

# SUPERMICR 1U Twin™

**First** in Twin-Server Design  
**Best** in Technology Innovation



**"Innovation Excellence"**  
Intel® Server Award  
Spring 2007



## Supermicro's Leading Technology Innovations

- **Design:** First 1U Dual Node Server Design in the Industry
- **Power:** Patented Power Distribution Control Unit
- **Storage:** Up to 8x 2.5" HDDs in 1U Server
- **Performance Per Watt:** 240 GFLOPS/kW\*

### High-Performance

- Up to 16 CPU cores in 1U
- Onboard Infiniband or 10G Ethernet
- Up to 128 GB memory in 1U

### High-Efficiency

- Lower Energy Consumption
- High Efficiency Power Supply (90%+)

### High-Density

- Two complete nodes in a 1U space
- Fit up to 84 servers in a 42U standard rack

### Cost-Effective

- Reduced Space Per Node
- Shared Power Supply, Chassis and Cooling System

[www.supermicro.com/1UTwin/](http://www.supermicro.com/1UTwin/)



MODEL	6015TC-T/ 6015TC-10G	6015TW-T/ 6015TW-INF	1025TC-T/ 1025TC-10G	5015TB-T/ 5015TB-10G	A+ 1021TM-T+/ A+ 1021TM-T-INF+
<b>Processor Support</b>	Quad-Core/Dual-Core Intel® Xeon® processor 5400/5300/5200/5100 series (LGA771)	Quad-Core/Dual-Core Intel® Xeon® processor 5400/5300LV/5200/5100LV series (LGA771)	Quad-Core/Dual-Core Intel® Xeon® processor 5400/5300/5200/5100 series (LGA771)	Intel® Xeon® 3000 Sequence and Core™ 2 Extreme, Quad and Duo, Pentium® Dual-Core, Celeron® Dual-Core, and Celeron® 400 series (LGA775)	Quad-Core AMD Opteron™ 2000 Series Processors
<b>Chipset</b>	Intel® 5100 chipset with 1.33GHz FSB	Intel® 5400 chipset with 1.6GHz FSB	Intel® 5100 chipset with 1.33GHz FSB	Intel® X48 Chipset with 1600/1333/1066/800 MHz FSB	HyperTransport™ technology nVidia MCP55V-Pro
<b>Key Applications</b>	HPC cluster computer nodes, data center data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, data center data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, data center data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, data center data farm, front-end server and other computing intensive applications	HPC cluster computer nodes, datacenter, data farm, front-end server and other computing intensive applications
<b>Outstanding Features</b>	<ul style="list-style-type: none"> <li>Two nodes in 1U up to 16 cores in 1U</li> <li>10 Gigabit Ethernet controller onboard</li> <li>Double density and computing power</li> <li>Independent power control</li> <li>Independent cooling control</li> <li>Higher power utilization increases power supply efficiency</li> <li>Reduce power cables and power strips</li> <li>Save maintenance/management costs</li> </ul>	<ul style="list-style-type: none"> <li>Two nodes in 1U up to 16 cores in 1U</li> <li>Infiniband MT25204 20Gbps Controller</li> <li>Double density and computing power</li> <li>Independent power control</li> <li>Independent cooling control</li> <li>Higher power utilization increases power supply efficiency</li> <li>Reduce power cables and power strips</li> <li>Save maintenance/management costs</li> </ul>	<ul style="list-style-type: none"> <li>Two nodes in 1U up to 16 cores in 1U</li> <li>10 Gigabit Ethernet controller onboard</li> <li>Double density and computing power</li> <li>Independent power control &amp; cooling control</li> <li>Higher power utilization increases power supply efficiency</li> <li>Reduce power cables and power strips</li> <li>Save maintenance/management costs</li> </ul>	<ul style="list-style-type: none"> <li>Two nodes in 1U up to 16 cores in 1U</li> <li>10 Gigabit Ethernet controller onboard</li> <li>Double density and computing power</li> <li>Independent power control</li> <li>Independent cooling control</li> <li>Higher power utilization increases power supply efficiency</li> <li>Reduce power cables and power strips</li> <li>Save maintenance/management costs</li> </ul>	<ul style="list-style-type: none"> <li>Two nodes in 1U up to 16 cores in 1U</li> <li>Onboard Infiniband MT25204 20Gbps controller</li> <li>Double density and computing power</li> <li>Independent power control</li> <li>Independent cooling control</li> <li>Higher power utilization increases power supply efficiency</li> <li>Reduce power cables and power strips</li> <li>Save maintenance/management costs</li> </ul>
<b>Serverboard</b>	X7DCT(-10G)	X7DWT(-INF)	X7DCT(-10G)	X7SBT(-10G)	H8DMT+(-INF+)
<b>System Memory (Max.)</b>	Twin set of 48 GB Dual-Channel ECC Reg. DDR2 667/533 in 6 DIMM sockets	Twin set of 64 GB Fully-buffered DIMM (FBD) DDR2 800/667 in 8 DIMM sockets	Twin set of 48 GB Dual-Channel ECC Reg. DDR2 667/533 in 6 DIMM sockets	Twin set of 8GB unbuffered ECC/non-ECC DDR3 1333/1066/800 MHz SDRAM or up to 4 GB Non-ECC 1600MHz	Twin set of 64 GB ECC Reg. DDR2 667/533/400 SDRAM in 16 DIMM sockets
<b>Optimized Chassis</b>	SC808T-780	SC808T-980	SC809T-780	SC808T-780	SC808T-980
<b>Expansion Slots</b>	Twin set of PCI-E x16 via riser card (Low Profile)	Twin set of PCI-E x16 Gen. 2.0 via riser card (Low Profile)	Twin set of PCI-E x16 via riser card (Low Profile)	Twin set of PCI-E 2.0 x16 slot (Low Profile)	Twin set of PCI-E x16 via riser card (low profile)
<b>Onboard SATA RAID</b>	Twin set of Intel® ICH9R for 4 SATA (3 Gbps) RAID 0, 1, 5, 10 (Windows) RAID 0, 1, 10 (Linux)	Twin set of Intel® ESB2 for 4 SATA (3 Gbps) RAID 0, 1, 5, 10 (Windows) RAID 0, 1, 10 (Linux)	Twin set of Intel® ICH9R for 4 SATA (3Gbps) RAID 0, 1, 5, 10 (Windows) RAID 0, 1, 10 (Linux)	Twin set of Intel® ICH9R for 4 SATA (3 Gbps) RAID 0, 1, 5, 10 (Windows) RAID 0, 1, 10 (Linux)	Twin set of nVidia MCP55V-Pro for 2 SATA RAID 0, 1, 0+1, 5, JBOD
<b>Onboard LAN</b>	Twin set of Dual LAN with Intel® 82573V/L Gigabit Ethernet controllers (w/IOAT support) Twin set of Intel® 82598EB 10 Gigabit Ethernet controller (6015TC-10G)	Twin set of Dual LAN with Intel® 82563EB Gigabit Ethernet controllers (w/IOAT support) Twin set of Mellanox 20Gbps Infiniband controller (6015TW-INF)	Twin set of Dual LAN with Intel® 82573V/L Gigabit Ethernet controllers (w/IOAT support) Twin set of Intel® 82598EB 10 Gigabit Ethernet controller (1025TC-10G)	Twin set of Dual LAN with Intel® 82573V/L Gigabit Ethernet controllers (w/IOAT support) Twin set of Intel® 82598EB 10 Gigabit Ethernet controller (5015TB-10G)	Twin set of Dual LAN with nVidia MCP55-V Pro Gigabit Ethernet controllers Twin set of Mellanox 20Gbps Infiniband controller (1021TM-INF+)
<b>Onboard VGA</b>	Twin set of ATI® ES1000 32MB PCI graphics controller	Twin set of ATI® ES1000 32MB PCI graphics controller	Twin set of ATI® ES1000 32MB PCI graphics controller	Twin set of ATI® ES1000 32MB PCI graphics controller	Twin set of XGI Z9S 32MB PCI graphics controller
<b>Manageability</b>	Twin set of SIMSO(+) socket (IPMI 2.0 with virtual media over LAN & optional KVM-over-LAN), Doctor III, Watch Dog	Twin set of SIMSO(+) socket (IPMI 2.0 with virtual media over LAN & optional KVM-over-LAN), Doctor III, Watch Dog	Twin set of SIMSO(+) socket (IPMI 2.0 with virtual media over LAN & optional KVM-over-LAN), Doctor III, Watch Dog	Twin set of SIMSO(+) socket (IPMI 2.0 with virtual media over LAN & optional KVM-over-LAN), Doctor III, Watch Dog	Twin set of SIMSO(+) (IPMI 2.0 with virtual media over LAN & optional KVM-over-LAN), SuperDoctor III, Watch Dog
<b>Max. Internal Storage</b>	SATA: 2 TB for each node	SATA: 2 TB for each node	SATA: 2 TB for each node	SATA: 2 TB for each node	SATA: 2 TB for each node
<b>Drive bays</b>	Twin set of 2 x 3.5" hot-swap drive bays	Twin set of 2 x 3.5" hot-swap drive bays	Twin set of 4 x 2.5" hot-swap drive bays	Twin set of 2 x 3.5" hot-swap drive bays	Twin set of 2 x 3.5" hot-swap SATA drive bays with SES2 support
<b>Power Supply</b>	780W high-efficiency power supply w/ PFC	980W high-efficiency power supply w/ PFC	780W high-efficiency power supply w/ PFC	780W high-efficiency power supply w/ PFC	980W high-efficiency power supply w/ PFC
<b>Cooling System</b>	Twin set of 3 x 4cm counter-rotating PWM fans w/optimal fan speed control & air shroud	Twin set of 3 x 4cm counter-rotating fans w/optimal fan speed control & air shroud	Twin set of 3 x 4cm counter-rotating PWM fans w/optimal fan speed control & air shroud	Twin set of 3 x 4cm counter-rotating PWM fans w/optimal fan speed control & air shroud	Twin set of 3 x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
<b>Form Factor</b>	1U Rackmount 17.2"W x 1.7"H x 27.75"D	1U Rackmount 17.2"W x 1.7"H x 27.75"D	1U Rackmount 17.2"W x 1.7"H x 27.75"D	1U Rackmount 17.2"W x 1.7"H x 27.75"D	1U Rackmount 17.2"W x 1.7"H x 27.75"D