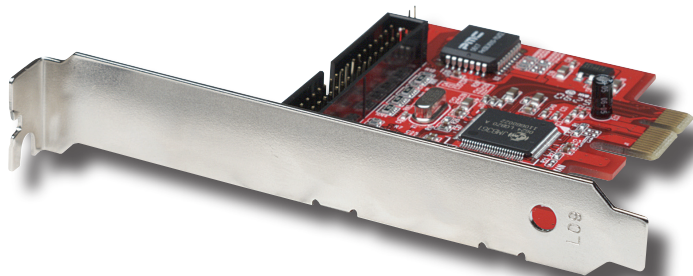


ATA 133 RAID PCI EXPRESS CARD USER MANUAL

MODEL 160537



 **MANHATTAN**

MAN-160537-UM-1106-04

Thank you for purchasing the MANHATTAN® ATA 133 RAID PCI Express Card, Model 160537. Compliant with PCI Express 1.0a specifications, this card supports UDMA6 data transfer rates of up to 133 MBps and full-speed burst transfers on the ATA bus. Using 48-bit LBA, it breaks the size limit of 137 GB hard drives to support larger storage devices.

INTRODUCTION

This ATA 133 RAID PCI Express Card (also known as a low-profile ultra ATA-133 RAID PCIe host adapter) is a controller board that supports both low-profile and regular-size PCI in one card.

The card can upgrade your desktop computer with dual ultra ATA-133 channels and the ability to support RAID 0, RAID 1 and JBOD features. It comes complete with drivers for Windows 2000, XP and Server 2003.

RAID (redundant array of independent disks) greatly enhances two main areas of data storage: performance and data integrity. By using RAID 0, also known as "Striping," performance of sustained data transfer rates is greatly enhanced by simultaneously writing data to two, three or four drives. The second benefit of RAID is data redundancy. RAID 1 (Mirroring) writes identical data on two drives or sets of drives, thus protecting the data from a disk failure. If for any reason, one drive were to fail, your data is secure and available from the mirrored second drive.

FEATURES

- 48 bits LBA can break the capacity limit to support HDD larger than 137 GB
- Supports 1-lane 2.5 Gbps PCI Express
- Includes 2 brackets (low-profile PCI and regular-size PCI)
- Low-profile PCIe form factor
- Pin header on board for LED connection
- Complete with drivers for Windows 2000/XP/Server 2003
- Provides RAID 0 (Striping) to greatly increase the performance of data transfer by simultaneously writing data to two drives
- Provides RAID 1 (Mirroring) to protect the data from a disk failure by writing identical data on two drives
- RAID 0+1 (Mirrored-Striping) combines both striping and mirroring technologies to provide both the performance enhancements that come from striping and the data availability and integrity that comes from mirroring
- JBOD, a virtual disk that combines all disk drives as one entire disk drive
- Supports full-speed burst transfers on the ATA bus
- Supports up to UDMA6 transfer mode

WHAT IS RAID?

RAID (Redundant Array of Independent Disks)

RAID technology manages multiple disk drives to enhance I/O performance and provide redundancy in order to withstand the failure of any individual member, without the loss of data.

Disk Striping (RAID 0)

Striping is a performance-oriented, non-redundant data mapping technique. While striping is discussed as a RAID set type, it actually does not provide fault tolerance. With modern SATA bus-mastering technology, multiple I/O operations can be done in parallel, enhancing performance. Striping arrays use multiple disks to form a larger virtual disk.

Disk Mirroring (RAID 1)

Disk mirroring creates an identical twin for a selected disk by having the data simultaneously written to two disks. This redundancy provides instantaneous protection from a single disk failure. If a read failure occurs on one drive, the system reads the data from the other drive.

JBOD (Just a Bunch of Disks)

The JBOD is a virtual disk in which several drives act as a single disk drive.

WINDOWS XP/2000/2003 DRIVER INSTALLATION

1. Turn the computer system off. Insert the ATA 133 RAID PCI Express Card into an available PCIE slot, then turn the system on.
2. During OS boot-up, Windows will display the Found New Hardware Wizard and "JMicron JMB36X RAID controller."
3. Select "Install from a list or specific location (Advanced)," click "Next," and make sure the driver CD is in your CD-ROM/DVD unit.
4. Select "Search for the best driver in these locations," and check "Include this location in the search." Uncheck the other boxes.
5. Type in E:\ (if your CD-ROM/DVD is E:\), then click "Browse."
6. Check a specific a location; e.g., E:\ATA133 Raid\jmb361\Win2000_xp_2003, and click "Open," then "OK."
7. When the wizard indicates that it found a driver for the device, click "Next."
8. The wizard will now copy the required files to the system and start the driver. After starting the driver, the wizard will display a completion dialog. Click "Finish" to exit the wizard.

SPECIFICATIONS

Port Specifications

- One internal ATA 133 IDE port
- Compliant with PCI Express 1.0a
- 48-bit LBA supports HDD larger than 137 GB
- Dual 2-pin headers for LED indicator connections
- 3.3 V

Bus Specifications

- PCI Express x1
- Bus speed: 2.5 Gbps
- Compliant with PCI Express specifications 1.0a

System Requirements

- Windows 2000/XP/Server 2003/Vista
- PCI Express-enabled system with an available PCI Express slot
- CD-ROM drive

Package Contents

- ATA 133 RAID PCI Express Card, x1 Lane
- Regular and low-profile brackets
- Ribbon cable
- User manual and driver CD



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