

Intel® Server RAID Controller U3-1L Low Profile (SRCU31L)



Product Brief

- Validated with Intel® Server Boards and Platforms
- Intel Service and Support
- Three-year Limited Warranty

Specifically designed and tested for Intel® Server Boards and Platforms

Can your customers afford to lose their data?

For affordable data protection and improved disk storage system performance, turn to the latest in Intel's family of RAID products: the Intel® Server RAID Controller U3-1L Low Profile (SRCU31L). The SRCU31L offers your customers a single-channel RAID controller with the latest in SCSI technology. It is pre-validated and easy to integrate into Intel server boards and platforms.

By adding RAID to Intel server building blocks, you increase the level of data protection, performance, and availability in the disk storage systems you deliver. The SRCU31L offers four RAID levels from which to choose, allowing you to select the level that best suits your customer's computing requirements.

RAID (Redundant Array of Independent Disks) technology addresses one of the most common potential points of failure in today's server platform—the hard disk drive. RAID technology provides the ability to distribute large amounts of data, with parity, across an array of disks, enabling data reconstruction in the event of a single disk failure. The purpose of RAID is two-fold: to avoid reliance on a single disk, which could fail with catastrophic consequences, and to implement relatively low-cost storage. In a RAID application, even if a disk drive crashes, the host will remain up and running¹. In many cases, the disk failure will not be noticeable to users connected to the server. With today's hot-swap disk drives and Intel® Intelligent RAID Controllers, the failed drive can be swapped out, replaced, and reconstructed while the server remains fully operational.

Intelligent RAID: Affordable One-Stop Solution

The SRCU31L makes Intelligent RAID a cost-effective option for Intel server boards and platforms. The SRCU31L is a single-channel, Ultra160 SCSI, 32-bit PCI card that supports RAID Levels 0, 1, 5, and 10, and has 16 MB of embedded cache memory. The controller is pre-validated on Intel server boards and platforms², making it easy to integrate into Intel server building blocks.

Intel Service and Support

Intel provides service options to system integrators and dealers on all Intel server building blocks.³ These options include a three-year, limited warranty, next-business-day replacement of in-warranty Intel server products, and optional server spares kits for same-day service. In addition, Intel provides access to support personnel for assistance with technical questions, and dedicated Web sites such as support.intel.com and www.intel.com/go/serverbuilder

Features

Benefits

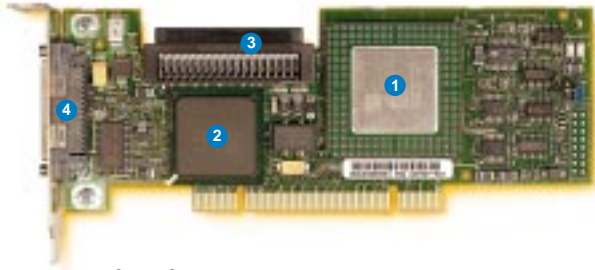
Designed and validated with Intel server boards	High reliability and easy integration
Exceptional price/performance	Affordable RAID solutions for small and mid-size businesses
Intel quality, validation, service, and support	Three-year limited warranty, parts replacement, and answers to technical questions
Low-profile form factor	Easily integrated into high-density rack-mount or tower systems
Online RAID level migration and capacity expansion without rebooting	Provides the ability to add drives to an array and create new volumes on the array while the server is online and in use
Automatic rebuild with global hot spares	Automatically reconstructs data on the hot spare drive when an active drive in the array encounters a failure



¹ Depending on the RAID level implemented

² For a list of validated server products, visit: support.intel.com

³ Some restrictions apply. Not available in all countries.



1. Intel® i960® RS Intelligent I/O Processor
2. LSI Logic* SCSI controller
3. 68-pin LVD SCSI connector
4. 68-pin VHDCI SCSI connector



5. 16MB of PC-100 ECC SDRAM
6. 16Mb Flash Memory

Intel® Server RAID Controller U3-1L Low Profile (SRCU31L) Specifications

Intel Server RAID

- RAID levels 0, 1, 5, and 10
- Supports up to 15 SCSI disk drives
- Instant availability and background initialization
- Automatic rebuild with global hot spares
- Hot-plug drive support
- Online migration and capacity expansion without rebooting
- Variable stripe size per volume
- Online array roaming
- Full and sequential write-back caching selectable per volume
- SAF-TE enclosure support

RAID Storage Console Software

- Easy RAID configuration and monitoring
- Typical and advanced capabilities for all levels of end users
- HTML-based for ease of use and remote manageability

RAID Configuration Utility

- Easy-to-use PCI expansion ROM utility
- Full boot support

Physical and Environmental

PCI Card	Low profile
Form Factor	Length 167mm Height 56mm
PCI Voltages	5V

Absolute Maximum Rating

Operating Temperature	0°C to +55°C
Storage Temperature	-40°C to +70°C
Operating Humidity	90% relative humidity
Operating Storage	90% relative humidity

Operating System Support

- Microsoft Windows® NT® 4.0 Server and Workstation (including Terminal Server and Enterprise Edition)
- Novell Netware® 4.2 and 5.x
- SCO UnixWare® 7.1.x
- Microsoft Windows® 2000 Professional, Server, and Advanced Server
- Red Hat® Linux 6.x

Controller Specifications

- Intel® i960® RS Intelligent I/O processor
- Embedded 16 MB of PC-100 ECC SDRAM
- Single-bit ECC error correction on ECC memory
- Low-profile form factor
- Single-channel Ultra-160 SCSI supports up to 160 MB/second burst transfer rate
- 32-bit PCI 2.2 connector interface
- Single external VHDCI SCSI connector
- Single internal 68-pin high-density SCSI connector

Absolute Maximum Rating

Voltage on any signal with respect to ground	-0.3V to $V_{DD} + 0.3V$
3.3V Supply Voltage with respect to ground	-0.3V to +3.63V
5V Supply Voltage with respect to ground	-0.3V to +5.5V
12V Supply Voltage with respect to ground	-0.3V to +12.6V

Intel® Product Ordering Codes

SRCU31L RAID Controller BOXSRCU31L

For the most current information on all Intel server building blocks visit the Web site at:

www.intel.com/go/serverbuilder

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