Product Brief

Intel® RAID Controller SRCZCRX
- Intel® IOP321 I/O Processor Operating at 400 MHz
- Up to Two Ultra320 SCSI Channels
- Support for RAID 0, 1, 5, 10, and 50

Intel® RAID Controller SRCZCRX

A PCI-X modular ROMB controller providing RAID on up to two Ultra320 SCSI channels

Intel® RAID Controller SRCZCRX

Businesses need server storage solutions that can protect critical data with RAID technology while offloading that technology from the server. They need such solutions to be highly flexible, to support extensive memory capacity, and to provide multiple levels of RAID. To address these needs Intel offers the Intel® RAID Controller SRCZCRX.

Engineered around the Intel® IOP321 I/O processor operating at 400 MHz and based on Intel® XScale® technology, the Intel RAID Controller SRCZCRX provides a low-profile PCI-X modular ROMB solution supporting RAID on one or two onboard Ultra320 SCSI channels. The RAID Controller SRCZCRX offers a wide assortment of RAID capabilities, including an optional battery-back-up unit, 128 MB of embedded ECC SDRAM, and support for RAID 0, 1, 5, 10, and 50. The controller also includes integrated Intel® RAID Software, notably the Intel® RAID Web Console. This GUI-based tool provides a central, unified environment for simplifying the management of remote servers on a network and other critical monitoring and management activities.

For high levels of server reliability and availability, the Intel RAID Controller SRCZCRX also supports drive migration, online capacity expansion, auto rebuild, auto rebuild resume, drive roaming, and other capabilities. Moreover, to provide advanced performance at an affordable price, the controller supports Intel® Extended Memory 64 Technology (Intel® EM64T)[1]. Support for all these technologies makes the RAID Controller SRCZCRX an ideal solution for small to medium-sized businesses seeking a cost-effective RAID solution using onboard SCSI technology.

For extra data reliability, the Intel® RAID Controller SRCZCRX features an optional battery-backup unit providing up to 48 hours of data retention for 128 MB of cache memory.
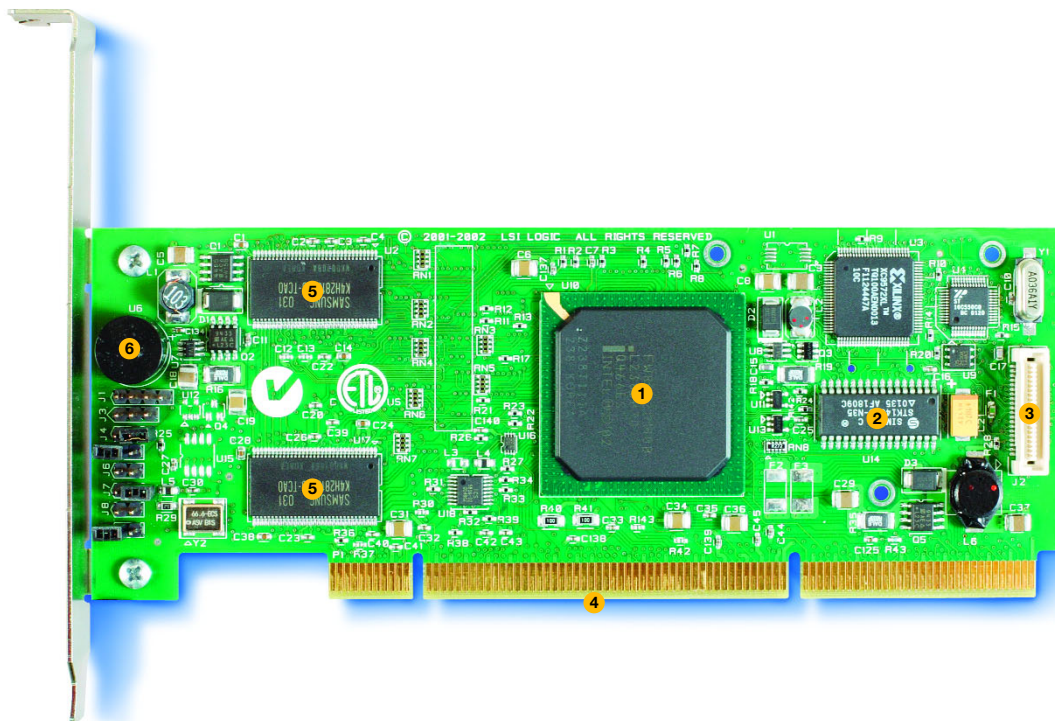
The Intel® RAID Controller SRCZCRX is compatible with Intel® Server Management, providing centralized RAID monitoring, alerting, and configuration details.

Intel® RAID Controller SRCZCRX Features and Benefits

Features	Benefits
Intel® IOP321 I/O processor operating at 400 MHz	Outstanding RAID performance
Modular ROMB solution using the existing SCSI controller integrated onto the server board and supporting up to two SCSI channels and 30 hard drives	Up to 320 MB/sec I/O bandwidth per SCSI channel, I/O expandability
PCI-X 133MHz interface	High data-transfer rates, increased availability and flexibility
128 MB of embedded ECC DDR 333 SDRAM	Data integrity and performance
Optional battery-backup unit providing up to 48 hours of data retention for 128 MB of cache memory	Data reliability
Support for RAID 0, 1, 5, 10, and 50	Flexibility for optimizing performance and fault tolerance in a variety of solutions
Intel® RAID Software: Intel® RAID BIOS Console, Intel® RAID Web Console, and Intel® RAID Flash Utilities	Ease of management and monitoring

The Intel® RAID Controller SRCZCRX is a PCI-X modular ROMB solution for mission-critical servers.

1. Intel® IOP321 I/O processor operating at 400 MHz
2. 32K nonvolatile static RAM
3. Connector for battery-backup daughter card
4. 64-bit modular ROMB PCI-X interface
5. RAM modules
6. Audible alarm

The Intel® RAID Controller SRCZCRX is Part of a Family of Intel® RAID Controllers Based on the Intel® IOP321 I/O Processor Operating at 400MHz.

Product	Market	Positioning	PCI Interface	Disk-Drive Support	Raid Levels	Memory Support	Management Solution
Intel® RAID Controller SRCU42E	Enterprise, department, workgroup, medium-size to large business	Full-featured, high-end, dual-channel Ultra320 RAID controller with PCI Express* interface	PCI Express* x8	Dual-channel Ultra320 SCSI with support for up to 30 drives (15 per channel)	0, 1, 5, 10, and 50	Up to 512 MB of ECC DDR 333	Intel® Server Management
Intel® RAID Controller SRCU42X	Enterprise, department, workgroup, medium-size to large business	High-performance dual-channel Ultra320 PCI-X RAID controller	PCI-X 133MHz (compliant with PCI 1.0 and 2.2)	Dual-channel Ultra320 SCSI with support for up to 30 drives (15 per channel)	0, 1, 5, 10, and 50	Up to 512 MB of ECC DDR 200	Intel Server Management
Intel® RAID Controller SRCZCRX	Small and medium-size business, high-density servers	PCI-X modular ROMB controller providing RAID on up to two Ultra320 SCSI channels	PCI-X 133MHz	Single- or dual-channel Ultra320 SCSI with support for up to 30 drives (15 per channel)	0, 1, 5, 10, and 50	Includes 128 MB of embedded ECC DDR 333	Intel Server Management
Intel® RAID Controller SRCS16	Small business or graphic design	High-performance six-port Serial ATA RAID controller with SATA II enclosure-management support	PCI 2.2 64-bit/66MHz	Support for up to six independent SATA ports	0, 1, 5, 10, and 50	64 MB of embedded ECC SDRAM	Intel Server Management

See **http://www.intel.com/go/serverbuilder** for details on specific Intel® RAID Controller configurations.

Intel® RAID Controller SRCZCRX Specifications

Hardware

System	Intel®-based server or equivalent with PCI-X 133MHz
Processor	Intel® IOP321 I/O processor operating at 400 MHz with hardware XOR
Memory	128MB embedded ECC DDR 333 SDRAM
PCI Interface	PCI-X 133MHz, ROMB-enabled slot
SCSI	Onboard single- or dual-channel Ultra320
Form Factor	Low-profile, half-length PCI: 6.6" x 2.6" (168 mm x 66 mm)
Components	Audible alarm, I²C connector (enclosure management)

Key RAID Features

RAID Levels Supported	0, 1, 5, 10, and 50
Reliability	Optional battery-backup unit for up to 48 hours of cache data retention
Scalability	Online RAID-level migration and capacity expansion without the need for reboot
Configurability	Variable stripe size, variable cache options, drive coercion, array spanning, variable rebuild rate
Availability	Auto hot-spare, auto rebuild, auto rebuild resume, drive roaming, controller migration, online capacity expansion, remote monitoring and management

Operating System Support

For the latest information on operating system support, visit http://support.intel.com/support/motherboards/server

Microsoft* Windows Server* 2003 Enterprise Edition, Microsoft* Windows* 2000 Advanced Server, Novell* NetWare*, Red Hat* Enterprise Linux*, SCO* OpenServer*, SCO* UnixWare, SUSE* LINUX* Professional, SUSE* LINUX* Enterprise Server

Power Requirements

DC Power Supply	14W
+5 V	2A maximum continuous current
+3.3 V	0A maximum continuous current
+12V	0.3A maximum continuous current (when battery is charging)
–12V	10mA maximum continuous current

Environment

Ambient Temperature	Operating (dry bulb): 0ºC to 55ºC, non-operating (dry bulb): –40ºC to +115ºC
Relative Humidity	5% to 80% non-condensing

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® RAID Controller SRCZCRX subassembly guide.)

Country	Certification Safety and/or EMC	Regulatory Mark Safety and/or EMC
Australia/ New Zealand	Not applicable / AS/NZS 3548 Class B	C-Tick
Canada	CSA60950 / ICES-003 Class B	ETL / ICES
Europe	EN60950 / CE Directive 73/23/EEE/EN5022 Class B / EN5024 / CE Directive 89/336/EEC	CE
International	IEC60950 / CISPR 22 Class B	Not applicable
Korea	Not applicable / MIC 1997-41/42	MIC
Japan	Not applicable / Class B Verification only	VCCI
Taiwan	Not applicable / CNS 13438 Class B	BSMI
United States	UL60950 / FCC Class B	ETL / FCC

Intel® RAID Controller SRCZCRX – Ordering Information

Product	Order Code(s)
Intel® RAID Controller SRCZCRX	SRCZCRX
Optional Battery Backup Unit	AXXRBBU1

[1] 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.

For more information on how to make the Intel® RAID Controller SRCZCRX part of your server environment, please contact an Intel® Channel Membership Programs participant.