™** systems, Supermicro offers the most advanced and complete HPC solutions in the world.

Optimized Chassis:

SC827HD-R1400B

Two DP Nodes in 2U, each node with 2x FH slots and 1x LP slot

- Hot-swappable module design for easy system upgrade, installation and maintenance
- 2x swappable motherboard modules supports X8DTT-H(+) motherboards
- Redundant (1+1) 1400W Gold Level (93%+) power supply with PMBus support
- 12x 3.5" hot-swap SATA drive trays (6x per 1U server node)
- 24x 2.5" hot-swap SATA drive trays *(Coming Soon!)*
- 4x 80mm heavy duty fans with PWM fan speed control
- 2x front control panel with UID per node
- Quick release rail and bulk pack design

SC827T/H-R1400B

Supports four systems (nodes) in 2U

- Hot-swappable module design for easy system upgrade, installation and maintenance
- 4x swappable motherboard modules supports compatible Twin motherboards *(shown below)*
- Redundant (1+1) 1400W Gold Level (93%+) power supply with PMBus support
- 12x 3.5" hot-swap SAS/SATA drive trays (3x per node)
- 4x 80mm heavy duty fans with PWM fan speed control
- 4x low-profile AOC slots (1x slot per node)
- 4x front control panel with UID for each node
- Quick release rail and bulk pack design

SC217HQ-R1400B

2U Twin with High Storage Capacity

- Hot-swappable module design for easy system upgrade, installation and maintenance
- 4x Hot-swap motherboard modules in 2U space, supports X8DTT-H(+) motherboards
- Redundant (1+1) 1400W Gold Level (93%+) power supply with PMBus function
- 24x 2.5" hot-swap SAS/SATA HDD (6x per node) with SESII support
- 4x 80mm heavy duty fans with PWM fan speed control
- 4x Low-profile AOC slots (1x slot per node)
- 4x front control panel with UID for each node
- Quick release rail and bulk pack design

SC809T-1200B

Supports two systems (nodes) in 1U

- 1200W Gold Level high-efficiency power supply
- 8x 2.5" hot-swap SAS/SATA drive bays (4x per node)
- 1x Low profile expansion slot per node
- 3x 4cm counter-rotating fans per system node
- Supports Twin motherboard sizes up to: 6.8"x18"

SC808T-1200B

Supports two systems (nodes) in 1U

- 1200W Gold Level high-efficiency power supply
- 4x 3.5" hot-swap SAS/SATA drive bays (2x per node)
- 1x Low profile expansion slot per node
- 3x 4cm counter-rotating fans per system node
- Supports Twin motherboard sizes up to: 6.8"x16.64"

Compatible Twin Motherboards:

X8DTT-HIBQ(F)(+)
X8DTT-HIBX(F)(+)
(Cable-less)

X8DTT-H(F))(+)
(Cable-less)

X8DTT-IBQ(F)
X8DTT-IBX(F)

X8DTT-F

X7DCT

X7SBT

H8DMT
(MCP55-Pro based)

MKT-0005-10/2009

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