Intel® Server Board S5500HV
Intel® Server System SR1670HV

A high performance half-width server system engineered to maximize compute density for HPC workloads
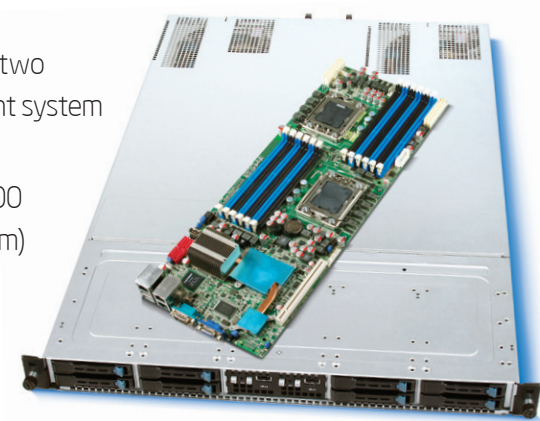
Density

- This dual node system delivers all of the benefits of two complete servers in a single ultra-dense 1U rack mount system

Performance

- Supports up to four total Intel® Xeon® Processor 5500 series on Intel® Microarchitecture (codename Nehalem)
- Highly scalable DDR3 memory (24 DIMMs)
- Full 1 x16 PCIe 2.0 I/O slot in each node

Reduced system cost

- Two boards in a single system saves money
- Independent, high-efficiency power supply for each node (2 x 770W)

Target Applications: *High Performance Computing (HPC) segment applications that require maximum compute density, such as Life Sciences, Energy, Financial Services and Manufacturing*
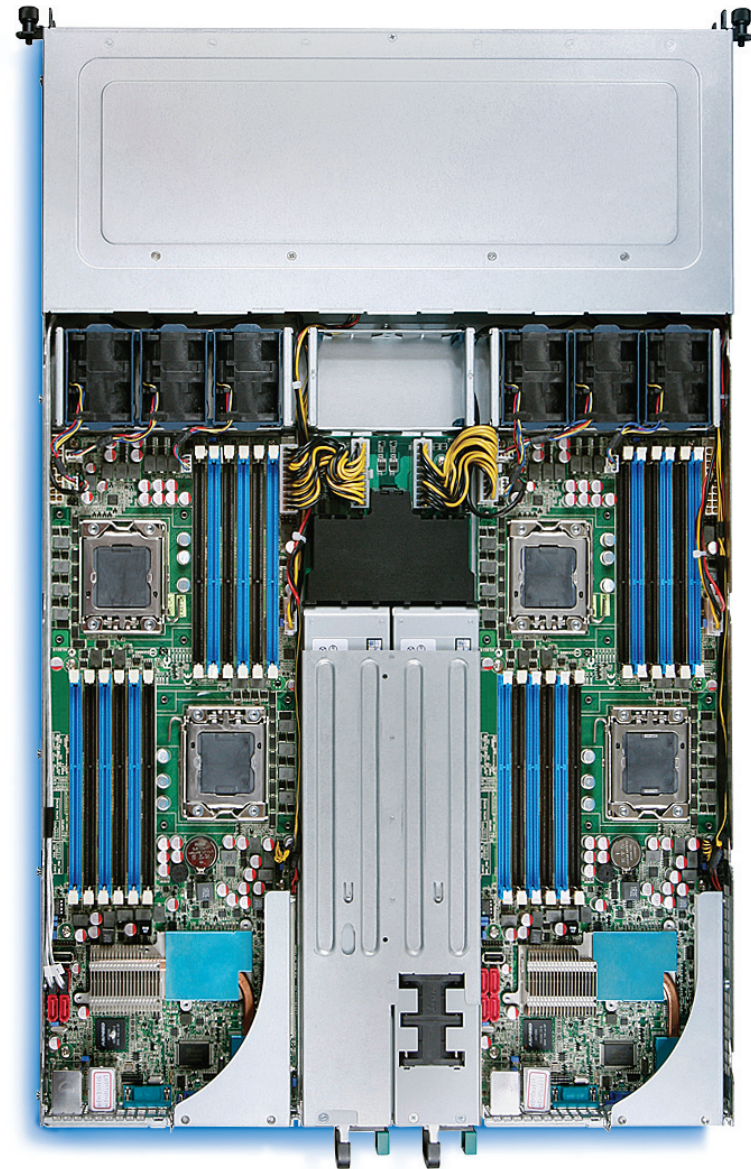
Board Features and Benefits

- **Supports up to two Intel® Xeon® processors 5500 series** Delivers HPC performance requirements with increased memory bandwidth, improved energy efficiency, lower TCO and greater application performance

- **Custom half-width form factor (6.3" X 16.7")** Provides twice the compute density of a standard SSI board, with the ability to support 2 boards in a single 1U chassis

- **DDR3 memory capacity and bandwidth** 12 registered or unbuffered DIMMs per board at up to 1333 MHz and 6 memory channels provide the bandwidth to support your high performance throughput and virtualization needs

- **High Performance I/O** One PCI Express* 2.0 x16 slot supports your high speed I/O expansion requirements

- **Flexible storage options** Supports your storage needs with four integrated SATA2 300MB/s ports with RAID 0, 1, 10

## System Features and Benefits

- **System supports two Intel® Server Board S5500HV in a single 1U chassis** Delivers all of the benefits of two servers in a single, ultra-dense 1U rackmount system

- **Independent high-efficiency power supplies** Separate high-efficiency (80 Plus) 770-watt power supplies for each platform for increased availability and individual system maintenance

- **Flexible storage configuration** Total of eight 2.5" hot swap drive bays (Four HDD bays per board)

- **Intel® Enabled Server Acceleration Alliance (Intel® ESAA) Certified** Pre-tested and certified configuration guides ("recipes") for HPC applications such as provisioning and scheduling for clusters

Intel® Server Board S5500HV Technical Specifications

Form Factor	Custom – 6.3" X 16.7"
Processors	Supports one or two Intel® Xeon® Processor 5500 series on Intel® Microarchitecture, codenamed Nehalem
Chipset	Intel® 5500 chipset with Intel® ICH10R
Intel® Quick Path Technology	4.8GT/s, 5.86GT/s and 6.4GT/s
Memory Capacity	Twelve DDR3 DIMM sockets (Registered or Unbuffered) • Six channel native (800/1066/1333MHz)
Memory RAS Features	Channel-Independent Mode Channel-Sparing Mode Demand Scrubbing Mode Patrol Scrubbing Mode
Storage	Four SATA ports (3 Gbps) via ICH10R with Intel® Embedded Server RAID Technology
Intel® RAID Support	Four Integrated SATA II ports supporting Intel® Matrix RAID Technology with Software RAID levels 0/1/5/10 (Windows* Only) and LSI* MegaRAID* with Software RAID 0/1/10 (Windows* and Linux*)
Expansion Slots	1 PCI Express* 2.0 x16 (half-length, low profile)
Integrated LAN	Embedded Intel® 82574L PHYs with Intel® I/O Acceleration Technology
Integrated Graphics	On-board ASPEED* AST2050 with integrated 2D Video Controller and 8 MB Video Memory
Management Hardware	On-board ASPEED* AST2050 with integrated baseboard management controller Baseboard Management Module with IPMI 2.0 Serial-Over-LAN support via a dedicated 10/100 Mbps Management NIC Other Key Features • IPMI 2.0; Advanced Encryption Standard (AES) • Secure Socket Layer (SSL) • Dynamic Host Configuration Protocol (DHCP) • Telnet Access, SSH support; SMASH CLP (Command Line) • Remote Update Firmware • Remote Reboot • Remote Power On/Off; PEF Configuration
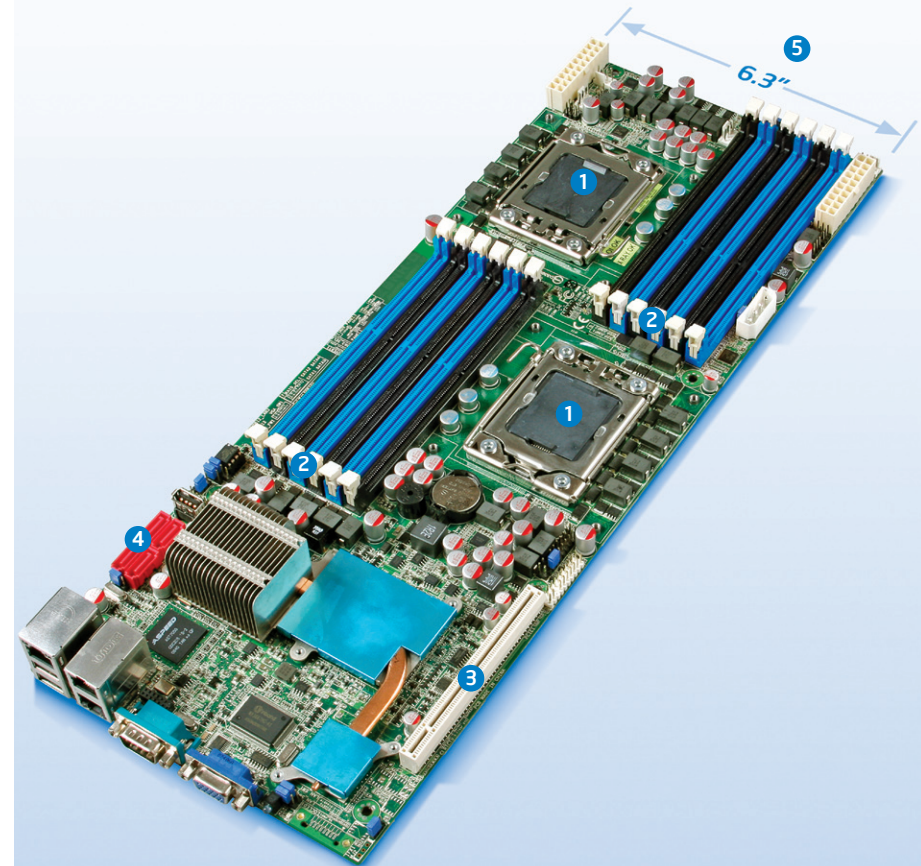
❶ *Up to two Intel® Xeon® 5500 Processors*

❷ *12 DDR3 DIMMs for support of 96GB*

❸ *PCIe 2.0 X 16 riser slot supporting 1 PCIe expansion card*

❹ *4 SATA ports*

❺ *Custom form factor (6.3 X 16.7")*

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	(marks)
Australia (ACA) / New Zealand (MED)	(C N232 mark)	
Belarus	Regulation N/A	(TP BY mark)
Canada	(cULus mark)	(cULus mark)
	ICES-003	
China	Regulation N/A	(CCC mark)
		声明 此为A级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取可行的措施。
	(20 mark)	(20 mark)
Europe (EU Directives) - LVD & EMC require CE mark; No mark required for RoHS; WEEE marking added voluntarily for end integrator convenience)	CE	CE
		(WEEE crossed-out bin mark)
Germany GS for Chassis Only; German Green Dot (Duales System Deutschland) for Board Packaging Only	(Green Dot mark)	(GS mark)
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	(VCCI text)
	(recycling marks)	Marking Not Required
Korea (KCC)	(KCC mark)	
Russia (GOSSTANDART)	Regulation N/A	(PCT mark)
Taiwan (BSMI)	(BSMI D33995 mark)	(BSMI D33995 mark)
		警告使用者： 這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。
Ukraine (UKRTEST)	Regulation N/A	Marking Not Required
United States NRTL & FCC (For Board Products FCC Notation May Be in Documentation)	(cULus mark)	(cULus mark)
	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:

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