



Product Brief

Intel® Server Systems
SR1560SF and SR1560SFHS

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Rack-Optimized, Highly Integrated Server Systems Designed for High Performance Computing and High Density Data Centers



Product Overview

The Intel® Server Systems SR1560SF and SR1560SFHS represent Intel's latest generation of rack-optimized server solutions. These systems feature a large 16 DIMM memory footprint, fast 1600 MHz system bus, and PCI Express* 2.0 x16. Support for the latest 45nm Multi-Core Intel® processors ensures high compute density and outstanding performance-per-watt.

Both system solutions are designed for space-constrained environments:

- **Intel Server System SR1560SF.** 1U fixed-drive system supports two 3.5" SATA drives in quick-release drive carriers.
- **Intel Server System SR1560SFHS.** 1U hot-swap drive system supports three 3.5" SATA drives with the optional passive backplane or three 3.5" SAS/SATA drives with the optional active SAS backplane.

Both systems include the Intel® Server Essentials CD pack, a suite of software applications that are designed to help reduce the complexity of deploying and managing Intel® Server Systems.

The Intel® Server Essentials CD pack features the Intel® Deployment Assistant, a graphical tool that simplifies the process of deploying an Intel server, and Intel® System

Management Software 2.0, a comprehensive software suite designed to provide local and remote server management functionality for businesses of all sizes.

This family of systems is also designed for increased uptime and tool-less serviceability. To assure compatibility and reliability, over 10,000+ hours of testing and validation were done, not only with other building blocks from Intel but also with third-party peripherals and memory.



Intel® Server System SR1560SF
with Intel® Server Board S5400SF



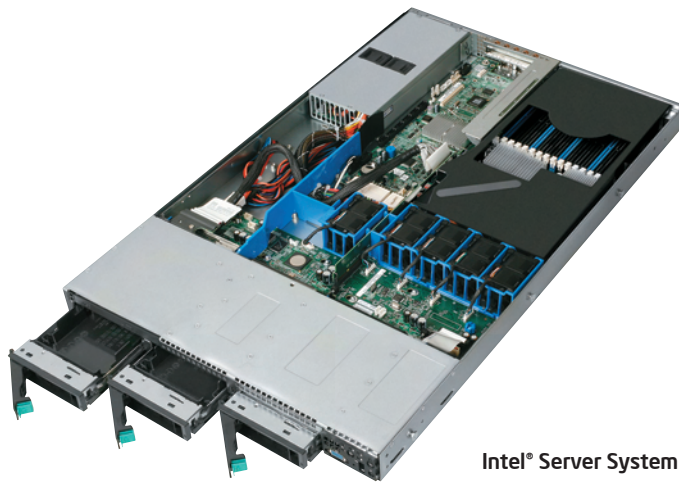
Features and Benefits

This balanced server platform based on Multi-Core Intel® Xeon® processors offers the following:

- **Support for dual-core and quad-core processors** for significantly increased server performance without an increase in power consumption.
- **Dual independent bus architecture** enables dedicated data flow to each processor, maximizing system performance.
- **16 Fully Buffered DIMM slots** increase the memory footprint with smaller, more cost-effective DIMMs.
- **1600 MHz system bus** to keep pace with the processor and I/O performance enhancements.
- **Mezzanine I/O modules** enable extra Gigabit Ethernet, SAS storage, or Infiniband* ports while preserving the PCI Express* 2.0 x16 riser slot for other uses.
- **Larger 24 MB snoop filter** improves system performance.
- **Flexible backplane options** on the hot swap drive system (SR1560SFHS) enable multiple drive configurations depending on storage requirements.
- **Intel® I/O Acceleration Technology** (Intel® I/OAT) helps get network data to and from server applications faster, while consuming far fewer CPU cycles.

Optional Accessories and Spare Parts

Intel Building Block	Product Name(s)	Order Code(s)
1U PCI-E x16 Riser Accessories	Full-height PCI Express* 2.0 x16 riser	FSR1560RISER
SR1560 Bezel Options	1U Black Bezel	ADWBEZBLACK
I/O Modules	Dual Gigabit I/O Expansion Module External SAS I/O Expansion Module Single Data Rate Infiniband* Expansion Module	AXXGBIOMOD AXXSASIOMOD AXXIIBIOMOD
Rack Options	Tool-less Rail Kit Cable Management Arm (requires AXXHERAIL) Fixed Mount Bracket Basic Rail Kit	AXXHERAIL AXXRACKARM AXXBRACKET AXXBASICRAIL
Intel® RAID Options	Intel SAS RAID controller, PCI Express, 4-port internal, 4-port external with 128 MB embedded cache memory	SRC SAS144E
Intel® Management Module	Intel® Remote Management Module 2	AXXRMM2



Intel® Server System SR1560SFHS
Support for up to three hot swap SAS/SATA drives



Intel® Server System SR1560SF
Support for up to two fixed SATA drives

Technical Specifications

System Memory

Capacity

Sixteen fully buffered DIMM (FBDIMM) sockets for up to 64 GB of registered ECC DDR2 667/800¹ MHz memory

Reliability Features

Corrects single-bit errors, detects double-bit errors (using ECC memory), and supports Intel® x4 Single Device Data Correction, memory sparing

Intel® Server Management

Integrated Management Type

IPMI 2.0-compliant onboard platform instrumentation

Software Support

Intel® Server Essentials

Supported Operating Systems

Microsoft® Windows® Server 2003 Enterprise Edition (32 & 64 bit), Red Hat® Linux® Enterprise 5 (32 & 64 bit), and SuSE Linux® Enterprise Server 10 (32 & 64 bit)

System BIOS

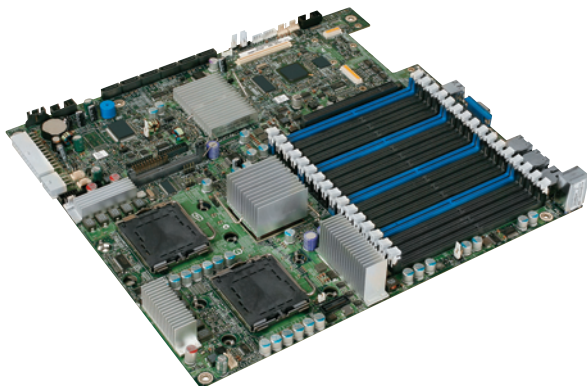
Type

8 MB Flash EEPROM with EFI* BIOS, multi-boot BIOS boot specification 1.4-compliant

Special Features

Plug and play, IDE drive autoconfigure, SMBIOS 2.3, ECC/parity support, multilingual support, enabled for rolling/online BIOS updates

¹ 800 MHz memory not fully validated at time of printing. See supported memory list at <http://support.intel.com> for a complete list of memory that is validated and supported on this product.



Intel® Server Board S5400SF

Jumpers

CMOS clear, password clear, BIOS bank select, BMC boot block write protect, serial port B select

Front-Panel Features

SR1560SF and SR1560SFHS systems: Power LED, hard-drive activity LED, system status LED, power/sleep switch, two server network connection LEDs, reset switch, NMI switch, system ID LED, video connection and a bootable USB 2.0 connection

Mechanical

Board Style

SSI TEB 2.1

Board Size

12" x 13" (305 mm x 330 mm)

Storage

SR1560SF: 2 fixed 3.5" SATA drives SR1560SFHS with ASR1500SASBP backplane: 3 hot swap SAS/SATA drives SR1560SFHS with ASR1500PASBP backplane: 3 hot swap SATA drives

Environment

Ambient Temperature

Operating (system): +10°C to +35°C;
non-operating/storage (system): -40°C to +70°C ambient

Relative Humidity

Non-operating: 95%, non-condensing at +30°C

Safety and EMC Regulatory Compliance (Class A)

(EMC Regulatory Compliance is based on a board configured in an Intel host system in which Intel tested the board and found it compliant.) RoHS (Restriction of Hazardous Substances) compliant with server exemption.

Region	Certification Safety and/or EMC	Regulatory Mark Safety and/or EMC
Australia/ New Zealand	ACA, MED	C-Tick
Canada	UL/Industry Canada	cURus/ICES
China	China RoHS	EFUP20
Europe	European Directives	CE
International	CB Report / CISPR	No legal requirements
Japan	VCCI (Verification only)	No legal requirements
Korea	RRL	MIC
Taiwan	BSMI DOC	BSMI
United States	UL / FCC (Verification only)	cURus



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 Systems SR1560SF and SR1560SFHS, visit:
www.intel.com/design/servers/platforms/srSR1560SF/index

For more information on Intel® Server Products, visit:
www.intel.com/go/serverproducts

For more information on Intel® Server Essentials, visit:
www.intel.com/go/serveressentials

For more information on how to make the Intel® Server System SR1560SF part of your server environment, please contact an Intel® Channel Partner Program participant.

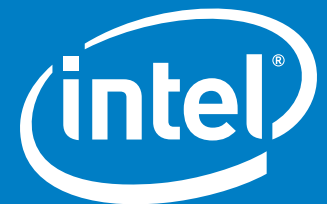
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