

### INTRODUCTION

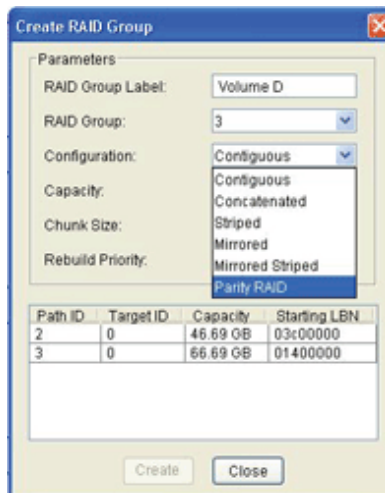
The 4 port ADSA4R5 provides high speed SATA in a PCI controller supporting RAID5 and JBOD, allowing desktop configurations with only PCI slots to have the newest RAID features. This RAID5/JBOD controller supports configurations of RAID 1, RAID 0, RAID 1+0, RAID 1 + S, RAID5 and JBOD. JBOD combines individual drives into one large volume to show as one drive letter.

With the Addonics optional Disk Array 4SA or 3SA system, you can add high performance storage system rivaling the traditional SCSI storage at less than half of the cost.



### FEATURES

- SATA II compliant
- Support data transfer of 3Gbits/sec (300MB/sec)\*
- Fits standard Desktop case and low profile systems
- PCI compatible
- 4 Internal Serial ATA ports
- Work with any Serial ATA drive
- Support large hard drives of 137 GB or greater
- RAID5/JBOD controller configuration possibilities
  - RAID 0, RAID1, RAID 1+0, RAID 1+ S, RAID5



- JBOD - combines individual drive into one large volume to show as one drive letter
- Can be used as a non-RAID controller for 4 individual drives
- Port Multiplier compatible
- Silicon Image chip set Sil 3124
- Hot swap - device can be removed and added without system shut down or restart
- simple plug and play
- compatible with Windows 2000, XP, and 2003, Vista

### SPECIFICATIONS

- Fully compliant with Serial ATA 1.0a and Serial ATA II Extensions to Serial ATA 1.0a Specifications revision 1.1
- Support SATA II transfer rate of 3G/sec (300 MB/ sec)\*
- Compliant with SATA 1.0 specification
- Supports SATA II First-party DMA commands for **Native Command Queuing (NCQ)**
- Supports **Serial ATA II Port Multiplier** 1.0 Specifications revision 1.1
- Plesiochronous, Single PLL architecture, 1 PLL for 4 ports
- 48-bit LBA support
- Four independent DMA channels with 256B FIFO per channel
- Virtual DMA in PCI with serial link in legacy PIO mode
- Supports command buffering for ATA TF shadow registers
- Independent Link, Transport, data FIFO, command fetch, scatter/gather, and command execution
- 31 Commands and Scatter/Gather Tables per Port
- Supports ATAPI devices: CD-ROM, DVD-ROM, etc.
- Supports bootable drive
- Hot-Plug capable
- Supports SATA active signal for 4 separate LEDs
- Built-in firmware RAID support for RAID 0, 1, 10 or 1+S, RAID 5, JBOD
- Supports Spread Spectrum in receiver
- Independent 256-byte FIFOs (32 bit \* 64 deep) per Serial ATA channel for host reads and writes
- Low Profile PCI form factor
- Integrated PCI DMA engines
- Four Pin header on board for LED connection
  
- Temperature: Operating 0 to 70 degree C.
- Storage: -25 to 90 degree C.
- Humidity: Operating 20% to 80%
- Non Operating 15% to 90%
- 32 bit, 33/66MHz fully compliant PCI host interface
- drivers for Windows 2000, XP and 2003 Server
- **PCI**
  - Compliant with PCI Specification, revision 2.3
  - Supports 66 MHz PCI with 32-bit data
  - Internal application interface multiplexed to 4 ports
  - All registers appear in unified memory space
  - Full-chip command completion status accessible with single PCI burst access
  - I/O port access to register space
  - **Low Profile PCI form factor**

\* The onboard SATA controller chip is SATA II compliant and capable of 3G/sec. Depending on the clock rate of the PCI BUS, the actual data transfer may not be able to reach the 3G/sec data transfer.

### System Requirement

- PC/AT or Compatible System
- One free PCI slot
- Pentium or greater
- Minimum 32 MB RAM
- 10 MB minimum free hard disk space
- One of the following operating systems: Windows 2000, XP, 2003, Vista