

Product Brief

Intel® Server Board S5520HC
Intel® Server Chassis SC5600
Intel® Server Chassis SC5650

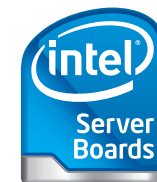
Intel® Server Board S5520HC Intel® Server Chassis SC5600 Intel® Server Chassis SC5650

A pedestal-optimized server product family designed with world-class performance, scalable management, and maximum expandability for small & medium business applications

Key Features

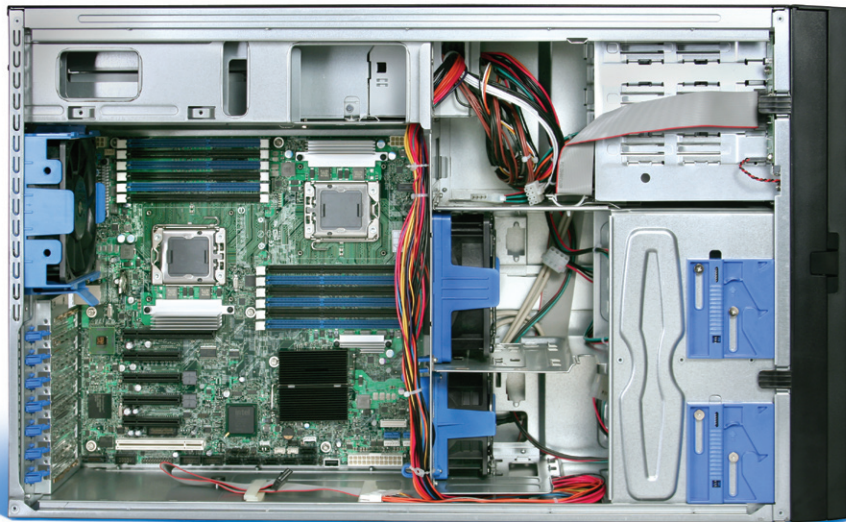
- Supports up to two Intel® Xeon® Processor 5500 series on Intel® Microarchitecture, codenamed Nehalem
- Highly scalable DDR3 memory (12 DIMMs)
- High-speed PCI Express* 2.0 I/O (up to 4 slots)
- Highly-flexible storage configurations

Target Applications: *File and print servers, e-mail servers, storage servers and vertical-specific business applications*



Features and Benefits

- **Supports up to two Intel® Xeon® Processor 5500 series on Intel® Microarchitecture, codenamed Nehalem** Increase server performance with no increase in power consumption
- **Fast, scalable, energy-efficient memory** 12 DIMMs of registered or unbuffered DDR3 ensure ample capacity and energy-efficient performance for any application
- **High-performance expandability** 6 total expansion slots, including four PCI Express* 2.0 x8 slots, provide high-speed I/O flexibility for the most demanding, bandwidth-intensive server applications
- **Flexible, scalable storage architecture** 6 SATA ports plus an optional four-port SAS expansion module provide versatile storage configurations, from 6 fixed SATA drives to your choice of four, six or ten hot-swap SATA or SAS devices
- **Intel® Enabled Server Acceleration Alliance (Intel® ESAA) Certified** Pre-tested and certified configuration guides (“recipes”) over a range of applications
- **Intel® System Management Software** Get your Intel® servers up and running with Intel® Deployment Toolkit and manage them with the provided Intel® Active System Console, a lightweight management solution for small business or with the optional full IT management solution using Intel® Management Packs with Microsoft* System Center Essentials



Intel® Server Chassis Information

| Intel® Server Chassis SC5600 & Intel Server Chassis SC5650 Maximum reliability, scalability, and manageability in a highly versatile pedestal chassis | | | | | |
|--|---|---|---|---|--|
| Chassis Order Code | SC5600BASE SC5600BASENA | SC5600BRP SC5600BRPNA | SC5600LX SC5600LXNA | SC5650DP SC5650DPNA | SC5650BRP SC5650BRPNA |
| Form Factor | Pedestal, convertible to 5U Rack ¹ | | | Pedestal, convertible to 6U Rack ² | |
| Drive Bays | Support for up to a total of six 3.5" fixed or hot swap SAS/SATA drives | Support for up to a total of ten 3.5" fixed or hot swap SAS/SATA drives | | Support for up to a total of six 3.5" fixed or hot swap SAS/SATA drives | |
| Peripheral Bay(s) | Media Bays (3 x 5.25") | | | Media Bays (2 x 5.25") & (1 x 3.5") | |
| System Cooling | Three fixed, non-redundant chassis fans: Two 120 mm and one 92 mm | | Four tool-less, hot swappable and redundant chassis fans: two 120 mm and two 92 mm. | Three Non-Redundant Cooling Fans: One 120-mm chassis fan One 120-mm PCI fan, One 92-mm drive bay fan | |
| Heat Sink | Not Included | | | Not Included | |
| Power Supply | 670-watt non-redundant power supply | 750-watt high efficiency, 1+1 redundant power supply | | 600-watt non-redundant power supply | 600-watt high efficiency, 1+0 redundant power supply |
| Pedestal Dimensions (H x W x D) | 17" (43.2 cm) x 8.6" (21.8 cm) x 28.4" (70.9 cm) | | | 17.8" (45.2 cm) x 9.256" (23.5 cm) x 19" (48.3 cm) | |
| Rack Dimensions (H x W x D) | 8.6" (21.8 cm) x 16.6" (42.2 cm) x 27.4" (69.6 cm) | | | 9.256" (23.5 cm) x 17.6" (44.7 cm) x 19" (48.3 cm) | |

Intel® Server Board S5520HC Technical Specifications

| | | | |
|----------------------------|---|----------------------------|---|
| Form Factor | SSI EEB (12" x 13") | Management Hardware | Integrated IPMI 2.0 baseboard management controller <ul style="list-style-type: none"> • Fan speed control • Diagnostic LED's • Temperature monitoring and recovery • SMASH CLP (command line interface) • Email alerting • Power management with Intel® Intelligent Power Node Manager Optional Intel® Remote Management Module (RMM3) <ul style="list-style-type: none"> • KVM & Virtual Media redirection • Dedicated 3rd NIC • Remote Power on/off • Embedded Web UI • Event log and configuration |
| Processors | Supports one or two Intel® Xeon® Processor 5500 series on Intel® Microarchitecture, codenamed Nehalem | Management Software | Intel® Deployment Assistant 3.0 <ul style="list-style-type: none"> • Wizard based UI to deploy, configure and update server • BIOS, BMC and RAID array configuration • Unattended OS install • Online patch updates Intel® Server Management Software 3.X <ul style="list-style-type: none"> • View critical or warning events • Power on/off/reset • View sensor (fan speeds, temperature, power) • Full IPMI 2.0 interface • Chassis Intrusion detection • Serial Over LAN (Text Console Redirection) |
| Chipset | Intel® 5520 chipset with Intel® ICH10R | | |
| Memory Capacity | Twelve DDR3 DIMM sockets (Registered or Unbuffered) <ul style="list-style-type: none"> • Six channel native (800/1066/1333MHz) | | |
| Memory RAS Features | Channel-Independent Mode Channel-Mirroring Mode Demand Scrubbing Mode Patrol Scrubbing Mode | | |
| Storage | <ul style="list-style-type: none"> • Six SATA ports (3 Gbps) via ICH10R with Intel® Embedded Server RAID Technology • Modular SAS RAID solution via Intel® I/O Expansion Module Options | | |
| Intel® RAID Support | Integrated <ul style="list-style-type: none"> • Intel® Embedded Server RAID Technology with host-based SW RAID levels 0/1/10 Optional SW RAID 5 with activation key Optional <ul style="list-style-type: none"> • Intel® SAS Entry RAID Module AXX4SASMOD with RAID 0, 1, 1E, or Intel® Integrated RAID Module ROMBSASMR with RAID 0, 1, 5, 6 and striping capability for spans 10, 50, 60 offering value above a traditional add-in card • Validated Intel® RAID Controllers³ | | |
| Expansion Slots | Six total expansion slots <ul style="list-style-type: none"> • 1 PCI Express 2.0 x8 slot (x16 mechanical) • 3 PCI Express 2.0 x8 slot (x8 mechanical) • 1 PCI Express 1.0 x4 slot (x8 mechanical shared with optional SAS module) • 1 PCI 32/33 5V slot | | |
| Integrated LAN | Embedded Intel Dual Gigabit Controller 82575EB with Intel® Virtualization Technology ⁴ | | |
| Integrated Graphics | Server Engine* LLC Pilot II* Controller with 64 MB DDR2 memory, 8MB allocated to graphics | | |

Safety and EMC Regulatory Compliance

Regulatory compliance for an Intel host system is based on the use of an Intel server base board that was tested in the host chassis and found compliant. Intel server base boards and host chassis are tested to Class A EMC requirements. Intel server products comply with RoHS (Restriction of Hazardous Substances).

| Region (Compliance Obtained) | Board Markings | Host Chassis Markings |
|---|--|-----------------------|
| Argentina (IRAM) | Regulation N/A | |
| Australia (ACA) / New Zealand (MED) | | |
| Belarus | Regulation N/A | |
| Canada | | |
| | ICES-003 | |
| China | Regulation N/A | |
| | | |
| Europe (EU Directives) - LVD & EMC require CE mark; No mark required for RoHS; WEEE marking added voluntarily for end integrator convenience) | | |
| Germany GS for Chassis Only; German Green Dot (Duales System Deutschland) for Board Packaging Only | | |
| International Compliance (CB Report & CISPR Emission & Immunity) | Marking Not Required | |
| Japan (VCCI for chassis only) & Japan Recycling Marks on Board Retail Packaging Only | Regulation N/A | |
| | | Marking Not Required |
| Korea (KCC) | | |
| Russia (GOSSTANDART) | Regulation N/A | |
| Taiwan (BSMI) | | |
| | | |
| Ukraine (UKRTEST) | Regulation N/A | Marking Not Required |
| United States NRTL & FCC (For Board Products FCC Notation May Be in Documentation) | | |
| | This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation | |

To build your system and get more details on server configurations from Intel visit:

www.intel.com/go/serverconfigurator

For more information on Intel® Server Products, visit:

www.intel.com/go/serverproducts

Build an Eco-Smart IT Environment
with Intel® Server Products

¹ Requires rack conversion kit ARIGRACK

² Requires rack conversion kit APP3RACKIT

³ For tested Intel® RAID Controller options go to http://support.intel.com/support/motherboards/server/compat_matrix.htm

⁴ Intel® Virtualization Technology requires a computer system with an enabled Intel® processor, BIOS, virtual machine monitor (VMM) and, for some uses, certain computer system software enabled for it. Functionality, performance or other benefits will vary depending on hardware and software configurations and may require a BIOS update. Software applications may not be compatible with all operating systems. Please check with your application vendor.

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