

PCI-e SATA6G HypeDuo Controller Card

Automated SSD/HDD Tiering

80% SSD Performance at 1/3 the Cost

User Manual

Ver. 1.00

Features

- Increase system overall performance by combining a high performance mini SATA SSD and a low cost hard drive
- Maximum 6Gbits/sec*
- Port Multiplier Compatible
- Hot swappable
- Install into standard height or low profile system
- Compatible with any SATA I ,II or III hard drive
- NCQ support
- ★ SATA III max transfer rate of 6.0Gbps

Package Contents

- 1 × PCI-e HyperDuo Controller Card
- 1 × User Manual
- 1 × Driver CD
- 1 × SATA Cable
- 2 × Screws for mSATA SSD

System Requirements

- Windows 2000/XP/2003/2008/Vista/7

Hardware Installation

1. Turn off computer.
2. Unplug power cord and remove case cover.
3. Remove the slot bracket from an available PCI-E slot.
4. To install the board, carefully align the card's bus connector with the selected PCI-E slot on the motherboard. Push the board down firmly.
5. Attach your internal devices to the PCI-e HyperDuo controller Card.

6. Tighten the screw to secure the card.
7. Replace the computer cover and reconnect the power cord.

Steps to create HyperDuo from Controller BIOS

1. Connect one HDD and one mSATA SSD to Hybrid HDD - mSATA SSD controller.
2. Enter Ctrl-M during Marvell Controller POST display to enter into BIOS Menu
3. Select "**HBA 0:Marvell 0**" and **Enter**
4. Hit Enter "**Configuration Wizard**" selection dialog box
5. Hit "**Space bar**"to select SSD and HDD,an "*" will appear next to the device after it is selected
6. After SSD and HDD are select ,hit Enter
7. "**HyperDuo: Safe**" option is highlight .This is the default selection.
8. Hit enter ,a pull down menu will appear with 4 options - "**safe**",Capacity", "**RAID 0**"and"**RAID 1**"Continue from step 8 to create"**HyperDuo Safe Mode**"
9. Select"**Safe**" mode from the pull down menu
 - ▲ Note: Safe mode synchronizes SSD data to HDD for mirrored protection .As a result, performance will be slower than Capacity mode
10. Moving with down key,user can highlight "**Keep Original Data :yes**".This option will keep HDD original data.
 - ▲ Note: If this option is selected, controller will do automatic background sync up from HDD to SSD which could take from 30 minutes to couple hours. During this time,performance to the Safe Mode HyperDuo disk will be degraded. Any performance testing during background initialization running will not be optimized.
- 11.Select"**Next**"
- 12."**Create Virtual Disk - Do you want to create this virtual disk?**" Dialog box will pop up .
Select"**yes**" and **Safe Mode HyperDuo** virtual disk is created.

Continue from step 8 to create "**HyperDuo Capacity Mode**"

13. Select "**Capacity**" mode from the down menu

▲ Note: Capacity mode augments SSD and HDD capacity without mirroring.

The best performance for HyperDuo is achieved via Capacity mode.

14. Select "**Next**" (warning - all data on HDD and SSD will be erased)

15. "**Create Virtual Disk - Do you want to create this virtual disk ?**"

dialog box will pop up.

Select "**yes**" and **Capacity Mode HyperDuo** virtual disk is created

Windows and driver loading

For Windows operating systems , driver path on the driver CD is : CD-ROM :

\\2012A0\\Marvell\\9130 .

For Windows 7 and Vista , a built in AHCL driver will be automatically loaded by Windows 7 and Vista . No user installation is required .

A HyperDuo and RAID manager software is included on the CD . Once installed, user manual can be accessed by clicking on the blue help icon near the top right hand corner of the interface.