Product Brief

Intel® Entry Server Chassis SC5295-E

- Support for Dual-Core Intel® Pentium® D Processors and Two 64-bit Intel® Xeon™ Processors
- Expansive Storage Capacity
- Extensive Tool-less Assembly

Intel® Entry Server Chassis SC5295-E

A powerful, cost-effective chassis designed for quiet and reliable operation and tool-less assembly and service

Dual-core Intel® Pentium® D processors, with a system bus of up to 1066 MHz and support for Hyper-Threading Technology[1] and Intel® EM64T[2], provides excellent performance and value for entry-level applications.

The 64-bit Intel® Xeon™ processor, with up to 2MB L2 Cache, Hyper-Threading Technology, Intel® EM64T[2], and Enhanced Intel SpeedStep® technology[3], provides an efficient, reliable, and proven foundation for diverse server applications.

Intel® Entry Server Chassis SC5295-E

Many businesses running entry-level servers and workstations require a chassis that blends performance and cost-effectiveness with quiet operation and serviceability. Such a chassis should also be configurable with a variety of boards, storage options, power supplies, and drives. Intel offers such a chassis in the Intel® Entry Server Chassis SC5295-E.

Versatility, Quiet Operation, and Tool-less Servicing

Small and medium-size businesses often face a limited choice in the location of their computing equipment, such as requiring that a server or workstation sit on or under the desk or share space with other hardware. The Intel Entry Server Chassis SC5295-E addresses such a requirement through its support for both pedestal and rack-mount form factors and its enhanced cooling capabilities for quiet operation. For easier servicing, the Entry Server Chassis SC5295-E also provides an extensive set of tool-less components, including drive bays, fans, peripherals, and power supplies.

The Intel Entry Server Chassis SC5295-E is designed to meet such needs through its support for both pedestal and rack-mount form factors, its enhanced cooling capabilities for quiet operation, and its extensive set of tool-less components. These include drive bays, fans, peripherals, and power supplies that can be removed and replaced without the need for any tools.

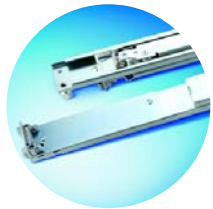
Cost-Effective Performance and Reliability

By supporting both the dual-core Intel® Pentium® D processor and the 64-bit Intel® Xeon™ processor in an entry-level chassis, the Intel Entry Server Chassis SC5295-E provides a powerful and cost-effective foundation for running business-critical applications. For reliability, the chassis offers an optional redundant power supply[4] and supports sophisticated Intel server technologies specifically designed to boost reliability as well as simplify server administration and maintenance.

Finally, to make its performance and reliability advantages available to businesses with wide-ranging needs, the Entry Server Chassis SC5295-E supports four different Intel® Server Boards: the Intel® Entry Server Board SE7230NH1-E, for general-purpose dual-core single-processor applications, the Intel® Server Board SE7320EP2, for general-purpose dual-processor server applications; the Intel® Server Board SE7525RP2, for high-end graphics-workstation or entry-level server applications; and the Intel® Server Board SE7520BD2, for workgroup server applications.

In its SC5295BRP configuration, the Intel® Entry Server Chassis SC5295-E provides a 500W PFC 1+1 redundant[4] power supply module for highly dependable solutions in diverse environments.

Tool-less assembly of drive bays, peripherals, fans, PCI, power supplies, and the side-access cover help to simplify servicing and maintenance of the Intel® Entry Server Chassis SC5295-E.



Intel® Entry Server Chassis SC5295-E Features and Benefits

Features	Benefits
Specifically designed for and validated with Intel® Entry Server Board SE7230NH1-E and Intel® Server Boards SE7320EP2, SE7525RP2, and SE7520BD2[5]	**Scalable performance, reliability, and easy integration**
Several power-supply options: 350W fixed, 420W fixed, 500W redundant (SC5295BRP configuration)[4], 600W fixed	**Power capabilities for a robust workstation or server solution at diverse price points**
One fan for cooling the main chassis and one fan for cooling the power supply	**Quiet cooling operations even in clustered rack-mount configurations**
Six tool-less fixed-drive bays upgradable to one-inch Serial ATA or Ultra320 SCSI hot-swap bays	**Easily expandable and reconfigurable storage capacity**
Two 5.25–inch peripheral drive bays and one 3.5–inch flexible drive bay	**Configuration flexibility**
Tool-less components including fixed and hot-swap drive bays, fixed drives in fixed drive bay, 5.25-inch bay peripherals and 3.5-inch bay slots, hot-swap chassis fans, hot-swap power supplies, PCI slots, and side-access cover	**Simplified maintenance for lower service and support costs**

Intel® Entry Server Chassis SC5295-E

Intel® Entry Server Chassis SC5295-E – Front View

1. Front-access USB
2. Tool-less side-panel removal
3. Two tool-less 5.25–inch bays
4. Support for six tool-less fixed and one 3.5-inch bay or hot-swap hard drives[6]

Intel® Entry Server Chassis SC5295-E – Rear View

1. 350W, 420W, or 600W PFC fixed power supply
2. 500W PFC fixed power supply

2a. Optional 500W PFC 1+1 redundant power supply[4] on SC5295BRP configuration

3. ATX-compatible cutout for I/O shield installation
4. Security lock loop
5. Expansion-card slot covers
6. Tool-less PCI card retention

Intel® Entry Server Chassis SC5295-E – Side View

1. Validated with Intel® Entry Server Board SE7230NH1-E and Intel® Server Boards SE7320EP2, SE7525RP2, and SE7520BD2[5] *(server board not included with chassis)*
2. Tool-less 350W, 420W, or 600W PFC fixed or 500W hot-swap power-supply option
3. Tool-less fan brackets
4. Tool-less PCI
5. Two tool-less 5.25–inch peripheral drive bays and one tool-less 3.5–inch flexible drive bay
6. Support for optional Intel® Local Control Panel[7]
7. Tool-less installation and removal of all drive bays
8. Tool-less fixed-drive bays upgradable to one-inch SATA or Ultra320 SCSI hot-swap bays (shown)

The Intel® Entry Server Chassis SC5295-E Supports Technologies That Define Innovation[8]

The Intel® Entry Server Chassis SC5295-E supports a number of sophisticated Intel server technologies designed specifically to address the needs of businesses and workgroups for a cost-effective and powerful workstation or server solution. **Intel® Light-Guided Diagnostics** and the optional **Intel® Local Control Panel**[6] ease server monitoring and simplify server troubleshooting.

Intel® Active Airflow Control addresses problems of noise, heat, and equipment complexity that are common in smaller workspaces. In addition, the Entry Server Chassis SC5295-E features **Intel® Power and Thermal Headroom**, which enhances performance and provides room for growth, and **Intel® Drive Stabilization Technology**, which helps to deliver server reliability.

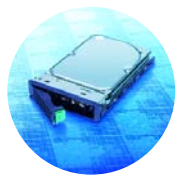
Intel server technologies provide powerful capabilities designed to help make server systems more reliable, more available, and easier to service. Seamlessly integrated into the latest generation of Intel® Server Products, these technologies work in concert to complement the capabilities of the most current Intel processor and chipset technologies.

Intel® Light Guided Diagnostics

Intel® Local Control Panel

Intel® Active Airflow Control

Intel® Power and Thermal Headroom



Intel® Drive Stabilization Technology

For more information on these technologies, please visit:
http://developer.intel.com/design/servers/technologies/

Compatible Products for Comprehensive Solutions

The following table provides a list of key compatible products for the Intel® Entry Server Chassis SC5295-E. Please see http://support.intel.com for the most recent and comprehensive product compatibility list.

Intel Building Block	Product Name(s)	Order Code(s)
Intel® Server Chassis	Intel® Entry Server Chassis SC5295-E	SC5295UP SC5295UPNA SC5295DP SC5295DPNA SC5295BRP SC5295BRPNA SC5295WS SC5295WSNA
Intel® Server Boards	Intel® Entry Server Board SE7230NH1-E	SE7230NH1 SE7230NH1LX
	Intel® Server Board SE7320EP2	SE7320EP2DG SE7320EP2SA4
	Intel® Server Board SE7525RP2 Intel® Server Board SE7520BD2	SE7525RP2 SE7520BD2SATAD2 SE7520BD2VD2 SE7520BD2SCSID2
Intel® Server Accessories	SC5295-E Rack Conversion Kit	APP3RACKIT
	350W Power Supply Module 420W Power Supply Module 500W Power Supply Module (redundant power supply for SC5295BRP) 600W Power Supply Module	FXX350WPSU FXX420WPSU APP3500WPSU FXX600WPSU
	Base Redundant Power Cage Maintenance Kit	FPP3BRPCAGE FPP3PMKIT
	Bracket Mount Kit for Hot-Swap Drive Bay Spare Bezel with Door	APP3HSDBKIT APP3STDBEZEL
	Four-Wire Fan Kit (one 92mm fan and one 120mm fan) Three-Wire 120mm Fan SC5295DP Front Panel Spare Six-Drive SATA Hot-Swap Drive Bay Six-Drive SCSI Hot-Swap Drive Bay	FPP3FANKIT4W FPP3FAN3W FXXPP3FPBRD AXX6SATADB AXX6SCSIDB

The Intel® Entry Server Chassis SC5295-E is Available in Four Configurations to Meet Diverse Needs in Server-Board Support, Power Delivery, System Cooling, and Drive-Bay Layout.

Product Code	Server-Board Support	Power Delivery	System Cooling	Drive-Bay Support
SC5295UP	Intel® Entry Server Board SE7230NH1-E	350W PFC Intel-validated power-supply module with integrated fan	One tool-less 120mm chassis fan	One tool-less fixed drive bay; optional tool-less hot-swap drive bay with support for up to four drives[9]
SC5295DP	Intel® Server Board SE7320EP2 Intel® Server Board SE7520BD2	420W PFC Intel-validated power-supply module with integrated fan	One tool-less 120mm chassis fan monitored by Intel® Server Management 8 when this software is installed	
SC5295BRP	Intel® Server Board SE7320EP2 Intel® Server Board SE7520BD2	500W PFC Intel-validated power-supply module with integrated fan; also available with optional redundant 500W power-supply module[4]		One tool-less fixed six-drive bay; optional tool-less hot-swap six-drive bay (includes 92mm cooling fan)
SC5295WS	Intel® Server Board SE7525RP2	600W PFC Intel-validated power-supply module with integrated fan	One tool-less 120mm chassis fan; one 50mm memory-cooling fan	

Take advantage of Intel's experience in providing a full complement of solution-level server products by pairing the Intel® Entry Server Chassis SC5295-E with the Intel® Entry Server Board SE7230NH1-E or the Intel® Server Board SE7320EP2, SE7525RP2, or SE7520BD2.

Intel® Entry Server Chassis SC5295-E Specifications

Form Factor

Pedestal	SSI Entry E-Bay 3.0–compatible
5.2U Rack-Mount Server	SSI Thin E-Bay v3.1–compatible

Dimensions and Color

Pedestal	Height 17.8", Width 9.3", Depth 19.0" (452 mm x 236 mm x 483 mm) Black (Intel Color Standard GE 701)
Rack-Mount	Height 9.3", Width 17.6", Depth 19.0" (236 mm x 477 mm x 483 mm) Black (Intel Color Standard GE 701)

Hard-Drive-Bay Support

Fixed (shipping configuration)	Four or six SATA or Ultra320 SCSI[10] drives, or six SAS hard drives
Optional Hot-Swap Upgrade Support	Four or six SATA, Ultra320 SCSI[10] (one-inch height), or SAS hard drives
SCSI Backplane	LVD with SAF-TE
External Peripheral Bays	Up to two[11] tool-less 5.25" (1.75" height) and one tool-less 3.5" (floppy)

Front Panel *(for SC5295UP)*

Button	Power on/off (momentary)
LED	System status
Connectors	Two USB ports

Front Panel *(for SC5295DP, SC5295BRP, and SC5295WS)*

Buttons and Switches	Power on/off (momentary) button, system-reset button, tool-activated NMI switch
LEDs	Power, system status, NIC activity (two), HDD activity
Connectors	Two USB ports, serial port

Security

A mechanical lock on the front bezel, a padlock loop, and an intrusion switch that can be monitored by Intel® Server Management 8

Environment

Ambient Temperature	Operating: +10°C to +35°C; non-operating: –40°C to +70°C
Relative Humidity	Non-operating: 95% @ +30°C non-condensing
Acoustics	Server Configuration – Sound Power (LwAd in BA): 6.0
	Workstation Configuration[12] – Sound Power (LwAd in BA): 5.5
Electrostatic Discharge	15kV per Intel test specification

Power Delivery

	SC5295UP	SC5295DP	SC5295BRP	SC5295WS
DC Power Supply	350W PFC	420W PFC	500W PFC, dual-line cord 1+1 redundant–power-capable	600W PFC
AC Voltage	100–127 / 200–240V~; 10.0 / 5.0A[13]	100–127 / 200–240V~; 7.7 / 4.3A[13]	100–127 / 200–240V~; 7.7 / 4.3A[13]	100–127 / 200–240V~; 10.0 / 5.0A[13]
+5V	25A maximum	20A maximum	24A maximum	24A maximum
+5V Standby	2A maximum	2A maximum	2A maximum	2A maximum
+12V	25A maximum	30A maximum	41A maximum	43A maximum
+3.3V	22A maximum	17A maximum	24A maximum	20A maximum
–12V	0.8A maximum	0.5A maximum	0.3A maximum	0.5A maximum

Safety and EMC Regulatory Compliance (Class A)

(EMC regulatory compliance is based on integration with a validated Intel server board and configuration as outlined in the Intel® Entry Server Chassis SC5295-E subassembly guide.)

Country	Certification *(Safety and/or EMC)*	Regulatory Mark *(Safety and/or EMC)*
Australia/New Zealand	ACA, MED	C-Tick
Canada	UL / Industry Canada	cULus / ICES
Europe	European Directives	CE
International	CB Report / CISPR	Not applicable
Japan	VCCI	VCCI
Korea	RRL	MIC
Russia	GOST	GOST
Taiwan	BSMI RPC	BSMI
United States	UL / FCC	cULus / FCC

[1] Hyper-Threading Technology (HT Technology): Using HT Technology with this product requires an Intel® Pentium® 4 processor that supports this feature and an HT Technology–enabled chipset, BIOS, and operating system. See http://support.intel.com/support/motherboards/server/ for more information, including details on which processors and operating systems support this feature.

[2] Intel® Extended Memory 64 Technology (Intel® EM64T) requires a computer system with a processor, chipset, BIOS, OS, device drivers and applications enabled for Intel EM64T. Processor will not operate (including 32-bit operation) without an Intel EM64T-enabled BIOS. Performance will vary depending on your hardware and software configurations. Intel EM64T-enabled OS, BIOS, device drivers and applications may not be available. Check with your vendor for more information.

[3] Enhanced Intel SpeedStep® technology is available on Intel® Xeon™ processors with an 800MHz system bus at operating frequencies of 3.40 GHz and above.

[4] Full redundancy requires the purchase of an optional second power supply, order code APP3500WPSU.

[5] Different product models of the Intel® Entry Server Chassis SC5295-E are compatible with different boards: product model SC5295UP with the Intel® Entry Server Board SE7230NH1-E, product models SC5295DP and SC5295BRP with both the Intel® Server Board SE7320EP2 and Intel® Server Board SE7520BD2, and product model SC5295WS with the Intel® Server Board SE7525RP2.

[6] Available on product models SC5295BRP and SC5295WS; product models SC5295UP and SC5295DP support four tool-less fixed or hot-swap hard drives instead.

[7] The Intel® Local Control Panel requires the purchase and installation of an optional Intel® Management Module upgrade.

[8] Features may vary depending on system configuration and may require purchase and installation of an optional Intel® Management Module upgrade.

[9] To determine power requirements for the optional drive bay, check the Intel® Power Budget Tool at http://www.intel.com/support/motherboards/server/sb/cs-010758.htm.

[10] The Ultra320 SCSI drive bays are compatible with Ultra2 SCSI.

[11] The Intel® Entry Server Chassis SC5295-E supports up to three peripheral drive bays. The shipping configuration includes two sets of rails; additional rails are available with order code FHD2HWKT.

[12] Includes Workstation Cooling Kit (APT2WKTCOOLKIT).

[13] The maximum amperage represents the value at which the chassis is rated.

For more information on how to make the Intel® Entry Server Chassis SC5295-E part of your server environment, please contact an Intel® Channel Membership Programs participant.

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Intel Literature Center: 1-800-548-4725

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