

Adaptec® Zero-Channel RAID Family



Innovative zero-channel designs for an easy and cost-effective upgrade to RAID

Adaptec's family of zero-channel RAID (ZCR) cards offer the ideal solution for customers who want an affordable, flexible upgrade path to advanced RAID. Each ZCR card takes advantage of the system motherboard's existing Ultra160 or Ultra320 SCSI I/O channels by using complimentary logic designed on the motherboard. This innovative approach reduces the cost of the RAID card by eliminating the need for a SCSI I/O chip on the card.

Adaptec ZCR cards use the Adaptec AIC™-7930W I/O processor. The AIC-7930W is extremely efficient, consuming 75% less power than comparable I/O processors. Operating at a mere two watts, Adaptec ZCR cards dissipate less heat than traditional RAID cards, making them ideal in rackmount server environments where heat dissipation is a critical consideration.

Adaptec ZCR cards support advanced RAID features such as online capacity expansion (OCE), immediate array availability with background initialization, and RAID levels 0, 1, 10, 5, 50, and JBOD. Each card is compatible with Windows NT®, 2000, RedHat, and SuSE Linux.

Storage Management Software

Adaptec Ultra160 SCSI ZCR cards come packaged with Adaptec's JAVA-based Storage Manager Pro™ which allows users to locally and remotely configure and manage cards installed in one or more servers from a single client workstation. Adaptec Ultra320 SCSI ZCR cards are shipped with Adaptec Storage Manager™. Both software management tools support online expansion of arrays when additional capacity is needed – providing convenience, flexibility, and maximum server uptime.

Compatibility, Reliability, and Support

Adaptec zero-channel RAID cards are designed to work with motherboards incorporating a complementary logic, such as Adaptec Embedded RAID Logic (EMRL) or Intel RAIDIOS logic. The Adaptec RAID Ready icon identifies motherboards implementing Adaptec EMRL technology.



Like all Adaptec products, the Adaptec ZCR cards have been extensively tested with third party systems and SCSI devices to deliver the utmost in compatibility, now and in the future. They are backed by a 3-year warranty and Adaptec's industry leading technical support.

Adaptec SCSI RAID 2000S & 2010S

The Adaptec 2000S & 2010S are low-profile ZCR card that connects to a standard PCI slot. These cards are compatible with motherboards incorporating Adaptec EMRL technology or Intel RAIDIOS logic. Compatibility across multiple ZCR technologies makes the Adaptec 2000S or 2010S a flexible choice for customers looking to standardize on a single RAID card.

Adaptec SCSI RAID 2005S & 2015S

The "credit-card size" form factor of the Adaptec 2005S & 2015S is one of the smallest RAID form factors available. Measuring at 3.2" x 3.8", these innovative RAID card plug into a specially designed small form factor PCI connector enabled with Adaptec EMRL technology. The unique design gives customers the ability to offer customized RAID data protection and performance without sacrificing a PCI slot on the motherboard, a premium in 1U and 2U rackmount servers.

Product Highlights

- Unique form factors ideal for high-density server environments
- Adds advanced RAID functionality to onboard Adaptec SCSI
- Consumes 75% less power than comparable one- and two-channel RAID cards
- Supports RAID levels 0, 1, 10, 5, 50, and JBOD
- Simplifies array management with easy-to-use Adaptec storage management software

Adaptec Zero-Channel RAID Family

	Adaptec SCSI RAID 2000S (1931500)	Adaptec SCSI RAID 2010S (2004000)	Adaptec SCSI RAID 2005S (1957500)	Adaptec SCSI RAID 2015S (2004100)
Why buy	Affordable, low-profile RAID design – easily upgrades onboard SCSI to RAID		Affordable, “credit card size” RAID design – easily upgrades onboard SCSI to RAID	
Environment	Ideal for Intel-based servers and workstations implementing Adaptec SCSI zero-channel RAID		Ideal for Intel-based servers and workstations implementing Adaptec SCSI zero-channel RAID	
Device support	15 SCSI devices per channel		15 SCSI devices per channel	
Data transfer rate	Up to 160 MByte/sec per channel	Up to 320 MByte/sec per channel	Up to 160 MByte/sec per channel	Up to 320 MByte/sec per channel
RAID levels	0, 1, 10, 5, 50, JBOD		0, 1, 10, 5, 50, JBOD	
Cache memory	48 MByte onboard ECC SDRAM		48 MByte onboard ECC SDRAM	
Bus type	64-bit/ 66 MHz PCI		64-bit/ 66 MHz PCI	
System requirements	Intel PC or equivalent with PCI slot supporting Adaptec Embedded RAID Logic (EMRL) or Intel RAIDIOS logic		Intel PC or equivalent with specially-designed small form factor PCI connector supporting Adaptec Embedded RAID Logic (EMRL)	
Operating system support	<ul style="list-style-type: none"> Windows NT/2000/XP RedHat and SuSE Linux <i>(for latest supported kernels visit www.adaptec.com)</i>		<ul style="list-style-type: none"> Windows NT/2000/XP RedHat and SuSE Linux <i>(for latest supported kernels visit www.adaptec.com)</i>	
Key RAID features	<ul style="list-style-type: none"> Online capacity expansion Background initialization <i>(for immediate RAID availability)</i> S.M.A.R.T. support SES/SAF-TE support Hot-swap disk drive support for easy replacement Hot-spare disk support with automatic rebuild Supports bootable arrays 		<ul style="list-style-type: none"> Online capacity expansion Background initialization <i>(for immediate RAID availability)</i> S.M.A.R.T. support SES/SAF-TE support Hot-swap disk drive support for easy replacement Hot-spare disk support with automatic rebuild Supports bootable arrays 	
Software management and configuration	<ul style="list-style-type: none"> Storage Manager Pro Storage Manager RAIDUTIL BIOS configuration utility 	<ul style="list-style-type: none"> RAIDUTIL BIOS configuration utility 	<ul style="list-style-type: none"> Storage Manager Pro Storage Manager RAIDUTIL BIOS configuration utility 	<ul style="list-style-type: none"> RAIDUTIL BIOS configuration utility
Physical dimensions	Low-profile: 2.5in H x 6.6in L 6.25cm H x 16.5cm L		3.2in H x 3.8in L 8cm H x 9.5cm L	
Operating temperature	0°C to 55°C		0°C to 55°C	
Power requirements	1 amp @ 3.3V		1 amp @ 3.3V	
Warranty	3 years		3 years	

○ 2000S
○ 2010S



○ 2005S
○ 2015S



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