PCI-Express / Mini PCI-E
SATA 6Gbps RAID Controller Card

User's Manual

INTRODUCTION

This SATA 6Gbps Controller Card enables Serial ATA PHY up to 6.0Gbps high speed interface utilizing a native PCI Express 2.0 interface. The card supports SATA 6Gbps devices compliant with Serial-ATA Revision 3.2 specification. It is also backward compatible with SATA 1.5Gbps and 3.0Gbps devices This card also supports RAID 0, RAID 1, SPAN and individual working modes for the SATA device connected.

The LED indicator headers on the card are specially designed so that the front panel LED indicator can show Read/Write activities of any hard disk drives connected to the card or to the motherboard.

FEATURES & SPECIFICATION

General

- Based on ASMedia PCI-Express SATA 6Gbps controller supports communication speed of 2.5Gbps and 5.0Gbps
- Compliant with PCI-Express 2.0 / Mini PCI-E 1.1 standard
- Supports RAID 0, 1, SPAN and Individual modes
- Unique Hard Drive Activity LED indicator circuit design: The LED blinks when there is read/write activity on any one of the hard drive connected to the motherboard or to this add-on card
- Supports Windows 8.1/8/7/Vista/Server 2008 32/64-bit

Serial-ATA (SATA) Interface

- Up to 2 SATA 6Gbps ports (internally,externally or their combination)
- Compliant with Serial-ATA Specification 3.2
- Supports communication speed of 6.0Gbps, 3.0Gbps, and 1.5Gbps
- Compatible with SATA-III (6Gbps), SATA-II (3Gbps), SATA-I (1.5Gbps) hard drives and SSDs
- Supports Gen1m and Gen2m SATA PHY
- Supports Native Command Queue (NCQ)
- Supports SATA Port Multiplier
- Supports SATA port Hot-Plug
- Supports IDE/AHCI mode

PACKAGE CONTENTS

- SATA 6Gbps RAID Controller Card x 1
- User's manual x 1
- Optional LED Cable x 1

BEFORE INSTALLATION

- The user must have basic knowledge of installing an add-on card and its driver to a desktop PC. If you have any queries, please call your local dealer, or find somebody who is experienced in computer hardware installation.
- Motherboard with a free PCI-Express/mini PCI-E slot and a supported operating system installed.

> **WARNING**
>
> Before installing and activating the controller card, please make sure you have a complete backup of your existing data from hard drives. Manufacturer is not responsible for data loss due to abuse, misuse, or neglect. Should you have any installation problem, please contact your dealer for assistance.

HARDWARE INSTALLATION

1. Turn off your computer and all external devices connected to it
2. Disconnect your computer from the power sources.
3. Open the computer case. Refer to your computer user manual for more details.
4. Find an available PCI-Express / mini PCI-E slot and remove the slot bracket if you are installing into the PCI-Express slot. Save the bracket screw for later use.
5. Align the controller card correctly with respect to the slot and insert it into the slot firmly and evenly. Take care not to force it into the slot. Once you have properly positioned the controller card into the slot, fasten it to the computer case or motherboard with the screw you have just saved.
6. Mount the hard disk(s) on the computer case.
7. Connect the power cable to the hard disk(s).
8. Connect the SATA hard disk(s) to the controller card with the SATA cable.
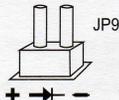9. Connect the computer case's front panel Hard Disk LED cable to pin header JP9 (See Figure 1)

Figure 1

Connect the one end of the LED cable (included) to pin header JP10, and the other end to your motherboard's HDD LED connector
Secure the computer case and switch on your computer.

Port Configuration (Optional features)

There are some specific models in which you can change the SATA port on the card freely by changing the jumper header. Please refer to below table for jumper setting.

SATA Port \ Jumper	The lower 4 sets of jumpers				The upper 4 sets of jumpers			
CON1	2-3	2-3	2-3	2-3	No Connection			
CON2	No Connection				2-3	2-3	2-3	2-3
CON3	1-2	1-2	1-2	1-2	No Connection			
CON4	No Connection				1-2	1-2	1-2	1-2

RAID BIOS SETUP

1. Skip this section if you are not going to create a RAID virtual disk
2. Press the **[Ctrl] + [R]** key. After pressing **[Ctrl] + [R]**, you may have to wait a few seconds before the BIOS screen appears
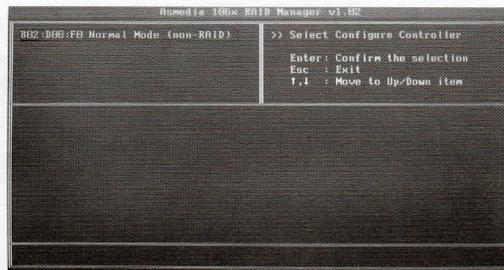
3. Select **Bxx:Dxx:Fx Normal Mode (None-RAID)** press Enter
4. Follow the on-screen instructions and information to configure various RAID functions, such as selecting RAID Level (RAID 0 ,RAID 1 ,SPAN)

5. If you created a RAID virtual disk but later you don't want the RAID function, simply remove the RAID configuration data in the BIOS