

Adaptec® Serial ATA RAID 1210SA



Cost-effective storage connectivity and data protection for desktops, workstations, and sub-entry servers

Serial ATA, the successor technology to parallel ATA for data storage, is a point-to-point connection that delivers full throughput to each storage device by allowing multiple ports to be managed by a single controller. Adaptec Serial ATA technology delivers data transfer rates starting at 1.5 Gbit/sec and a performance roadmap that calls for extensions to 3.0 Gbit/sec and ultimately 6.0 Gbit/sec. Adaptec's Serial ATA cables are thinner, simpler to route and install, and provide better airflow for system cooling than parallel ATA cables.

Adaptec Serial ATA RAID 1210SA

The Adaptec Serial ATA RAID 1210SA card is a two-port controller featuring Adaptec HostRAID™ – an integrated RAID technology that maximizes system performance and uptime. The Adaptec 1210SA supports up to two Serial ATA drives and offers RAID levels 0 (striping), 1 (mirroring), and JBOD (individual drive). The Adaptec 48-bit LBA support enables use of disk drives exceeding 137 GByte in capacity. The Adaptec 1210SA supports Windows® XP, Windows 2000, RedHat Linux, and SuSE Linux.

Adaptec Serial ATA RAID applications

The Adaptec 1210SA allows end users to tune their system performance and data protection. On personal computers, the striping feature of the Adaptec 1210SA bolsters the performance of applications such as audio/video streaming and gaming. The Adaptec 1210SA's mirroring capability protects data for applications such as personal finance. In the small office and home office environment, the Adaptec 1210SA can be used as a boot device to protect the operating system in print, file, and storage servers.

Why Adaptec Serial ATA RAID?

The Adaptec 1210SA is the first in a family of Serial ATA RAID controllers delivered by Adaptec. The family of controllers is a key part of the Adaptec effort to help organizations cost-effectively deploy, manage, scale, and protect storage resources. Adaptec is driving RAID adoption with new RAID product and technology development, compatibility testing with motherboards, operating systems, applications and disk drives, RAID application education, and global customer care.

Adaptec Serial ATA RAID 1210SA performance advantages

The Adaptec 1210SA improves performance over a comparable parallel ATA RAID controller by 40 percent. (Figure 1)

Implementing a two-drive RAID 0 array using the Adaptec 1210SA delivers double the performance of a single Serial ATA drive. (Figure 2)

Easy-to-use storage management

The Adaptec Serial ATA RAID 1210SA operates under Adaptec Storage Manager™ – Browser Edition, a browser-based storage management tool that centralizes management of all Adaptec host-based RAID products. The intuitive RAID management tool provides pop-up tips and online help to simplify the creation and management of RAID arrays.

Compatibility, reliability, and support

Like all Adaptec products, the Adaptec Serial ATA RAID 1210SA has been extensively tested with third-party systems to deliver the utmost in compatibility, now and in the future. It is backed by a 3-year warranty and Adaptec's industry-leading technical support.

Product Highlights

Two ports support up to two Serial ATA hard disk drives

RAID 0, 1, JBOD

48-bit LBA support

Low-profile form factor

Bootable array support

Background initialization

Adaptec Serial ATA RAID 1210SA

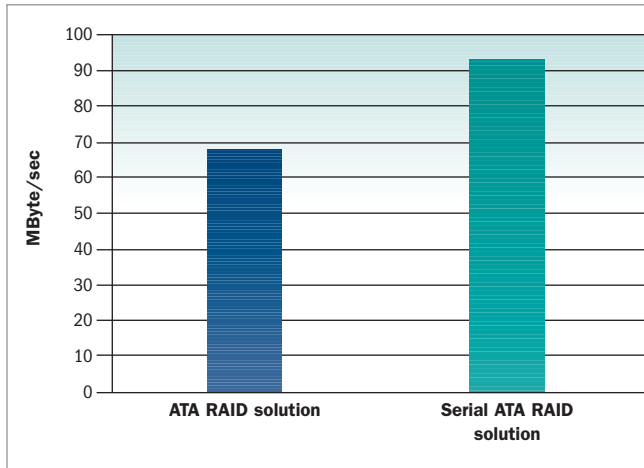


Figure 1: Adaptec 1200A vs 1210SA RAID 0 Sequential Reads

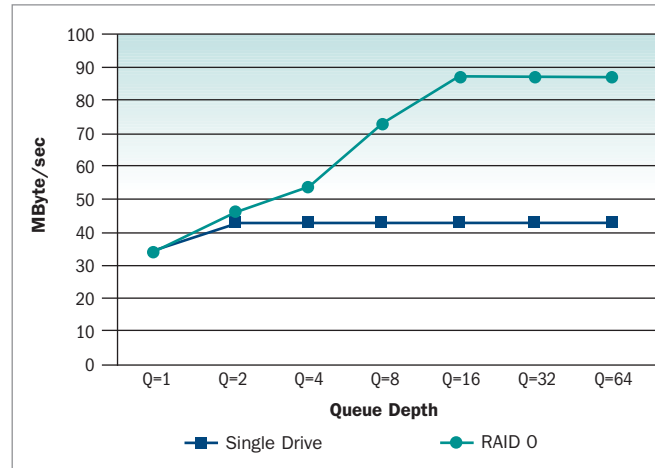


Figure 2: Adaptec 1210SA RAID 0 vs Single Drive

Adaptec Serial ATA RAID 1210SA (2015000)

Why to Buy	Low-cost Serial ATA RAID card for data protection and increased performance
Customer Needs	Ideal for desktop and workstations as well as sub-entry servers requiring RAID mirroring or striping
Environment	Small office and home office as a boot device for print, file, and storage servers. Enhanced performance for video editing, video/audio streaming, and gaming applications.
Device Support	- Up to two Serial ATA disk drives 48-bit LBA supports drives larger than 137 GByte
Data Transfer Rates	Up to 1.5 Gbit/sec
RAID Levels	0, 1, JBOD
Bus Type	32-bit/66MHz
System Requirements	Intel PC or equivalent with available universal PCI slot
Operating System Support	Windows XP, Windows 2000, RedHat and SuSE Linux (for latest supported kernels visit www.adaptec.com)
Key RAID Features	- Background initialization - Support bootable arrays
Software in Kit	Adaptec Storage Manager™— Browser Edition, BIOS configuration utility
Cables in Kit	Two, 1-meter Serial ATA cables
Physical Dimensions	PCI MD2 form factor (low-profile) 2.5 inch H x 6.6 inch L 6.4 cm H x 16.8 cm L
Operating Temperature	0° to 55° C
Power Requirements	0.3 amps @ +5V
Warranty	3 years

— 1210SA



Adaptec, Inc.
691 South Milpitas Boulevard
Milpitas, California 95035
Tel: (408) 945-8600
Fax: (408) 262-2533

Literature Requests:
US and Canada: 1 (800) 442-7274 or (408) 957-7274
World Wide Web: www.adaptec.com
Pre-Sales Support: US and Canada: 1 (800) 442-7274 or (408) 957-7274
Pre-Sales Support: Europe: Tel: (44) 1276-854-500 or Fax: (44) 1276-854-505

Copyright 2002 Adaptec, Inc. All rights reserved. Adaptec, the Adaptec logo, Storage Manager, and HostRAID are trademarks of Adaptec, Inc., which may be registered in some jurisdictions. Microsoft and Windows are registered trademarks of Microsoft Corporation, used under license. All other trademarks used are owned by their respective owners.

Information supplied by Adaptec Inc., is believed to be accurate and reliable at the time of printing, but Adaptec Inc., assumes no responsibility for any errors that may appear in this document. Adaptec, Inc., reserves the right, without notice, to make changes in product design or specifications. Information is subject to change without notice.