

EX-3512

2-Port eSATA3 RAID PCIe Card

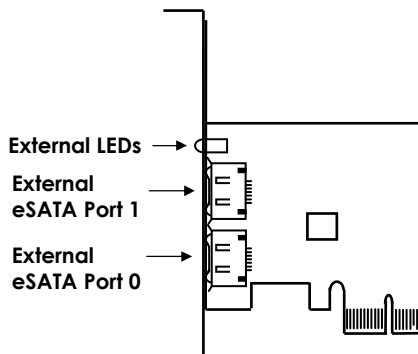
1. Introduction

Thank you for purchasing this 2-Port SATA3 RAID PCI PCIe Card. It is designed to support up to 2 SATA3 ports in RAID 0 and RAID 1 modes. It supports SATA3 hard drives with up to 6.0Gbps data rate. It is an ideal solution to add new external SATA3 drives for your system.

Features:

- ✓ Supports 1-lane 5.0Gb/s PCI Express Data Transfer Rate
- ✓ Built-in 2 eSATA3 Ports
- ✓ Supports RAID 0 and RAID 1 for the 2 SATA3 Ports
- ✓ Supports Windows based RAID GUI
- ✓ Supports SATA3 transfer rate up to 6.0Gb/s (600Mbytes/sec)
- ✓ Supports RAID 1 Rebuild by BIOS Setup Utility
- ✓ Supports Windows 2000, XP, Vista and Win 7

2. Board Layout



3. Hardware Installation

1. Power down the computer, remove the computer cover.
2. Choose an unused PCI Express bus slot, unscrew and remove the slot cover.
3. Place the SATA3 RAID PCIe Card into the slot. Carefully press the board into the slot until it seats firmly.
4. Secure the SATA3 RAID PCIe Card with the slot cover screw.
5. Install the SATA cables from the SATA connectors to your SATA devices.
6. Carefully reinstall the computer cover. Insert and tighten the computer cover screws.
7. Power up the PC and observe the monitor. The BIOS lists all Serial ATA devices attached to the SATA3 RAID PCIe Card. For example:

Marvell 88SE91xx Adapter - BIOS Version x.x.x.xxxx

PCIe x1 5.0Gbps

Mode: CPU AHCI

Virtual Disk

No Virtual Disk!

Physical Disk

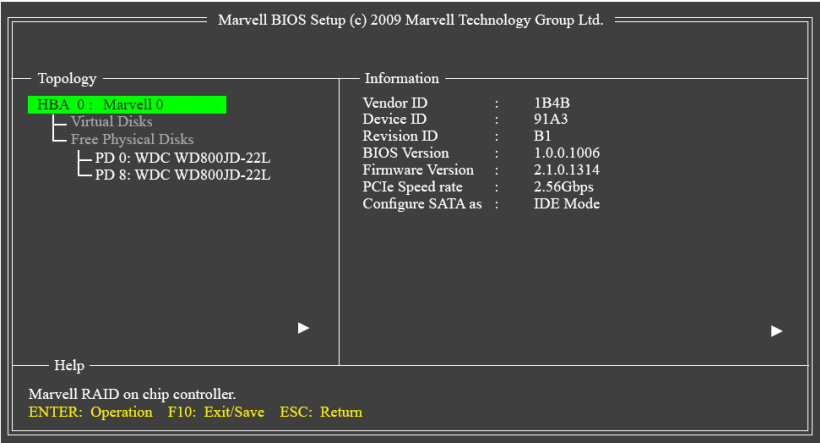
[ID]	[DISK Name]	[Size]	[Speed]
0	SATA ST32000641AS	1.83TB	6.0G
8	SATA ST32000641AS	1.83TB	6.0G

Press <Ctrl>+<M> to enter BIOS Setup or <Space> to continue

If the information displayed on your monitor is correct (the installed devices are listed with the correct device name, etc.), congratulations! You have successfully installed the SATA3 RAID PCIe Card in your computer. If you want to configure your RAID drives, press and hold the 2 keys, **Ctrl** and **M**, to enter the BIOS Setup for this card. You can configure the SATA RAID modes in the BIOS Setup.

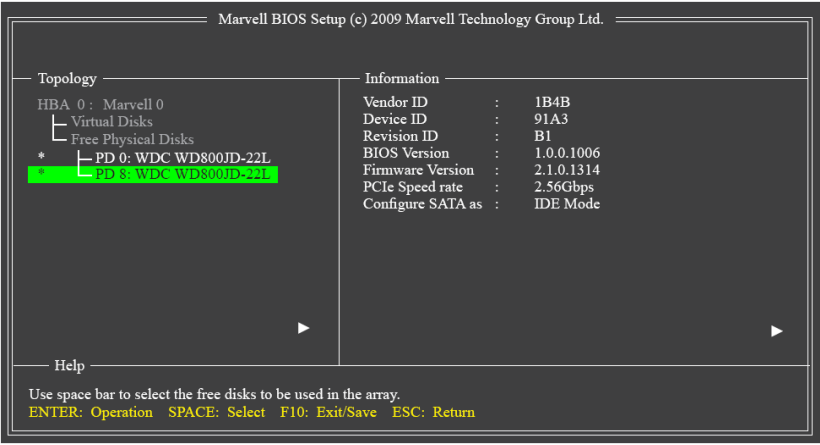
4. Configuring a SATA Disk Array

Turn on your computer and press <Ctrl> and <M> keys to enter BIOS Setup during the POST (Power-On Self-Test).



4.1 Create a Disk Array:

Under **Free Physical Disks**, use the <Space> key to select the hard drives to be included in the RAID array. The selected hard drive will be marked with an asterisk (*). After selecting the hard drives, press <Enter> to proceed.



To further configure the disk array, use the up or down arrow key to move the selection bar to select an item in the right block of the screen and press <Enter>. Set the required items in sequence and press <Enter> after each step:

1. **RAID Level:** Select a RAID level. Options include RAID 0 (Stripe) and RAID 1 (Mirror).

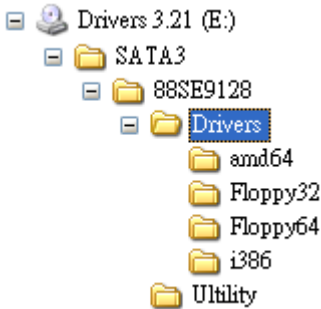
2. **Stripe Size:** Select the stripe block size. Options include 32 KB and 64 KB.
3. **Gigabyte Rounding:** Select whether to permit the installation of a replacement drive that is smaller than the failed drive when performing a RAID 1 rebuild. Options include None, 1G, and 10G.
4. **Quick Init:** Select whether to quickly erase old data on the hard drives when creating the array.
5. **VD Name:** Enter an array name with 1~10 letters (letters cannot be special characters).
6. **Next:** After completing the settings above, move to **Next** and press <Enter> to begin creating the array. When prompted to confirm whether to create this array, press <Y> to confirm or <N> to cancel.
7. When completed, you can see the new array under **Topology\Virtual Disks**.
8. **Save the Settings and Exit.** After you complete the RAID configuration and before you exit the configuration screen, be sure to press <F10> in the main screen. Press <Y> to confirm or <N> to cancel.
9. Now, you may proceed to create the SATA driver diskette (for AHCI mode) and the installation of the SATA driver and operating system

4.2 Delete the Disk Array:

To delete the existing array, select the array on the main menu (example: VD 0: New_VD) and press <Enter> to display the **Delete** option. Press <Enter>. When prompted, press <Y> to confirm or <N> to cancel.

5. Installing RAID Drivers and GUI

With the Marvell RAID utility (RAID GUI), you can setup an disk array or view the current array status in the operating system. To install the utility, insert the supplied driver CD (folders as the following picture).



Please follow the following steps:

1. Run the driver installer (**drvSetup.exe**) in the folder **\SATA3\88SE9128\Drivers** to install the RAID drivers
2. Reboot the system to let the drivers take effect.
3. Run the RAID GUI installer (**\SATA3\88SE9128\Utility\MRUSetup.exe**) to install the RAID Utility.

Note: After the installation, you must login the utility with the same account name and password that you use to login the operating system. If you did not set the account password before, click **Login** to enter the Marvell RAID Utility directly.

