



Product Brief

- All-New RAID Controller Software
- Intel Service and Support
- Three-Year Limited Warranty



Intel® RAID Controller SRCMR

Modular ROMB (RAID On Mother Board) for Intel® Server Boards¹

As server and storage demand continues to grow, particularly in the high-density rack-mount (HDRM) segment, so does demand for an efficient cost-effective way to protect customer data. Designed with the latest Intel® 80302 I/O processor, the Intel® RAID Controller SRCMR leverages the on-board SCSI device on Intel® Server Boards to provide an easy-to-use economical RAID solution.

¹ For the latest server board support please see <http://support.intel.com/support/motherboards/server>

Performance and Protection in an Economical RAID Solution

The Intel® RAID Controller SRCMR sports a 64-bit/66-MHz PCI bus, 32 MB of embedded PC-100 ECC SDRAM, low-profile form factor, and support for up to two Ultra160 RAID channels with a maximum of 15 drives per channel. It is custom-designed for quick integration into a designated PCI slot on Intel Server Boards.

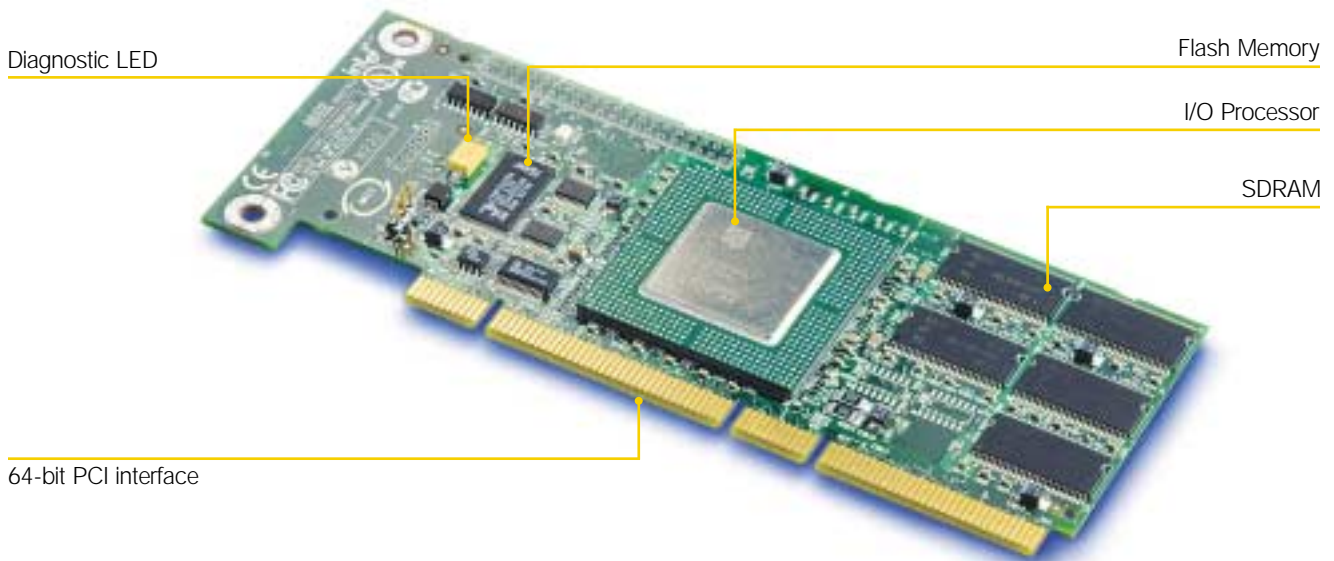
New RAID Software Architecture

Combined with the latest in I/O processing power, Intel® RAID controllers offer the performance, stability, and reliability RAID solutions require through an all-new RAID software architecture. This new architecture delivers a more robust feature set, increased stability, ease of use (through a full-featured BIOS tool available pre- or post-OS), simple installation, fast initialization, and increased performance. The Intel® Storage Console, included in this software package, supports remote



management, common BIOS and OS look and feel, easy RAID configuration and monitoring, and other advanced end-user capabilities.

Intel® RAID Controller SRCMR



Features

- Designed specifically for Intel® Server Boards
- Intel® 80302 I/O processor
- Exceptional price/performance
- All-new RAID controller software
- Intel® Storage Console
- Intel quality, validation, service, and support

Benefits

- High reliability, easy integration, one-stop shopping and support
- Price/performance leader in Intelligent RAID applications
- Economical RAID solution for high-density rack-mount servers
- Improved stability, reliability, and performance
- Full-featured monitoring and configuration utility available pre- or post-OS
- Three-year limited warranty, Advanced Warranty Replacement, and technical support

¹ For the latest server board support please see <http://support.intel.com/support/motherboards/server>

Other Key Intel® Server Building Blocks for a Complete Server Solution

The Intel® RAID Controller SRCMR is designed to work seamlessly with Intel server boards and chassis:



Intel® Server Board SCB2 is a powerful, rack-optimized server board for building reliable, high-density solutions. The Server Board SCB2 features:

- Dual Intel® Pentium® III processor support
- Triple peer PCI buses
- Six DIMM sockets for up to 6 GB of dual interleaved PC133 ECC SDRAM memory
- Advanced Intel® Server Management
- Ultra160 SCSI or ATA/100 RAID



Intel® Server Board SHG2 delivers superior performance, reliability, and manageability for departmental servers:

- Dual Intel® Xeon™ processors with 512KB Level 2 Advanced Transfer Cache support
- Triple-peer PCI buses with support for 64-bit/133MHz PCI-X
- Advanced Intel® Server Management
- Up to 12 GB of ECC DDR200/266 SDRAM



Intel® Server Board SE7500WV2 provides superior performance for reliable and manageable high-density solutions.

The Server Board SE7500WV2 features:

- Support for Dual Intel® Xeon™ processors with 512KB Level 2 Advanced Transfer cache
- Triple-peer PCI buses with support for 64-bit/100MHz bandwidth
- Six DIMM sockets for up to 12 GB of dual interleaved DDR200/266 memory
- Advanced Intel® Server Management
- Ultra160 SCSI or ATA/100 RAID



Intel® Server Chassis 5200 is designed specifically to work in tandem with the Intel® Server Board SHG2. Multiple options enable extensive customization of the Server Chassis SC5200, for example:

- A base configuration features five one-inch fixed-drive bays, five fans for ample cooling, and a 450W PFC power supply.
- A hot-swap redundant-power and fan pedestal configuration includes seven fans (five of which are hot-swap redundant), a hot-swap redundant drive bay with capacity for five one-inch-high SCSI hard drives, and 350W 2+1 dual line cord redundant power.
- A black rack-optimized redundant-power and fan version provides all the functionality of the redundant-power and fan pedestal version in an easy-to-install 5U rack-optimized chassis.
- An option for up to 10 hot-swap Ultra320 SCSI hard-drive bays boosts internal storage capacity to 730 GB².



Intel® Server Chassis 1300 is a 1U rack chassis designed specifically for the Intel® Server Board SE7500WV2 and includes the following features:

- Two PCI risers with two total 64-bit/100MHz slots
- Three one-inch hot-swap SCSI or two cold-swap ATA drive bays
- 350W PFC AC power supply (non-redundant)



Intel® Server Chassis 2300 is a 2U rack chassis designed specifically for the Intel® Server Board SE7500WV2 and includes the following features:

- Two PCI risers with six total 64-bit/66-100 MHz slots
- Seven one-inch hot-swap SCSI drive bays
- 500W PFC AC 1+1 power supply (redundant module optional), 480W PFC AC power-supply option

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

² At product introduction, based on support of 73GB drives. HDD capacity is expected to increase as new technology is introduced.

Intel® RAID Controller SRCMR Specifications

Hardware

- Intel® IOP 80302 at 66-MHz with hardware XOR
- 32 MB of embedded PC-100 ECC SDRAM with error detection/correction
- 64-bit/66-MHz PCI 2.2 interface
- 2 MB Flash for RAID Firmware
- Diagnostic LED (DS2A1) to indicate SCSI bus I/O activity

Feature Set

- Supports RAID levels 0, 1, 4, 5, and 10
- Supports server's on-board 2-channel, Ultra160 SCSI controller (160 MB/second per channel)
- Intel® Storage Console:
 - Full-featured monitoring and configuration utility available pre- or post-OS
 - Can be run locally or remotely
- Online RAID level migration and capacity expansion without reboot
- Support for up to 30 drives, 15 maximum per channel
- RAID array roaming
- Instant availability and background initialization
- Automatic rebuild with dedicated or pooled hot spare drives
- Variable data stripe size configurable per array
- Non-hard disk drive SCSI device support (tape, CD-ROM, etc.)
- Read/write controller and disk caches
- SAF-TE and SES intelligent enclosure support
- Hot-plug auto-detection configurable for non-intelligent enclosures
- Robust hot-plug drive support

Operating System Support³

- Microsoft® Windows® 2000 Advanced Server (Service Pack 2a or higher)
- Novell® NetWare® 5.1 (Support Pack 2a or higher)
- SCO® UnixWare® 7.1.1
- Red Hat® Linux® 7.1 (2.4 kernel)

Intel® RAID Controller SRCMR Box Contents

- Intel® RAID Controller SRCMR
- Installation Quick-Start Guide
- Resource CD-ROM includes:
 - Intel® RAID Controller documentation
 - User's Guide
 - Intel RAID Software
 - Operating system drivers
 - Firmware and firmware utilities
 - Other utilities (make diskettes, troubleshooting, and others)
 - Intel® Storage Console
 - Intel® Storage Console Plus

Environmental/Electrical Specifications

Height	56 mm (2.20 inches)
Length	167 mm (6.57 inches)
Voltage Requirements	+12, +5, 3.3 (all +/- 5% tolerance)
Thermal Temperature	
Non-Operating	-40° C (Celsius) to 70° C
Operating	-5° C to 60° C

Product Regulations-Safety Compliance

U.S. & Canada	CSA C22.22, No.60950/UL60950, 3rd ed. (2001) (UL Recognition Mark)
Europe	EN60950, CE Mark-EU Directive 73/23/EEC
International	IEC60950
EMI Verification-configured in a compatible⁴ Intel host system	
U.S.	Verified to FCC, Class A
Canada	Verified to ICES-003, Class A
Europe	Verified to EN55022 (Class A) and EN55024 (CE Mark-EU Directive 89/336/EEC)
International/Japan	Verified to CISPR-22/VCCI, Class A
Australia/New Zealand	Verified to AS/NZS 3548, Class A (C-tick Mark)
Taiwan	BSMI
Korea	RRL

Intel® RAID Controller Products

Intel® RAID Controller Family	Intel® Server RAID Controller U3-1 (SRCU31) <i>High-performance RAID card for data-intensive applications</i>	Intel® Server RAID Controller U3-1L Low Profile (SRCU31L) <i>Affordable RAID controller for small and mid-sized businesses</i>	Intel® RAID Controller SRCU32 <i>Full-featured high-performance RAID card with PCI Hot Plug support</i>	Intel® RAID Controller SRCMR <i>Economical modular ROMB (RAID On Mother Board) card</i>
Order Code	BOXSRCU31A	BOXSRCU31LA	SRCU32U	SRCMRU
Processor	Intel® i960 RN I/O 100-MHz	Intel® i960 RS I/O 100-MHz	Intel® 80303 IOP 100-MHz	Intel® 80302 IOP 60-MHz
XOR	Hardware XOR	Software XOR	Hardware XOR	Hardware XOR
Memory	Supports 32 to 128 MB PC100 ECC SDRAM	Embedded 16 MB PC100 ECC SDRAM	Supports 64 to 256 MB Unbuffered PC133 ECC DIMM	Embedded 32 MB PC133 ECC SDRAM
PCI Bus	PCI 2.2 64-bit/33-MHz	PCI 2.2 32-bit/33-MHz	PCI 2.2 64-bit/66-MHz	PCI 2.2 64-bit/66-MHz
SCSI	1 x Ultra160	1 x Ultra160	2 x Ultra160	2 x Ultra160 (leveraging server board SCSI controller)
Form Factor	Standard PCI	Low-profile or standard PCI	Standard PCI	Low-profile PCI card with standard PCI bracket
RAID Levels	0, 1, 5, and 10	0, 1, 5, and 10	0, 1, 4, 5, and 10	0, 1, 4, 5, and 10
SCSI Channels	One	One	Two	Two (using server board's integrated SCSI controller)
PCI Hot Plug Support	No	No	Yes	No
Compatibility ⁵	---	---	---	---
Availability	Now	Now	Now	Now

Item	Product Code
Intel® RAID Controller SRCMR	SRCMRU

3. For latest Operating System support please see <http://support.intel.com/>

4. Compatible host systems denote the system(s) Intel tested the board in and found it compliant.

5. For the latest server board support please see <http://support.intel.com/support/motherboards/server>.

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

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