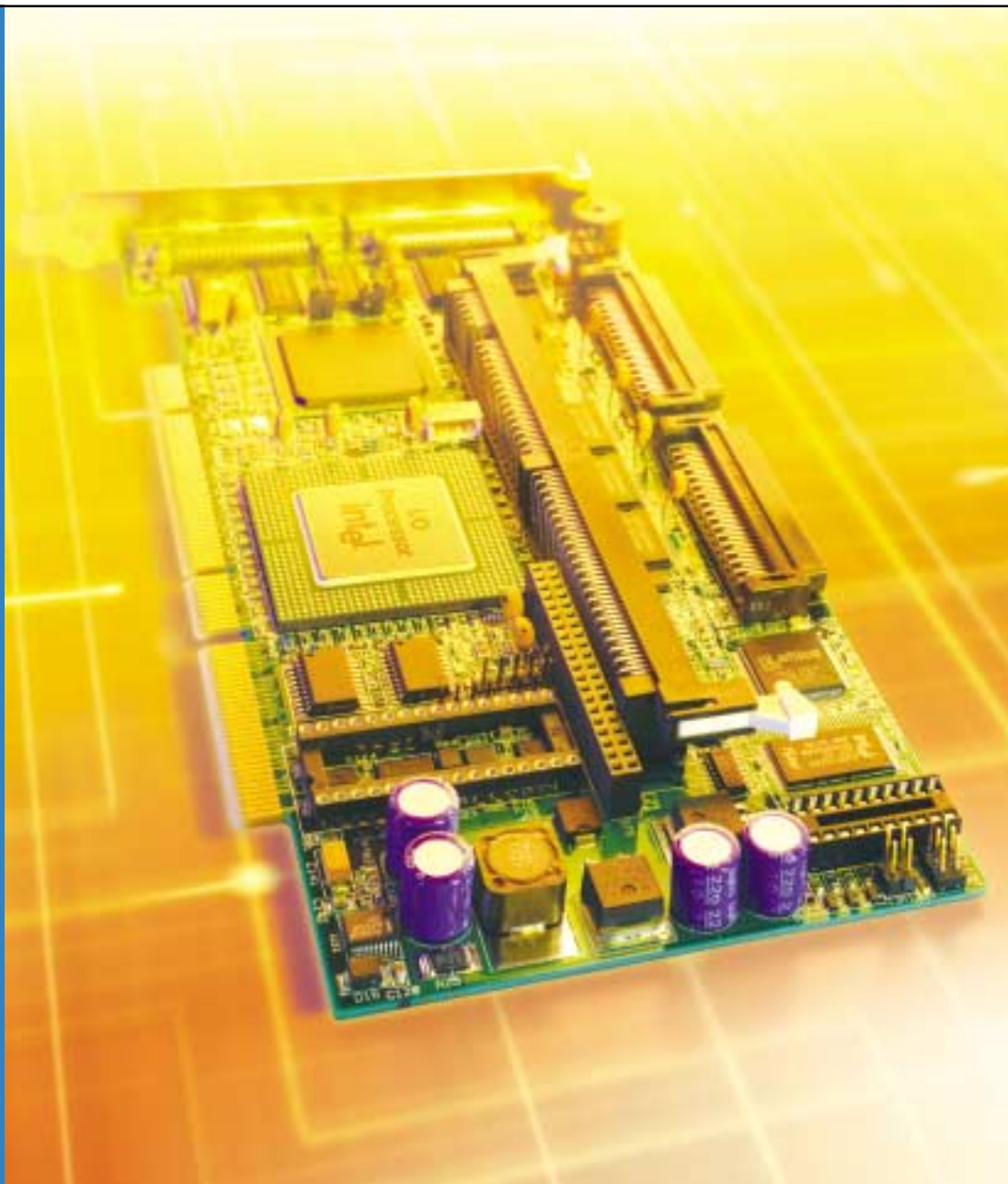




Product Brief

- Intel® I/O 80303 Processor with 64-bit/66-MHz PCI Interface
- Dual-Channel Ultra160 SCSI
- Easy-to-use RAID Configuration and Monitoring Utilities



Intel® RAID Controller SRCU32

High-Performance RAID Solution for Improved Data Protection and High Availability

Improve your data protection with Intel's most advanced, high-performance RAID controller, the Intel® RAID Controller SRCU32. The RAID Controller SRCU32 is a high-performance dual-channel Ultra160 SCSI-based RAID solution built with the new Intel® I/O 80303 processor.

High-Performance, Cost Effective RAID Solutions

The Intel® RAID Controller SRCU32 provides you with the opportunity to offer your customers a RAID solution with a more robust set of hardware and software features, increased data protection, and improved system-level availability and reliability. To meet the requirements of a high-end RAID solution, the two-channel RAID Controller SRCU32 provides the throughput of Ultra160 SCSI at 160 MB/second per channel; support for RAID levels 0, 1, 4, 5, and 10; a 64-bit/66 MHz PCI 2.2 interface; PCI Hot Plug support; and configurable memory support for up to 256 MB of unbuffered PC133 ECC SDRAM memory. The RAID Controller SRCU32 also offers status LEDs and acoustic alarms to assist configuration and monitoring during RAID initialization.

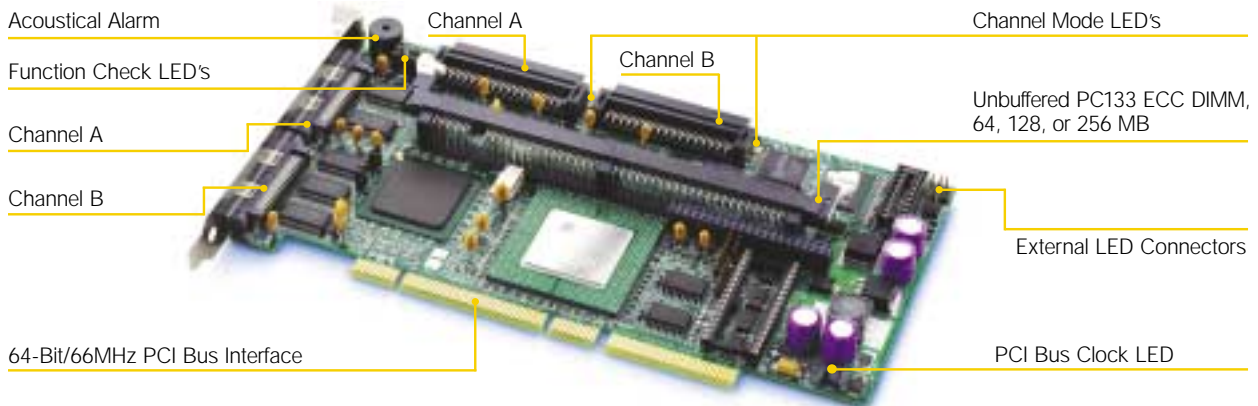
New RAID Software Architecture

The RAID Controller SRCU32 offers the performance, stability, and reliability RAID solutions require through an all-new RAID software architecture. This new architecture delivers a more robust feature set, improved ease of use (through a full-featured BIOS tool available pre- or post-OS), simple

installation, fast initialization, and increased performance. The RAID StorCon (Storage Console) included in this software package, supports remote management, a common BIOS and OS look and feel, easy RAID configuration and monitoring, and other advanced end-user capabilities.



Intel® RAID Controller SRCU32



Features

Intel® 80303 I/O 100-MHz processor
 All-new RAID controller software
 Dual-channel, Ultra160 SCSI support at 160 MB/second per channel, up to 30 drives (15 per channel)
 64-bit/66-MHz PCI 2.2 interface with PCI Hot Plug support
 RAID levels 0, 1, 4, 5, and 10
 RAID-status LEDs and acoustic alarms
 Support for 64 to 256 MB of unbuffered PC133 ECC SDRAM memory
 RAID StorCon
 SAF-TE intelligent enclosure support
 Intel quality, validation, service, and support

Benefits

Outstanding Intelligent RAID performance
 Improved stability, reliability, and performance
 High data throughput with hard drives and high expandability
 High data transfer rate with PCI bus. Supports "hot plug" removal and insertion in servers offering PCI Hot Plug support
 Flexible levels for optimizing performance and fault tolerance of a variety of solutions
 Provides notification of correct installation, monitors SCSI channel data-transfer activity, and provides RAID status-change indicators
 Scalability and performance; ECC error correction helps to protect data integrity
 Full-featured monitoring and configuration utility available pre- or post-OS
 Reliability and ease of use, provides automatic rebuild and online hot spare capability
 Three-year limited warranty, Advanced Warranty Replacement, and technical support

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



Intel® Server Boards are designed, tested, and validated to meet the unpredictable demands of a business in the Internet economy. Built-in performance, scalability, and availability make them ideal for e-Business.



Intel® Server Chassis are specifically designed for Intel® server boards. Server chassis are easy to service, versatile, expandable, and have built-in monitoring features to meet the needs of your server customers.



Intel® Pentium® III Processor with 512KB L2 cache delivers solid performance for value and volume servers. With higher processor speeds and an increased L2 cache, the Pentium III processor with 512KB cache provides the power to handle today's information overload, with the versatility and compatibility to manage a broad range of server applications.



Intel® Xeon™ Processor with 512KB Advanced Transfer Cache and Hyper-Threading Technology provides powerful performance to meet the needs of your server customers and gives them the reliability, flexibility, and headroom necessary for e-Business transaction surges.



Intel® Server Management monitors key server components and fixes many problems automatically, keeping your customers up and running. Intel Server Management offers several key high-availability features including:

- Integrated remote management
- Event alerting and logging
- Proactive fault management
- Serial Data and Console Redirection Over LAN



Intel® PRO/100+ Server Adapters, including Fast Ethernet and Gigabit Ethernet server adapters, help reduce bottlenecks and improve availability with industry-leading performance and advanced server features.

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 today's 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 Intel's added-value server offerings, please visit: www.intel.com/go/serverbuilder

Intel® RAID Controller SRCU32 Specifications

Hardware

- Intel® IOP 80303 100-MHz processor with hardware XOR
- 64 MB to 256 MB of unbuffered PC133 ECC SDRAM memory
- LSI Logic® Ultra160 SCSI Controller
- Dual-channel Ultra160 SCSI (LVD)
- Two external VHDCI 68-pin SCSI connectors and two internal 68-pin LVD SCSI connectors
- Supports RAID levels 0, 1, 4, 5, and 10
- 64-bit/66-MHz PCI 2.2 interface, backward compatible to 32-bit PCI slot, keyed for 3.3V and 5V slots
- PCI Hot Plug support
- Support for up to 30 drives—15 per channel
- Status LED notification of correct installation, channel activity, and DMA access level (by intensity of LED)
- Acoustic alarm indicating state of controller on boot-up, change in state of array, change controller environmental status (during normal operation), hardware failure

Software

- Online RAID-level migration and capacity expansion without reboot
- Array roaming
- Instant availability and background initialization
- Automatic rebuild with dedicated or pooled hot spares
- Variable strip size per volume
- Non-disk drive support (tape, zip, CD-ROM, etc.)
- SAF-TE intelligent enclosure support
- Robust hot-plug drive support

StorCon

- Easy RAID configuration and monitoring
- Typical and advanced capabilities for all levels of end-users
- Remote management
- BIOS- and OS-level common look and feel
- Easy-to-use PCI Expansion ROM utility

Operating System Support¹

- 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 SRCU32 Box Contents

- Intel® RAID Controller SRCU32
- 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)
 - RAID StorCon
 - RAID StorCon+

Environmental / Electrical Specifications

Voltage Requirements	+5, 3.3V (all +/- 5% tolerance)
Power consumption (5V, 12V)	Approximately 10 Watts
Thermal: non-operating	-10° C to 60° C
Humidity: non-operating	20% to 75% relative humidity, non-condensing
Operating temperature and voltage margin	-0° C to 55° C +/- 5% V _{cc}
Form factor (physical dimensions)	Height: 98mm (3.86 inches) Length: 200mm (7.87 inches)
Weight	.35 kg (.77 lb)
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 compatible² 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 ³	---	---	---	---
Availability	Now	Now	Now	Now

Item	Product Code
Intel® RAID Controller SRCU32	SRCU32U

1. For latest Operating System support please visit <http://support.intel.com>.
2. Compatible host systems denote the system(s) Intel tested the board in and found it compliant.
3. For the latest server board support please visit <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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