

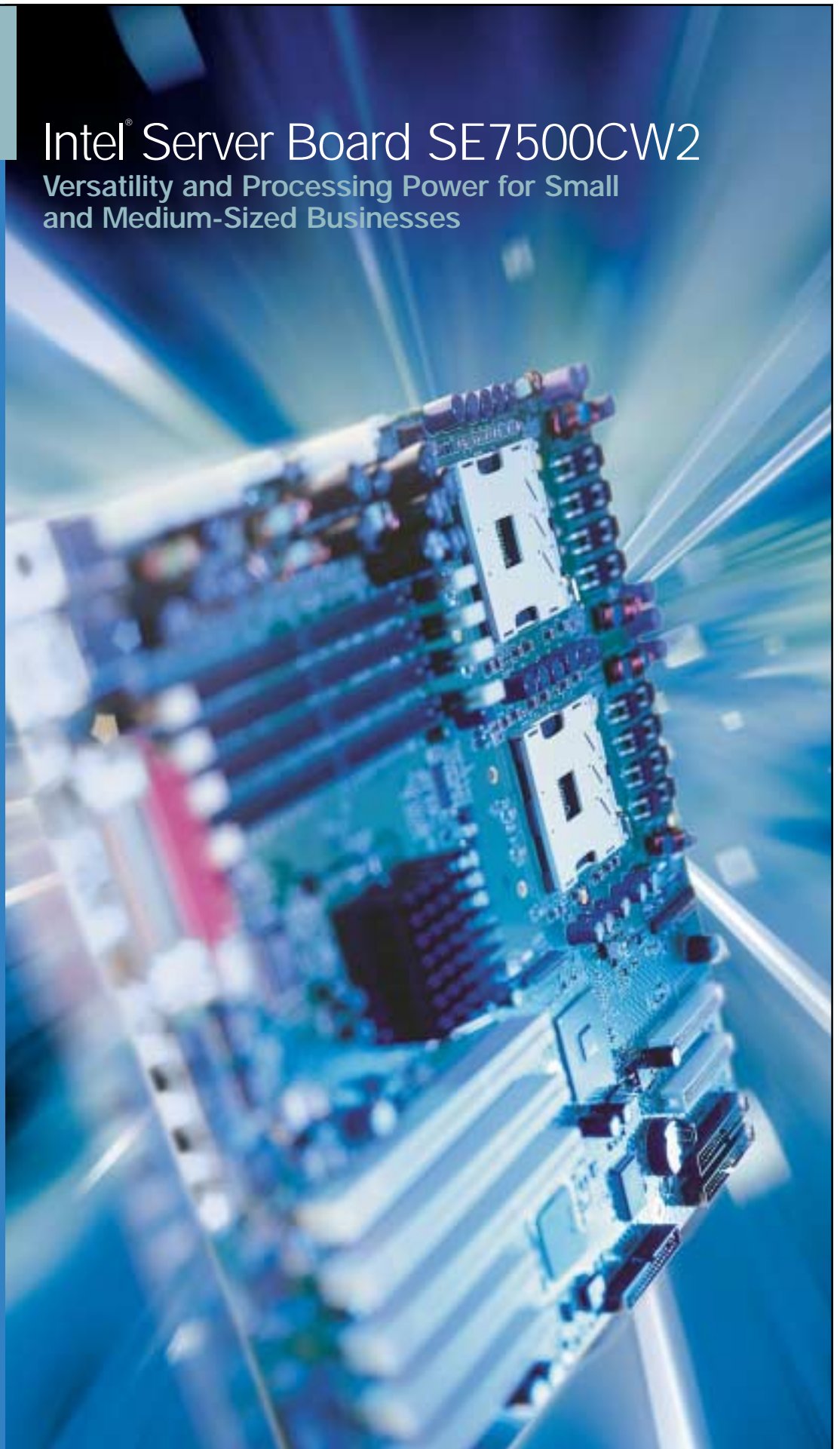


Intel® Server Board SE7500CW2

Versatility and Processing Power for Small
and Medium-Sized Businesses

Product Brief

- Supports Dual Intel® Xeon™ Processors with 512KB Level 2 Advanced Transfer Cache
- Intel® E7500 Chipset



A Scalable, Cost-Effective Solution

The Intel® Server Board SE7500CW2 harnesses the power of dual Intel® Xeon™ processors and the Intel® E7500 chipset to deliver outstanding performance for businesses seeking a cost-effective solution for diverse server applications.

With its support for dual-channel ECC DDR200/266 memory and triple-peer PCI buses supporting PCI-X-enabled add-in cards, the Server Board SE7500CW2 provides the memory capacity and bandwidth essential for growing businesses. The board also provides widely compatible networking capabilities, scalable bandwidth, and redundant links available through two integrated Intel® PRO/100+ Server Network Connections.

Innovation, Performance in a High-Value Package

A foundation in the innovative Intel® NetBurst™ microarchitecture of the Intel Xeon processor makes the Server Board SE7500CW2 ideally suited to applications and environments requiring advanced performance at a value price point. Hyper-Threading Technology supports multithreading and multitasking to boost the efficiency of processor resources, a 400MHz system bus provides three times the bandwidth of previous Intel® server processors, and an advanced Level 1 instruction cache vastly improves the efficiency of cached instructions.

The Ideal Approach to a Customized Solution

The Intel® Server Board SE7500CW2 addresses a variety of customer needs thanks to the easy configuration options provided in the base model by dual ATA/100 IDE controllers



and a dual-channel ATA/100 RAID controller. For applications requiring SCSI-based storage, another product model is available with an Ultra160 SCSI adapter in the box. The Server Board SE7500CW2 also is validated with the Intel® Server Chassis SC5200 (base model only) and supported by a number of rack-optimized and general-purpose third-party reference chassis. Also available are many third-party peripherals, add-in cards, and memory options, making the Server Board SE7500CW2 a highly versatile approach to building custom applications and solutions.

Features

Support for one or two Intel® Xeon™ processors with up to 512KB L2 cache and a 400MHz system bus and includes the Intel® E7500 chipset

Support for up to 4 GB of ECC DDR200/266 memory with four DIMM sockets¹

Dual memory channels

Triple-peer PCI buses

Five PCI slots: one PCI-X 64-bit/133MHz, two PCI-X 64-bit/100MHz, and two 32-bit/33MHz

Two integrated Intel® PRO/100+ Server Network Connections

Integrated ATA/100 IDE and Promise® Technology dual-channel ATA/100 RAID controller

Order code SE7500CW2SCSI includes a single-channel Ultra160 SCSI adapter

Integrated ATI® Rage® XL video controller with 8 MB of video memory

Intel® LANDesk® Client Manager-based management solution²

Three-year limited warranty

Benefits

Innovative technology to meet the requirements of high-performance server workloads

Memory flexibility with the price/performance advantage of DDR to support a wide range of solutions

High-performance memory subsystem with up to 3.2 GB/sec of data transfer

Elimination of data bottlenecks for the increased bandwidth necessary for intensive I/O needs

Flexibility and scalability, high bandwidth with support for PCI-X-enabled add-in cards

Networking capabilities with widespread compatibility, scalable bandwidth, and redundant links

Versatile storage options and enhanced data protection

Flexible storage options

High-quality video without the need for a video adapter card

Integrated in-band management, event alerting, and more to help provide higher reliability

Peace of mind

Intel® Server Board SE7500CW2 for the Intel® Xeon™ Processor with 512KB Cache

Up to 4 GB of ECC registered DDR200/266 memory¹
Dual memory channels for up to 3.2 GB/sec data transfer

Support for two Intel® Xeon™ processors with 512KB L2 cache

Two ATA/100 IDE channels

Server monitoring and control
Winbond® 83627HF controller

Two Intel® PRO/100+ Server Network Connections
Intel® 82550PM controllers

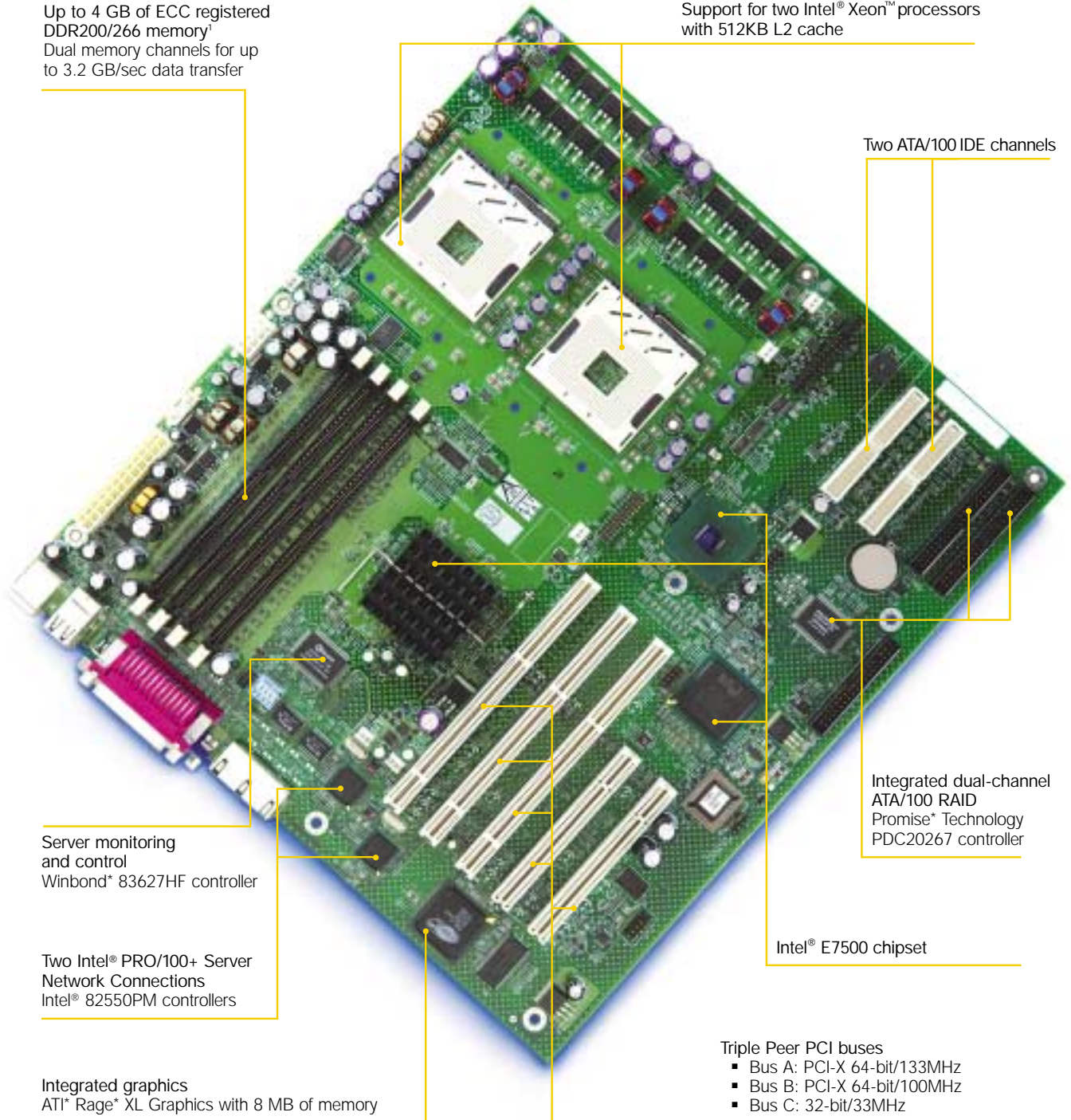
Integrated graphics
ATI® Rage® XL Graphics with 8 MB of memory

Integrated dual-channel ATA/100 RAID
Promise® Technology PDC20267 controller

Intel® E7500 chipset

Triple Peer PCI buses

- Bus A: PCI-X 64-bit/133MHz
- Bus B: PCI-X 64-bit/100MHz
- Bus C: 32-bit/33MHz



The Boxed Intel® Server Board SE7500CW2

Included for easy integration:

1. One Intel® Server Board SE7500CW2
2. Quick Start User Guide
3. CD-ROM with Intel® LANDesk® Client Manager software, software drivers, configuration tools, and technical product information
4. Cable kit
5. I/O shield
6. Board-layout sticker

Order code SE7500CW2SCSI also includes an Ultra160 SCSI Adapter and an Ultra160 SCSI cable with termination:

- Single-channel Ultra160 SCSI
- 64-bit/66MHz low-profile PCI with standard and low-profile brackets
- LSI Logic* 53C1000 controller



Build Value with Intel: Server Products, Programs, and Support



Intel is committed to providing industry-leading server building blocks, programs, and support services to help system integrators successfully compete in the evolving Internet economy. Get the high-value server solutions you need to succeed by taking advantage of the outstanding value Intel provides its system integrators:

- High-quality server building blocks
- Extensive breadth of server building blocks
- Solutions and tools to enable e-Business
- Comprehensive training services
- Worldwide 24x7 technical support
- World-class service, including a three-year limited warranty and Advanced Warranty Replacement

For more information on the Intel added-value server offerings, please visit: www.intel.com/go/serverbuilder

Complete Your Intel® Server Board SE7500CW2 with Intel® Server Building Blocks

Add the following Intel building blocks to your Intel Server Board SE7500CW2 to ensure a highly reliable, available, and scalable server:



Intel® Xeon® Processors provide a powerful foundation for business computing. They help to keep your business up and running by enabling you to cost-effectively manage growth by simply adding processors to your existing servers.



Intel® RAID Controllers are designed to protect data, applications, and the server operating system from disk failures. Intel offers an affordable high-performance line of RAID products, which are tested and validated for easy integration with Intel server building blocks.



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



Intel® Server Chassis SC5200 is a 5U server chassis designed for small and medium-sized business customers, especially those that may need to customize as they grow. Key features of the base configuration include:

- a pedestal form factor with five one-inch-high fixed-drive bays supporting drives that operate at up to 15K RPM, three full-size 5.25-inch peripheral bays, five fans for ample cooling, and a 450W PFC power supply.
- a black rack-conversion kit, which enables an easy-to-install 5U rack-optimized chassis.



Intel® Server Board SE7500CW2 Specifications

Processor/Cache

Processors Supported	One or two Intel® Xeon™ processors with 512KB of integrated L2 cache and a 400MHz system bus. For the latest processor support information, visit http://support.intel.com/support/motherboards/server
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System Memory¹

Memory Capacity	Four DIMM sockets for up to 4 GB DDR200/266 memory (128MB to 1GB DIMMs supported; memory must be populated in pairs)
Memory Type	DDR200/266 registered SDRAM 72-bit ECC, 184-pin gold-plated DIMMs
DIMM Sizes	128 MB, 256 MB, 512 MB, 1 GB
Memory Voltage	2.5 V only
Error Detection	Corrects single-bit errors, detects double-bit errors (using ECC memory), Chipkill ²

Integrated On-Board

Chipset	Intel® E7500 chipset
ATA/100 RAID Controller	Promise® Technology PDC20267 ATA/100 IDE RAID controller provides two channels of ATA/100 IDE that can be configured into either RAID level 0, RAID level 1, or RAID level 0+1; maximum data transfer: 100 MB/sec on each ATA/100 channel
Intel® PRO/100+ Server Network Connections	Two integrated Intel® PRO/100+ Server Network Connections (Intel® 82550PM controllers); supports 10BASE-T and 100BASE-TX, RJ45 output
Graphics	ATI® Rage™ XL SVGA PCI video controller with 8 MB of video memory
Super I/O Controller	Winbond® 83627HF

Input/Output

PCI	Triple-peer PCI buses, up to five total slots; one PCI-X 64-bit/133MHz, two PCI-X 64-bit/100MHz, two 32-bit/33MHz
IDE	Two ATA/100 EIDE channels for a total of four IDE devices backward-compatible to provide CD-ROM drive support
USB	Three stacked USB connectors and one internal USB header
Serial Ports	One asynchronous RS-232C 9-pin port and one 10-pin internal header
Floppy Controller	1.44 MB, 2.88 MB, 3-mode support
Keyboard/Mouse	PS/2, 8240A-compatible

Management Solution

Hardware	Winbond® 83627HF management controller
Software	Intel® LANDesk® Client Manager 6.3
Remote Management	In-band access to system status, configuration data, and utilities, without the need for a remote-management card
Server Monitoring	To monitor temperatures, voltages, and fans
Server Troubleshooting	Event filtering and proactive alerting via LAN
Operating Systems Supported by Intel® LANDesk® Client Manager	Microsoft® Windows® 2000, Microsoft® Windows NT®

System BIOS

BIOS Type	8Mb Flash EEPROM with Phoenix® BIOS, Multiboot BBS (BIOS Boot Specification) 1.4-compliant
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Special Features	Plug and Play, IDE drive autoconfigure, SMBIOS 2.3, ECC/Parity support
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Jumpers and Front-Panel Connectors

Jumpers	CMOS clear, password clear, BIOS recovery
Front-Panel Connectors	Power LED, power on/off switch, reset switch, HDD LED, NIC activity LEDs

Mechanical

Server Board Style	SSI EEB 3.0 fits in many ATX-compliant tower chassis
Server Board Size	12" x 13"

Power Requirements

+5V	13.00 A maximum continuous current
+5V Standby	1.00 A minimum continuous current
+12V	17.30 A (including fans) maximum continuous current
+3.3V	7.20 A maximum continuous current
-5V	0.00 A maximum continuous current
-12V	0.20 A maximum continuous current

Ultra160 SCSI Adapter

SCSI Controller	LSI Logic® 53C1000
SCSI Type	Single-channel Ultra160 SCSI
PCI	64-bit/66MHz
Connectors	Internal 68-pin and external VHDI interfaces

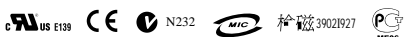
Environment

Ambient Temperature ³	Operating (system): 10°C to 35°C; non-operating/storage (system): -40°C to 70°C ambient
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Relative Humidity	Non-operating 95%, non-condensing at 30°C
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Safety / EMC Regulatory Compliance (Class A)

Class A EMC compliance is based on board configured in compatible ⁴ Intel host system.	
Australia/New Zealand	Verified to AS/NZS 3548, Class A (C-tick Mark)
Canada	Verified to ICES-003, Class A
Europe	Verified to EN55022 (Class A) and EN55024 (CE Mark—EU Directive 89/336/EEC)
International	IEC60950
Japan	Verified to CISPR-22/VCCI, Class A
Korea	RRL Certification to MIC Notices 1997-41 & 1997-42
Russia	Verified to GOSTR 29216-91, GOSTR 50628-95 (GOST-R Mark)
Taiwan	Verified to BSMI 13438, Class A (DOC)
U.S.	Verified to FCC, Class A



Order Codes

Please visit www.intel.com/go/serverbuilder for the most recent product updates.

Item	Product Order Code
Intel® Server Board SE7500CW2	SE7500CW2
Intel® Server Board SE7500CW2 with included Ultra160 SCSI Adapter	SE7500CW2SCSI
Intel® Server Chassis SC5200 (pedestal base configuration) ⁵	KHD3BASE450
Intel® Server Chassis SC5200 Rack Conversion Kit	AHD2RACK, AHD3RACK
Intel® Server Chassis SC5200 Spares Kit	FHD3SPRS
Intel® PRO 10/1000 XT Server Adapter	PWL48490XT
Intel® Server RAID Controller SRCU31-L	BOXSRCU31LA
Intel® RAID Controller SRCU32	SRCU32U

¹ The Server Board SE7500CW2 has been designed to support up to 8GB of memory using 2GB memory modules. At publication, 2GB memory validation was not completed; therefore, 2GB modules are not currently supported by this server board and the maximum memory supported by this board is 4GB. Please see <http://support.intel.com/support/motherboards/server/se7500cw2> for updates to the support of this feature and for the latest version of the tested memory list.

² Usage of Intel® LANDesk® Client Manager software is dependent on the operating system. See Intel® LANDesk® Client Manager documentation for details.

³ Environment ambient temperature is the system-intake measurement for an Intel® Server Board SE7500CW2 installed in an Intel® Server Chassis SC5200.

⁴ Compatible host system denotes the system(s) with which Intel tested the board and found it compliant.

⁵ See <http://support.intel.com> for a complete list of Intel and third-party chassis that are compatible with the Intel® Server Board SE7500CW2.

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

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