

Product Brief

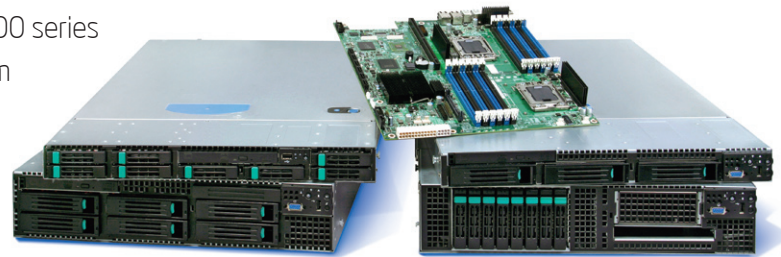
Intel® Server Systems
SR1600UR, SR1625UR,
SR2600UR, and SR2625UR

Intel® Server System SR1600 and SR2600 Family

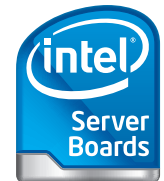
Rack-Optimized, Highly Integrated Server Systems
for High-Density, Energy-Efficient Applications

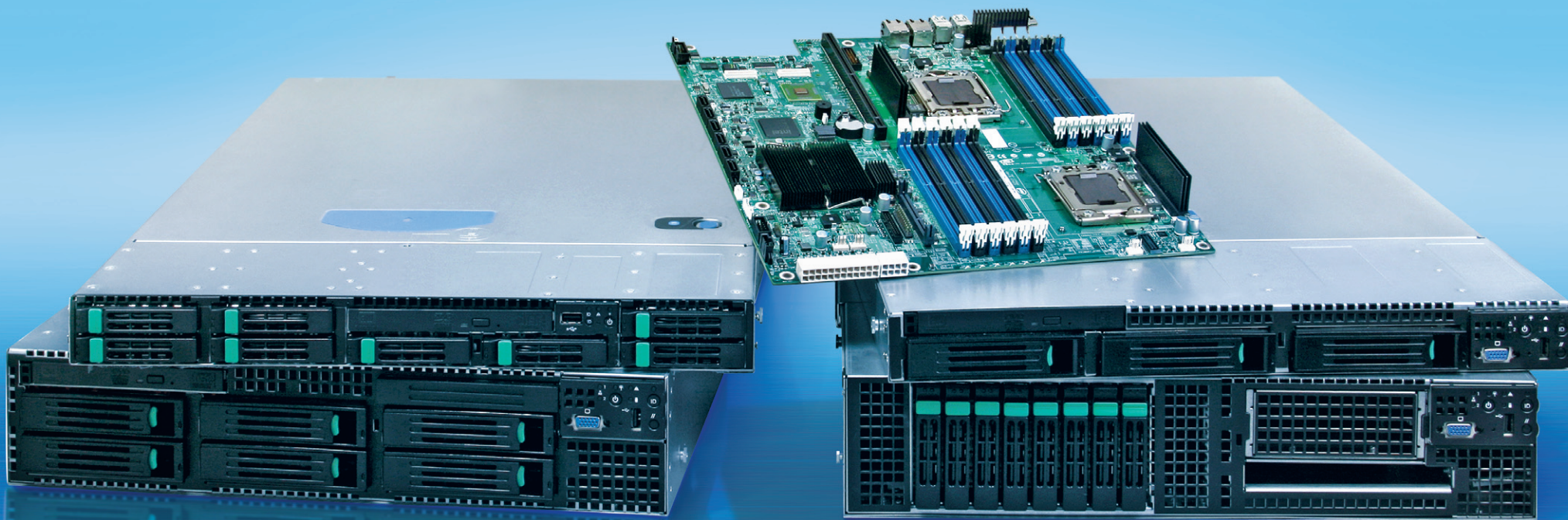
Key Features

- 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 5 slots)
- Business-critical RAS
- Optimized for energy efficiency
- Supports Server Power Capping via Intel® Intelligent Power Node Manager



Target Applications: *High-performance computing (compute, I/O and management nodes), video server, virtualization platform and general purpose data center building blocks*





Intel® Server System SR1625UR*, Intel® Server System SR2600URLX

Intel® Server System SR1600URHS, Intel® Server System SR2625URLX*

*shown with optional HDD carriers

Features and Benefits

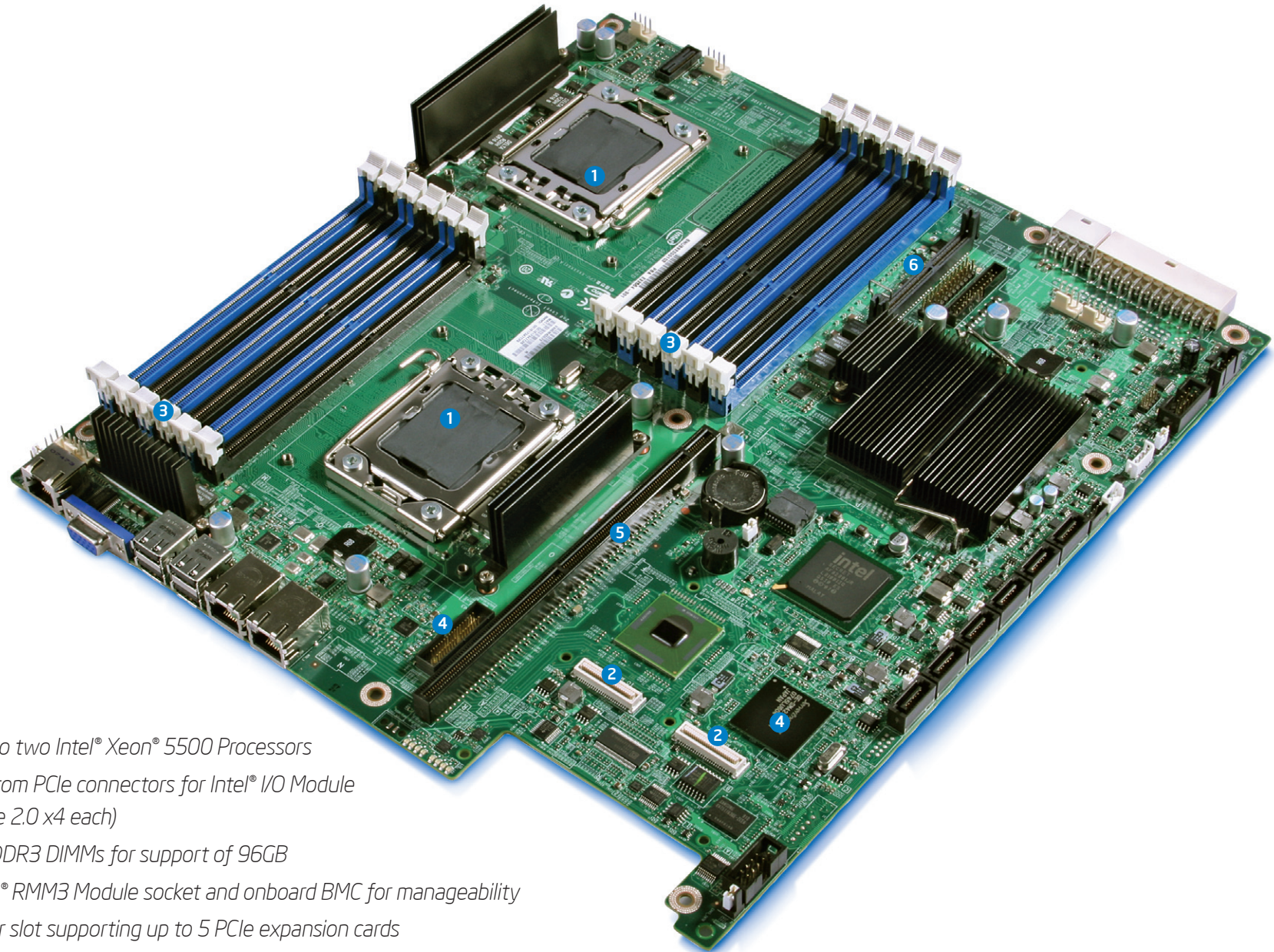
- **Supports up to two Intel® Xeon® Processors on Intel® Microarchitecture, codenamed Nehalem** Increase server performance with no increase in power consumption
- **Highly scalable, energy-efficient memory** 12 DIMMs of registered or unbuffered DDR3 ensure ample capacity and energy-efficient performance for any application
- **Highly expandable I/O architecture** 24 lanes of fast PCI Express* 2.0 x16 combined with PCI Express* 2.0 x8 expansion modules and optional PCI-X slots provide unmatched expansion flexibility¹
- **Highly flexible storage options** Hard disk configurations range from three fixed SATA drives to a ten-drive combination of eight hot-swap, two fixed SATA or SAS drives, providing optimum flexibility and scalability
- **Power efficient architecture with highly efficient power supplies** Reduced power and cooling requirements, lower operating costs
- **Server Power Capping via Intel® Intelligent Power Node Manager** Reduce power and cooling costs while increasing rack density with policy-based power and thermal management
- **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 Board S5520UR Technical Specifications

Form Factor	SSI EEB-leveraged (12" x 13")	Optional Intel® I/O Expansion Modules	<ul style="list-style-type: none"> ▪ Dual Gigabit Ethernet based on Intel® 82571EB ▪ 4 port external SAS (based on LSI* 1064e) ▪ Single port InfiniBand* (Mellanox* SDR) ▪ Dual-port 10 Gigabit Ethernet based on Intel® 82599EB ▪ Quad-port Gigabit Ethernet based on Intel® 82576EB ▪ Single port InfiniBand (based on Mellanox* QDR) ▪ Internal SAS and SAS RAID (see Intel® RAID Support)
Processors	Supports up to two Intel® Xeon® Processor 5500 series on Intel® Microarchitecture, codenamed Nehalem	Integrated Graphics	Onboard Server Engine* LLC Pilot II* Controller with 64 MB DDR2 memory, 8MB allocated to graphics
Chipset	Intel® 5520 chipset with Intel® ICH10R	Management Hardware	Integrated IPMI 2.0 baseboard management controller <ul style="list-style-type: none"> ▪ Fan speed control ▪ Diagnostic LEDs ▪ 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
Intel® Quick Path Technology	4.8GT/s, 5.86GT/s and 6.4GT/s	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)
Memory Capacity	Twelve DDR3 DIMM sockets (Registered or Unbuffered) <ul style="list-style-type: none"> ▪ Six channel native (800/1066/1333 MHz) 		
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 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 Module AXX4SASMOD with SAS and RAID 0, 1, 1E, 10, 5 and Intel® RAID Module SROMBSASMR with RAID 0, 1, 5, 6, 10, 50 and 60 offer value above a traditional add-in card. ▪ Validated Intel® RAID Controllers² 		
Integrated LAN	Embedded Intel® Dual Gigabit Controller 82575EB with Intel® Virtualization Technology ³		
Expansion Slots	Up to 5 PCI Express 2.0 with 2U riser PLUS two proprietary expansion connectors <ul style="list-style-type: none"> ▪ 1U: 1 PCI Express 2.0 x16 bus speed (x16 mechanical via riser) ▪ 2U: 3 or 5 PCI Express 2.0 x8 bus speed, or 3 PCI Express 2.0 x8 bus speed connectors plus two PCI-X 133 connectors ▪ Common: <ul style="list-style-type: none"> • 1 PCI Express 2.0 x8 bus speed via Intel® I/O Expansion Module • 1 PCI Express 1.0 x4 bus speed via Bridgeboard connector to storage controller (HW SAS RAID controller on midplane/backplane) 		

Intel® Server Board S5520UR



- 1 Up to two Intel® Xeon® 5500 Processors
- 2 Custom PCIe connectors for Intel® I/O Module (PCIe 2.0 x4 each)
- 3 12 DDR3 DIMMs for support of 96GB
- 4 Intel® RMM3 Module socket and onboard BMC for manageability
- 5 Riser slot supporting up to 5 PCIe expansion cards
- 6 Bridge-board connector, supporting Midplane2 with SAS HW RAID

Intel® Server Systems SR1600UR, SR1625UR Specifications

Configuration	Fixed	SAS	SATA	SAS
Order Code	SR1600UR	SR1600URHS	SR1625UR	SR1625URSAS
Form Factor	1U Rack	1U Rack	1U Rack	1U Rack
Drive Bays	Three Fixed 3.5" SATA HDDs	Three Hot Swap 3.5" SAS/SATA HDDs	Up to eight Hot Swap 2.5" SATA HDDs	Up to eight Hot Swap 2.5" SAS/SATA HDDs
Optical Bay	One slim SATA optical drive bay	One slim SATA optical drive bay	One slim SATA optical drive bay	One slim SATA optical drive bay
System Cooling	5 Non redundant dual-rotor fans	5 Non redundant dual-rotor fans	5 Non redundant dual-rotor fans	5 Non redundant dual-rotor fans
Power Supply	600-watt high efficiency fixed	600-watt high efficiency fixed	650-watt 1+0 high efficiency, hot swap, redundant capable	650-watt 1+0 high efficiency, hot swap, redundant capable
Add-in card support	1 full-height (PCI Express 2.0 x16) 1 Intel® I/O Expansion Module (PCI Express 2.0 x8)	1 full-height (PCI Express 2.0 x16) 1 Intel® I/O Expansion Module (PCI Express 2.0 x8)	1 full-height (PCI Express 2.0 x16) 1 Intel® I/O Expansion Module (PCI Express 2.0 x8)	1 full-height (PCI Express 2.0 x16) 1 Intel® I/O Expansion Module (PCI Express 2.0 x8)
Dimensions (H x W x D)	1.7" (43.3mm) x 16.9" (430mm) x 27.19" (690.6mm)	1.7" (43.3mm) x 16.9" (430mm) x 27.19" (690.6mm)	1.7" (43.3mm) x 16.9" (430mm) x 27.19" (690.6mm)	1.7" (43.3mm) x 16.9" (430mm) x 27.19" (690.6mm)
Front Panel Features (optional front panels available)	Power LED Hard Drive Activity LED System status LED 2 NIC LEDs System ID LED Power/sleep switch Reset switch NMI switch Bootable USB 1.1 port	Power LED Hard Drive Activity LED System status LED Power/sleep switch 2 NIC LEDs Reset switch NMI switch System ID LED VGA port Bootable USB 1.1 port	Power LED System status LED System ID LED Power/sleep switch NMI switch System ID switch Bootable USB 1.1 connection	Power LED System status LED System ID LED Power/sleep switch NMI switch System ID switch Bootable USB 1.1 connection
Components Included	Intel® Server Board S5520UR Cabled front panel Intel® Server Chassis SR1600 3 fixed HDD sleds 600-Watt Power Supply 5 fans One full height PCI Express* 2.0 x16 riser ODD tray Fan Board Pre-routed cables Memory blanks 2 CPU Heatsinks	Intel® Server Board S5520UR Standard front panel Intel® Server Chassis SR1600 3 hot swap HDD carriers 600-Watt Power Supply 5 fans One full height PCI Express* 2.0 x16 riser ODD tray Pre-routed cables Memory blanks 2 CPU Heatsinks * requires BackPlane	Intel® Server Board S5520UR Mini front panel Intel® Server Chassis SR1625 6 hot swap HDD carriers One 650 Watt Power Supply 5 fans One full height PCI Express* 2.0 x16 riser ODD tray Pre-routed cables Passive midplane Memory blanks 2 CPU Heatsinks	Intel® Server Board S5520UR Mini front panel Intel® Server Chassis SR1625 6 hot swap HDD carriers One 650 Watt Power Supply 5 fans One full height PCI Express* 2.0 x16 riser ODD tray Pre-routed cables Active SAS midplane (with optional HW RAID support) Memory blanks 2 CPU Heatsinks

Intel® Server Systems SR2600UR, SR2625UR Specifications

Configuration	BRP	LX	BRP	LX
Order Code	SR2600URBRP	SR2600URLX	SR2625URBRP	SR2625URLX
Form Factor	2U Rack	2U Rack	2U Rack	2U Rack
Drive Bays	Up to six Hot Swap 3.5" SATA HDDs One 3.5 tape drive	Up to six Hot Swap 3.5" SAS/SATA HDDs One 3.5 tape drive	Eight Hot Swap 2.5" SATA HDDs	Eight Hot Swap 2.5" SAS/SATA HDDs
Optical Bay	One slim SATA optical drive bay	One slim SATA optical drive bay	One slim SATA optical drive bay	One slim SATA optical drive bay
System Cooling	3 Non redundant fans	6 Redundant & hot swap fans	3 Non redundant fans	6 Redundant & hot swap fans
Power Supply	750-watt 1+0 high efficiency, hot swap, redundant capable	750-watt 1+0 high efficiency, hot swap, redundant capable	750-watt 1+0 high efficiency, hot swap, redundant capable	750-watt 1+0 high efficiency, hot swap, redundant capable
Add-in card support	Up to 3 full-height PCI Express 2.0 x8 or up to 2 full-height PCI-X 133 Up to 2 low-profile (PCI Express 2.0) 1 Intel® I/O Expansion Module (PCI Express 2.0 x8)	Up to 3 full-height PCI Express 2.0 x8 or up to 2 full-height PCI-X 133 Up to 2 low-profile (PCI Express 2.0) 1 Intel® I/O Expansion Module (PCI Express 2.0 x8)	Up to 3 full-height PCI Express 2.0 x8 or up to 2 full-height PCI-X 133 Up to 2 low-profile (PCI Express 2.0) 1 Intel® I/O Expansion Module (PCI Express 2.0 x8)	Up to 3 full-height PCI Express 2.0 x8 or up to 2 full-height PCI-X 133 Up to 2 low-profile (PCI Express 2.0) 1 Intel® I/O Expansion Module (PCI Express 2.0 x8)
Dimensions (H x W x D)	3.4" (87.3mm) x 16.9" (430mm) x 27.75" (704.86mm)	3.4" (87.3mm) x 16.9" (430mm) x 27.75" (704.86mm)	3.4" (87.3mm) x 16.9" (430mm) x 27.75" (704.86mm)	3.4" (87.3mm) x 16.9" (430mm) x 27.75" (704.86mm)
Front Panel Features (optional front panels available)	Power LED Hard Drive Activity LED System status LED Power/sleep switch 2 NIC LEDs Reset switch NMI switch System ID LED VGA port Bootable USB 1.1 port	Power LED Hard Drive Activity LED System status LED Power/sleep switch 2 NIC LEDs Reset switch NMI switch System ID LED VGA port Bootable USB 1.1 port	Power LED Hard Drive Activity LED System status LED Power/sleep switch 2 NIC LEDs Reset switch NMI switch System ID LED VGA port Bootable USB 1.1 port	Power LED Hard Drive Activity LED System status LED Power/sleep switch 2 NIC LEDs Reset switch NMI switch System ID LED VGA port Bootable USB 1.1 port
Components Included	Intel® Server Board S5520UR Standard front panel Intel® Server Chassis SR2600 5 hot swap HDD carriers One 750 Watt Power Supply 3 fans One full height PCI Express* 2.0 riser card (3 PCIe 2.0 x8 slots) ODD tray Pre-routed cables Passive midplane Memory blanks 2 CPU Heatsinks	Intel® Server Board S5520UR Standard front panel Intel® Server Chassis SR2600 5 hot swap HDD carriers One 750 Watt Power Supply 6 fans One full height+low profile PCI Express* 2.0 riser card (5 PCIe 2.0 x8 slots) ODD tray Pre-routed cables Active SAS midplane (with optional HW RAID support) Memory blanks 2 CPU Heatsinks	Intel® Server Board S5520UR Standard front panel Intel® Server Chassis SR2625 6 hot swap HDD carriers One 750 Watt Power Supply 3 fans One full height PCI Express* 2.0 riser card (3 PCIe 2.0 x8 slots) ODD tray Pre-routed cables Passive midplane Memory blanks 2 CPU Heatsinks	Intel® Server Board S5520UR Standard front panel Intel® Server Chassis SR2625 6 hot swap HDD carriers One 750 Watt Power Supply 6 fans One full height+low profile PCI Express* 2.0 riser card (up to 5 PCIe 2.0 x8 slots) ODD tray Pre-routed cables Active SAS midplane (with optional HW RAID support) Memory blanks 2 CPU Heatsinks

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:

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

¹ Configuration available on Intel Server Systems SR2600UR and SR2625UR

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

³ 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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