Is there a 2U rack-optimized server chassis for flexible high-density server solutions?

The Intel® Server Chassis SR2300 provides a highly flexible solution for building high-density rack-mount servers, featuring a variety of configurations.

Intel® Server Chassis SR2300 Product Brief

Designed for Intel® Server Board SE7501WV2, the Intel Server Chassis SR2300 accommodates dual Intel® Xeon™ processors and features seven hot-swap SCSI drive bays.

Intel® Server Chassis SR2300

Innovative and rack-optimized for the Intel® Server Board SE7501WV2, the Intel® Server Chassis SR2300 supports a variety of high-density system configurations with the latest server-chassis technology. The Server Chassis SR2300 includes two PCI/PCI-X risers, six one-inch drive bays for supporting hot-swap SCSI drives, and a seventh bay supporting either an additional hot-swap SCSI drive or a slim-line CD-ROM/floppy or DVD/floppy drive module. For availability and reliability, the Server Chassis SR2300 is offered in two configurations: one, with a single 480W power supply and the other, featuring a 500W hot-swap PFC 1+0 power supply with the option to add a second 500W hot-swap power supply for redundancy. To reduce integration time, the Server Chassis SR2300 is also available pre-integrated with the Intel Server Board SE7501WV2 (SCSI) as a separate product (Intel® Server Platform SR2300WV2). See the order code table for more information.

The Intel Server Chassis SR2300 provides multiple storage options and power configurations for exceptional high-density flexibility.

Highly Serviceable, Adaptable to Multipurpose Solutions

For ease of troubleshooting and maintenance, the Intel Server Chassis SR2300 ships with instrumented components, multiple LED indicators, and front access to USB and video connectors. Installation and administration are also simplified thanks to the chassis' tool-free fan assembly, PCI/PCI-X riser assembly, front-panel board, and power-supply modules. All this makes the Intel Server Chassis SR2300 ideal for such applications as Web hosting, application hosting, search engine, cache, VPN, proxy, e-mail, and file/print.

Delivering Intel® Server Products Leadership Technologies

For an exceptional degree of reliability, availability, and serviceability the Intel Server Chassis SR2300 provides you and your customers a number of Intel Server Products Leadership Technologies. These cutting-edge technologies complement the capabilities of the most current processors and chipsets and boost the ability of a given server to address new applications and markets:

- **Intel® Active Airflow Control** provides chassis thermal and fan control to keep servers cool and quiet.
- **Intel® Drive Stabilization Technology** enhances drive reliability, longevity, and performance.
- **Intel® Drive Power Isolation** provides critical protection for hot-swap hard drives.
- **Intel® Light-Guided Diagnostics** improves serviceability and accelerates recovery.
- **Intel® Multi-Path Boot** makes systems resilient to even the most fundamental errors.
- **Intel® Power and Thermal Headroom** budgets power and thermal engineering for maximum performance.
- **Intel® Validation Stress Test Suite** helps to ensure data integrity on the latest high-performance servers.

For more information on Intel Server Products Leadership Technologies, please visit:
http://developer.intel.com/design/servers/technologies/

The Intel® Server Chassis SR2300 can be ordered on its own or with the Intel Server Board SE7501WV2 (SCSI) pre-integrated to provide versatility and choice to businesses that rely on rack-mount server solutions.

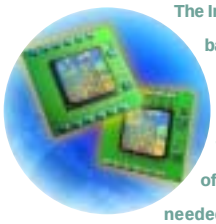
Intel® Server Chassis SR2300

Optional 500W hot-swap power supplies

Intel Server Platform SR2300WV2 (Server Board SE7501WV2 (SCSI) integrated into the Server Chassis SR2300) shown here; processor, memory, and hard drives not included

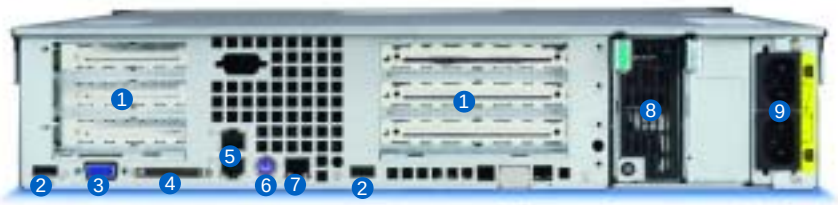
Meticulous design, thorough validation, and extensive testing can mean less development work, higher quality, and faster time-to-market.

1. **Two riser cards with up to six (three full-height, three low-profile) PCI/PCI-X slots on dual-peer buses**
2. **Three instrumented system-cooling fans (optional fourth fan for redundant cooling)**
3. **Chassis intrusion and server-management capabilities**
4. **Enhanced front panel with video and USB ports (use of front-panel video switches rear video off)**
5. **One 3.5-inch full-height drive bay**
6. **One flexible drive bay for additional hot-swap SCSI hard drive or slim-line CD-ROM/floppy or DVD/floppy drive module**
7. **Six hot-swap Ultra320 SCSI drive bays (non-integrated chassis[1] ships with four drive carriers; Intel Server Platform SR2300WV2[2] ships with six drive carriers)**
8. **Single 480W PFC power supply or 500W hot-swap 1+0 power-supply module with optional redundant 500W hot-swap power supply (dual-line power)**



The Intel® Xeon™ processor, based on Intel® NetBurst™ microarchitecture and featuring Hyper-Threading Technology, offers the performance needed for demanding applications in rack-mount server environments.

Optional locking bezel (black)



Rear panel with 500W hot-swap 1+0 power supply

Intel® Server Chassis SR2300 Rear Panel

1. **Six PCI/PCI-X slots**
2. **Two USB ports**
3. **Video port (front-panel video switches rear video off)**
4. **68-pin SCSI port**
5. **Two Gigabit Ethernet ports**
6. **PS/2 port**
7. **RJ45 serial port**
8. **500W hot-swap 1+0 PFC power option (shown), 480W power-supply option (not shown)**
9. **Dual-line power receptacles (dual-line receptacles with redundant power-supply option only)**

Intel® Server Chassis SR2300

Features	Benefits
Specifically designed for and validated with the Intel® Server Board SE7501WV2	Simplified integration and full 2U benefits
Available pre-integrated as the Intel Server Platform SR2300WV2	Key accessories included, fewer components to order, faster and less costly integration
Up to seven hot-swap Ultra320 SCSI hard-drive bays with up to 15K RPM support	Easily expandable storage capacity and SCSI integrity
Seventh bay for an additional hot-swap SCSI drive or optional slim-line CD-ROM/floppy or DVD/floppy drive module	Several system-configuration options
One 3.5-inch full-height peripheral-drive bay	Space for additional peripherals such as a tape drive
Up to six PCI/PCI-X expansion slots on dual-peer PCI riser cards (three full-height, three low-profile)	Outstanding scalability
Front-access video and USB ports	Easy portable peripheral and video attachment (use of front-panel video switches rear video off)
Tool-free serviceability	Minimal maintenance downtime
Intel® Server Management, including chassis intrusion, automatic health monitoring, proactive messaging, and post-issue diagnostics	Security and availability
Single 480W power supply or 500W hot-swap 1+0 PFC power-supply module with optional 500W hot-swap power supply to enable redundancy	Ample power and availability for full 2U system integration, limited exposure to power surges
Advanced optional redundant cooling with multispeed system fans	Fault-tolerant system cooling ideal for high-density, rack-optimized environments
Multiple international regulatory approvals[3]	Reduced time to market
Optional locking front bezel	Prevention of unauthorized access to peripherals and control panel
Three-year limited warranty	Peace of mind

Deliver industry-leading server technology and world-class customer support. With Intel, you can.

Technology leadership. Take advantage of Intel's 20 years of experience designing and engineering industry-leading server building blocks such as the Intel® Xeon™ processor.

Unsurpassed quality. Intel spends 10,000+ hours testing and validating every piece of an Intel server stack. Uncompromising quality standards translate into higher reliability, fewer repairs, and greater customer satisfaction.

With Intel, you can give your customers access to the latest server technologies, exceptional quality, and highly responsive technical support.

World-class technical support. Intel offers 24x7 phone and Web-based technical support, Advanced Warranty Replacement, a three-year limited warranty, spares kits, and extensive technical training. Integrators also have access to a wealth of sales and marketing support in the form of sales tools, videos, and high-quality images for advertising. For more information on Intel server building blocks please visit: **www.intel.com/go/serverbuilder**

Complete Your Intel® Server Chassis SR2300 with Intel® Server Building Blocks

Add the following Intel server building blocks to your Intel Server Chassis SR2300 to provide a highly reliable, available, and scalable server:

Intel® Xeon™ Processors, based on Intel® NetBurst™ microarchitecture and with Hyper-Threading Technology, can slice through the toughest business problems facing dynamic start-ups, large enterprises, and everything in between.

Intel® Server Board SE7501WV2 provides superior performance for reliable and manageable high-density solutions. The Server Board SE7501WV2 features:

- Support for dual Intel® Xeon™ processors
- Triple-peer PCI/PCI-X buses with up to 64-bit/100MHz bandwidth; up to six add-in card slots on two riser cards
- Six DIMM sockets for up to 12 GB of dual interleaved DDR200/266 memory
- Advanced Intel® Server Management software
- Dual-channel Ultra320 SCSI or dual-channel ATA/100 RAID

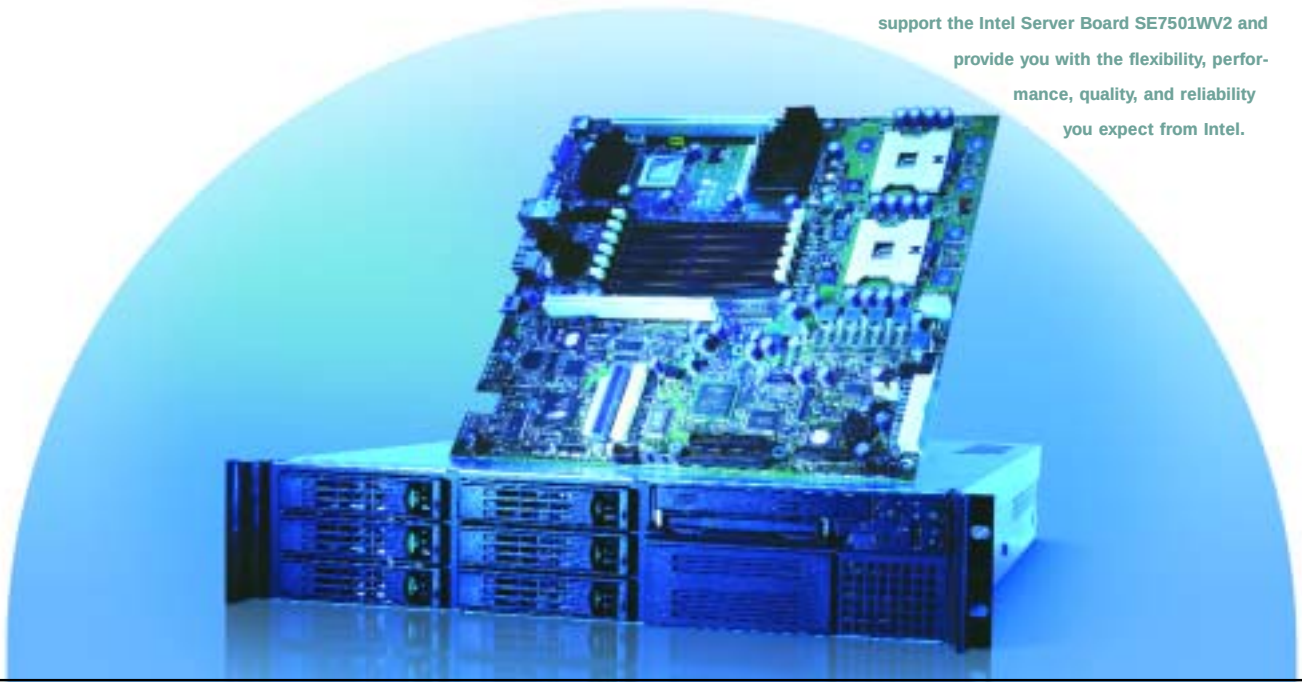
Intel® Server Management monitors key server components and helps to solve many problems easily with integrated in-band and out-of-band remote management through LAN and modem connections, event logging and alerting through e-mail or paging devices, and proactive fault management.

Intel® RAID Controllers help to protect data, applications, and the server operating system from disk failures and are part of an affordable, high-performance line of Intel RAID products, all of them tested and validated for easy integration.

Intel® PRO Server Adapters, including Gigabit Ethernet server adapters, help to reduce bottlenecks and boost availability with industry-leading performance and advanced server features.

Intel building blocks are validated to work together, helping to save R&D, validation, and support expenses—and speed your time-to-market.

Use the Intel Server Chassis SR2300 to build the right solution for your customers. For example, the Server Chassis SR2300 is designed to support the Intel Server Board SE7501WV2 and provide you with the flexibility, performance, quality, and reliability you expect from Intel.



Intel® Server Chassis SR2300 Specifications

Form Factor
2U rack-mount server chassis for EIA Standard 310-D racks, validated with Intel® Server Board SE7501WV2

Dimensions and Color
3.4" (height) x 16.9" (width) x 24" (depth) (chassis without handles); 3.4" (height) x 18.9" (width) x 25.1" (depth) (chassis with handles); black trim

Hard-Drive Support	
Drive Bays	Six one-inch hot-swap, one universal (for hot-swap SCSI drive, CD-ROM/floppy or DVD/floppy drive), one 3.5-inch full height (for additional peripherals such as a tape drive)
LVD SCSI Backplane	Ultra320/Ultra160 support for up to seven one-inch hot-swap SCSI drives or six one-inch hot-swap SCSI drives and one slim-line CD-ROM/floppy drive module or DVD/floppy drive module

System Cooling	
480W Fixed Power-Supply Configuration	Three 60mm fans mounted in the middle of the chassis and instrumented to provide RPM data for fan-failure prediction and detection (optional fourth fan available for redundant cooling); one 80mm x 38mm power-supply fan
500W Hot-Swap Power-Supply Configuration	Three 60mm fans mounted in the middle of the chassis and instrumented to provide RPM data for fan-failure prediction and detection (optional fourth fan available for redundant cooling); one 60mm x 38mm power-supply fan

Front Panel	
LEDs	Power, hard-drive activity, network activity, system ID, and general system status
Connectors	Video (switched video with rear video connector), USB port
Buttons and Switches	Power/sleep, reset, NMI, and ID

Security
A mechanical lock on the optional front bezel and an intrusion switch that can be monitored by Intel® Server Management software

Environment	
Ambient Temperature	Operating (system): 10°C to 35°C, with maximum change not to exceed 10°C; non-operating (system): –40°C to +70°C
Relative Humidity	Non-operating: 90% @ 35°C non-condensing
Acoustics	<55 dBA (rack-mount) in an idle state in an normal office environment (23°C)
Electrostatic Discharge	15kV per Intel test specification

Safety Compliance[4]	
Argentina	IRAM Certificate
Canada	UL60950 – CSA 60950 (UL and cUL)
China	GB4943 (CCC Certification)
Europe, CE Mark	EN60950 (complies with 73/23/EEC)
Germany	GS License
International	IEC60950 (CB Report and Certificate)
Nordic Countries	EMKO–TSE (74-SEC) 207/94
Russia	GOST 50377-92
United States	UL60950 – CSA 60950 (UL and cUL)

Electromagnetic Capability (EMC) (Class A)[4]	
Australia, New Zealand	AS/NZS 3548 (based on CISPR 22)
Canada	ICES-003
China	GB9254 & 17625 (CCC Certification)
Europe, CE Mark	EN55022; EN55024 & EN61000-3-2;-3-3 (complies with 89/336/EEC)
International	CISPR 22
Japan	VCCI
Korea	RRL, MIC 1997-41 & 1997-42
Russia	GOST 29216-91 & 50628-95
Taiwan	CNS13438
United States	FCC, Part 15

Standard Power Supply	
AC Power Supply	One fixed 480W EPS (non-redundant option) or one 500W hot-swap SSI TPS 1+0 (redundant option)
Max AC Voltage (500W)	6.7A at 115V, 3.3A at 220V
Max AC Voltage (480W)	8.4A at 115V, 4.2A at 220V
+5V	20A max
+5V Standby	2A max
+12V1	18A sustained
+12V2	18A sustained
–12V	0.5A max
+3.3V	24A max

Recommended Configurations and Order Codes

The following table provides several suggested configurations for Intel® Server Board SE7501WV2–based systems using the Intel® Server Chassis SR2300. For a complete list of spares and accessories, visit http://support.intel.com/.

Item	Intel® Server Chassis SR2300 with 480W Fixed Power Supply	Intel® Server Chassis SR2300 with 500W Hot-Swap 1+0 Power Supply	Intel® Server Platform SR2300WV2 (Power cord not included)	Intel® Server Platform SR2300WV2 (North American power cord included)
Intel® Server Chassis SR2300 (power cord not included)	KSW480	KSW	SE7501WV2SKU02	—
Intel® Server Chassis SR2300 (North American power cord included)	KSW480NA	KSWNA	—	SE7501WV2S02NA
Intel® Server Board SE7501WV2 with Integrated SCSI	SE7501WV2SCSI	SE7501WV2SCSI	Included	Included
Redundant 500W Hot-Swap Power Supply	N/A	AXX2PSMODL500	AXX2PSMODL500	AXX2PSMODL500
Redundant Fan	ASWFAN		Included	Included
Additional Hot-Swap Drive Carriers[5] (10-pack)	FXX2DRVCARBLK		Six hard-drive carriers included	Six hard-drive carriers included
Slide-Rail Kit	AXX1U2URAIL		AXX1U2URAIL	AXX1U2URAIL
Locking Bezel	ASWBEZBLACK		ASWBEZBLACK	ASWBEZBLACK
Slim-Line CD-ROM/Floppy Drive Module	AXXCDFLOPPY		Included	Included
Slim-Line DVD/Floppy Drive Module	AXXDVDFLOPPY		NA	NA
RJ45 to DB9 Dongle Converter Kit (includes rear serial cable)	AXXRJ45DB92		AXXRJ45DB92	AXXRJ45DB92
Tape-Drive Cable and Power Cable	ASWTAPECABLE		ASWTAPECABLE (Power cable included)	ASWTAPECABLE (Power cable included)
Chassis Spares Kit	FSWCHASSISKT		FSWCHASSISKT	FSWCHASSISKT
Electronics Spares Kit	FSWELECTKT		FSWELECTKT	FSWELECTKT
Intel® RAID Controllers[6]	Yes[6]		Yes[6]	Yes[6]
Intel® PRO/1000 XT Server Adapter[6] (low-profile)	PWLA8490XTL		PWLA8490XTL	PWLA8490XTL

1. Non-integrated Intel Server Chassis SR2300 order codes: KSW480, KSW, KSW480NA, and KSWNA.
2. Intel Server Platform SR2300WV2 (Server Chassis SR2300 integrated with Intel Server Board SE7501WV2 with integrated SCSI) order codes: SE7501WV2SKU02 and SE7501WV2S02NA.
3. When integrated as specified in the Intel Server Board SE7501WV2 integration guide. Please see http://support.intel.com/support/motherboards/server/SE7501WV2 for details.
4. Based on integration with a validated Intel server board and configuration as outlined in the SR2300 Chassis Subassembly Product Guide.
5. Non-integrated chassis ships with four hard-drive carriers; Intel Server Platform SR2300WV2 ships with six hard-drive carriers.
6. Please visit http://support.intel.com for a complete list of validated Intel and third-party adapter cards.

For the most current product information on Intel server building blocks, visit: www.intel.com/go/serverbuilder

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Intel Literature Center: 1-800-548-4725

ORDER NUMBER 283989-002