



Product Brief

Intel® Server Board S5500BC
Intel® Server Chassis SC5650
Intel® Server System SR1630BC

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An entry-level family of rack- and pedestal-optimized server products designed for business-class performance and quality for small to medium sized business applications

Key Features

- Supports up to two Intel® Xeon® Processor 5600 series on Intel® Microarchitecture, codenamed Nehalem
- Scalable DDR3 memory (8 DIMMs)
- High-speed PCI Express* 2.0 I/O (up to 5 slots)
- Flexible storage configurations
- Supports Server Power Capping via Intel® Intelligent Power Node Manager



Target Applications: *Small and medium-sized business applications, including web servers, file and print servers, e-mail servers, storage servers and vertical-specific business applications. CPU-Frequency intensive HPC workloads (Life Science, Financial Service, Seismic Imaging).*



Features and Benefits

- **Supports up to two Intel® Xeon® Processor 5500 or 5600 series on Intel® Microarchitecture, codenamed Nehalem** Increase server performance with no increase in power consumption
- **Fast, scalable, energy-efficient memory** Up to 8 DIMMs of registered or unbuffered DDR3 ensure ample capacity and energy-efficient performance for any application
- **High-performance I/O architecture** Up to 5 expansion slots, including two high-speed PCI Express* 2.0 x8 slots, provide flexible expansion
- **Flexible storage configurations** Hard drive options ranging from two fixed SATA devices to six fixed or hot-swap SATA or SAS drives provide flexible, scalable storage
- **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 maintain 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 System and Chassis Information

Intel® Server System SR1630BC	<i>1U rack-optimized server system for flexible high-density server solutions</i>	
Order Code	SR1630BC SR1630BCNA	
Form Factor	1U Rack	
Drive Bays	2 x fixed 3.5" SATA HDDs, Optional slim-line optical drive	
System Cooling	2 x fixed cooling blowers with duct	
Power Supply	400-watt High Efficiency non-redundant power supply	
Add-in Card Support	1 Low Profile Half Length PCI Express* 2.0 x8 through Riser card in slot 6	
Dimensions (H x W x D)	1.70" (43 mm) x 16.9" (430 mm) x 20.0" (508 mm)	
Components Included <i>*Heat sinks not included</i>	<ul style="list-style-type: none"> • Intel® Server Board S5500BC (SATA) • Intel® Server Chassis SR1630 • 400-Watt Non-Redundant High Efficiency power supply • One low-profile PCI Express* riser card • Slim-line CD-ROM bay • Basic rail kit • Pre-routed cables 	
Intel® Server Chassis SC5650	<i>A reliable and flexible server chassis for entry-level server and workstation applications</i>	
Configuration	BRP	DP
Chassis Order Code	SC5650BRP SC5650BRPNA	SC5650DP SC5650DPNA
Form Factor	5U Pedestal or 6U Rack	
Drive Bays	Support for up to a total of six 3.5" fixed or hot swap SAS/SATA drives	
Peripheral Bay(s)	Media Bays (2 x 5.25") & (1 x 3.5")	
System Cooling	One tool-less 120 mm chassis fan One tool-less 120 mm PCI fan One tool-less 92 mm drive bay fan	
Heat Sink (pre-installed)	Not included	
Power Supply	600-watt 1+0 High Efficiency Power Supply	600-watt Power Supply
Redundant Power Capable	Yes (Optional second power supply sold separately)	No
Tool-less Features	Peripheral bays, fixed hard drive bay, optional hot-swap bays, power supplies, system fan, PCI slots	
Bezel Features	Lockable, optional support for Intel® Local Control Panel	
Front Connectors	2 x USB	
Pedestal Dimensions (H x W x D)	17.8" (452mm) x 9.256" (235mm) x 19" (483mm)	
Rack Dimensions (H x W x D)	9.256" (235mm) x 17.6" (447mm) x 19" (483mm)	

Intel® Server Board S5500BC Technical Specifications

Form Factor	SSI CEB-leveraged (12" x 10.5")	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
Processor	Supports up to two Intel® Xeon® Processor 5500 or 5600 series ¹	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)
Intel® Quick Path Technology	4.8GT/s, 5.86GT/s and 6.4GT/s		
Chipset	Intel® 5500 chipset with Intel® ICH10R		
Memory Capacity	Eight DDR 3 DIMM sockets (Registered or Un-buffered) <ul style="list-style-type: none"> • Four channel native (800/1066/1333MHz) 		
Memory RAS Features	Channel-Independent Mode Channel-Mirroring Mode Demand Scrubbing Mode Patrol Scrubbing Mode		
Storage	Six SATA ports (3 Gbps) via ICH10R with Intel® Embedded Server RAID Technology		
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"> • Validated Intel® RAID Controllers² 		
Expansion Slots	Pedestal <ul style="list-style-type: none"> • 2 half-length PCI Express 2.0 x8 slot • 1 half-length PCI Express 2.0 x4 slot (x8 mechanical) • 1 half-length PCI Express 1.0 x4 slot • 1 half-length PCI 32/33 5V slot Rack <ul style="list-style-type: none"> • 1 low-profile half-length PCI Express 2.0 x8 riser in slot 6 		
Integrated LAN	Embedded Intel® Dual Gigabit Controllers		
Integrated Graphics	Onboard 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

¹ When installing two processors, both processors must be from the same processor series; either two Intel® Xeon® processor 5500 series or two Intel® Xeon® processor 5600 series. Out of the box support for the Intel Xeon 5600 series processors will be indicated by the addition of the letter "R" at the end of the Product Order Code. For boards and systems currently supporting the Intel Xeon 5500 series, a BIOS update is required before installing the 5600 series processor(s). Refer to <http://support.intel.com> for more information.

² For tested Intel RAID Controller options go to http://support.intel.com/support/motherboards/server/compat_matrix.htm

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