Introduction

This 2.5" SATA 6G / USB 3.0 to dual mSATA RAID adapter is an economical choice to use Intel mSATA SSD as a 2.5" SATA storage device. Once being installed into PC/notebook, the Intel mSATA SSD appears as an ordinary SATA storage to any OS and can be configured as a bootable device. Additionally, this adapter supports RAID0(Strip), RAID1(Mirror), JBOD(Port Multiplier) and SPAN(Big) with low power and high efficient RAID operation and easy configurable through GUI.

Features

- Standard 2.5" SATA storage device form factor (100mm x 70mm x 7mm)
- Transparent to OS and does not require any driver
- Can be a primary bootable device containing the OS and applications
- RAID mode switch by hardware strapping or graphic user interface (GUI)
- Upstream port: 7+15Pin SATA Interface x1 / Micro USB 3.0 B-type Female Interface* x1
- Downstream port: mSATA Interface x2
- Compatible to Intel-type mSATA device (mSATA Interface)
- LED indicators for activity and error

SATA 6G Interface Specification

- Complies with Serial ATA Specification Rev. 3.1
- Supports SATA III (6.0Gbps), SATA II (3.0Gbps), and SATA I (1.5Gbps) operation
- Supports Port Multiplier

USB 3.0 Interface Specification

- Complies with USB 3.0 Specification Rev. 1.0
- Supports USB Super-Speed (5.0Gbps), High-Speed (480Mbps) and Full-Speed (12Mbps) operation
- Supports USB 3.0 / 2.0 power saving mode
- Complies with USB Mass Storage Class Bulk-Only Transport (BOT) Specification Rev. 1.0
- Complies with USB Attached SCSI Protocol (UASP) Specification Rev. 1.0

System Requirement

- PC/laptop with SATA / USB interface (SATA III / USB 3.0 interface is preferred)
- Windows 8.1 / 8 / 7 / Server 2003-2008 / Vista / XP 32-/64-bit, Mac 10.3 or later, and Linux (AHCI system and BIOS setting is preferred)

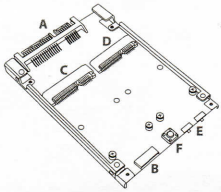
Package Contents

Please check whether the package contains the following items:

- 2.5" SATA 6G / USB 3.0 to Dual mSATA RAID Adapter x 1
- Screws
- User's Manual x 1
- Software CD x 1
- Optional USB 3.0 AM to Micro BM Cable x 1

If any item is missing or damaged, please contact the retailer as soon as possible.

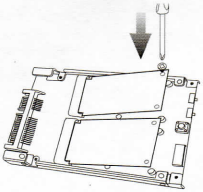
Package Contents



A. SATA 6G upstream port, connect to SATA 6G host interface
B. USB 3.0 upstream port, connect to USB 3.0 / 2.0 host interface*
C/D. SATA 6G downstream ports, install Intel-type mSATA SSD
E. SW1/SW2 slide switch, RAID mode hardware strapping
F. SW3 tact switch, reset button

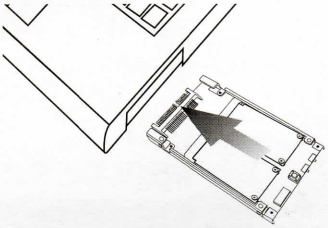
Hardware Installation

1. Install an Intel-type mSATA SSD to the adapter, secure it with two screws included in the package. If you want to use the adapter with RAID mode, please install two Intel-type mSATA SSD to it.



2. Now you can use the adapter as a 2.5" SATA storage device. For example, you can install it into a notebook.
3. Turn off your notebook and all external devices connected to it.
4. Disconnect your notebook from the power sources.

5. Open the HDD case on the underside of your notebook. Refer to your notebook user manual for more details
6. Use the adapter to replace the 2.5" SATA HDD inside.



7. Secure the HDD case and then switch on your notebook.
8. Or you can install the adapter to any 2.5" SATA HDD compatible device like USB portable hard drive enclosure.
9. If you want to use it as USB 3.0 to mSATA adapter, just simply use USB 3.0 AM to Micro BM cable to connect it to any USB host.

RAID Mode Configuration

Warning: All the data on the Intel-type mSATA SSD connected to the adapter will be permanently erased in the following actions.

1. In the Hydra RAID engine, RAID mode configurations can be controlled by hardware strapping or GUI software.
2. According to the tablet below to select RAID mode by hardware strapping (SW1/SW2):

	JBOD	RAID0	RAID1	SPAN
SW1	1-2	2-3	2-3	1-2
SW2	1-2	2-3	1-2	2-3

3. After RAID mode has been modified, you need to physically push the button SW3 or hot plug the adapter in order to reset it. But it's not necessary to push the reset button or hot plug if RAID mode is modified by GUI software.

Windows Graphic User Interface(GUI) Introduction

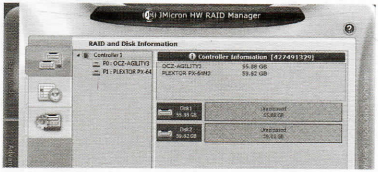
Warning: All the data on the Intel-type mSATA SSD connected to the adapter will be permanently erased in the following actions.

1. Start Windows and insert the driver CD into the CD-ROM drive, assume drive D.
2. Browse to the following folder on the driver CD:

D:\JMicron\JMS562\Utility

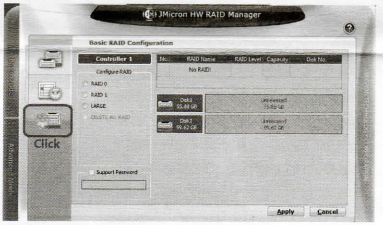
3. Run **Setup.exe** and click **Install** to begin to install JMicron HW RAID Manager.
4. Click **Finish** to exit the installation wizard and launch JMicron HW RAID Manager.

5. You will see **RAID and Disk Information** in the application. Assume two mSATA SSDs are installed to the adapter and hasn 't been set RAID.

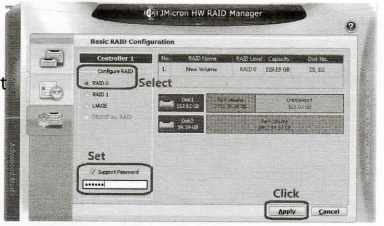


6. Click the second block, there is a **Event Log Viewer**. You can see the message which logs the operation event.

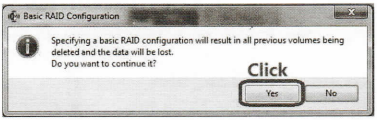
7. Click the third block, you can start **Basic RAID Configuration.**



8. Let's begin to configure RAID, for example, RAID 0. Select **RAID 0** in the block of **Configure RAID**, the application will automatically select the two exited mSATA SSD. If you want to set a password to keep the configuration safer, you can check the box of **Support Password** and set a password. Then click **Apply** to continue.

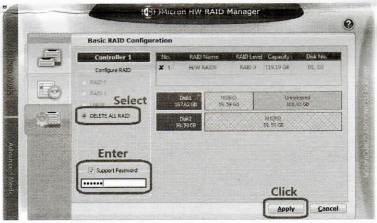


9. A window pops up and asks **Do you want to continue it**? Then click **Yes** to continue.

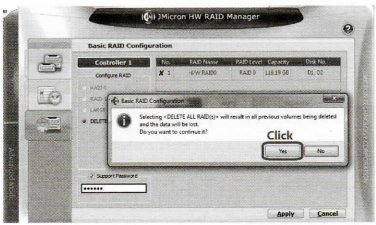


10. Several seconds later, an **Information Message** pops up and tells that H/W RAID0 is created. Then click **OK** to continue. Now you have successfully set two mSATA SSD to RAID 0 array.

11. If you want to delete RAID, select **DELETE ALL RAID** in the block of **Configure RAID**, the application will automatically select the exited RAID 0. If you have set a password before, please enter the correct password, otherwise you can't delete the RAID array. Then click **Apply** to continue.

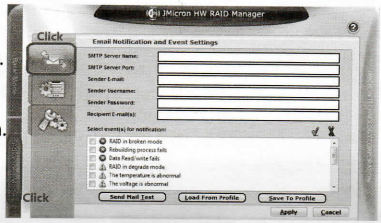


12. A window pops up and asks **Do you want to continue it**? Then click **Yes** to continue.

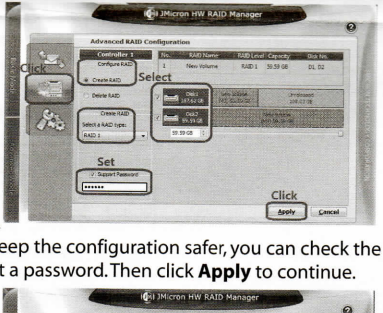


13. Several seconds later, a **Warning Message** pops up and tells that H/W RAID0 is deleted. Then click **OK** to continue.

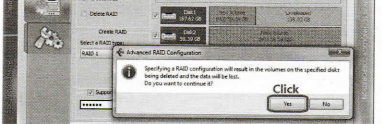
14. Click **Advanced Mode** and click the first block, you will see **Email Notification and Event Settings**. In this window, you can set Email server and Email information, then select events for notification.



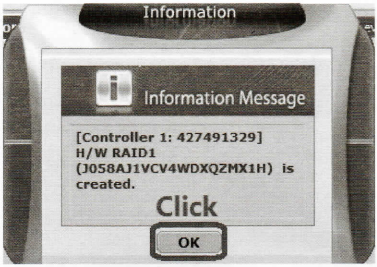
15. Click the second block, you will see **Advanced RAID Configuration**. It provides another way to configure RAID. Assume we configure RAID 1. Select **Create RAID** in the block of **Configure RAID**, and select **RAID 1** in the block of **Create RAID**. Then select the two existed mSATA SSD and adjust the RAID capacity. If you want to set a password to keep the configuration safer, you can check the box of **Support Password** and set a password. Then click **Apply** to continue.



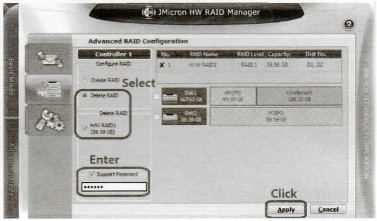
16. A window pops up and asks **Do you want to continue it**? Then click **Yes** to continue.



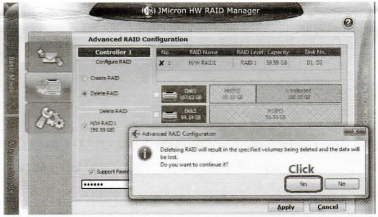
17. Several seconds later, an **Information Message** pops up and tells that H/W RAID1 is created. Then click **OK** to continue. Now you have successfully set two mSATA SSD to RAID 1 array.



18. If you want to delete RAID, select **Delete RAID** in the block of **Configure RAID**, then select **H/W RAID1** in the block of **Delete RAID**. If you have set a password before, please enter the correct password, otherwise you can't delete the RAID array. Then click **Apply** to continue.

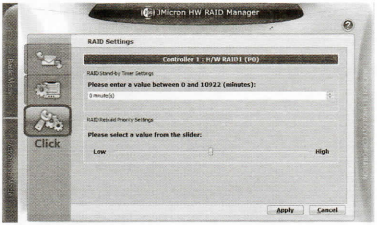


19. A window pops up and asks **Do you want to continue it**? Then click **Yes** to continue.



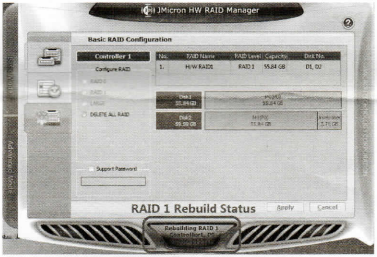
20. Several seconds later, a **Warning Message** pops up and tells that H/W RAID0 is deleted. Then click **OK** to continue.

21. Click the third block, you will see **RAID Settings.** In this window, you can enter a value between 0 and 10922 (minutes) for RAID stand-by time. For example, enter a value 10 (minutes), that means if the RAID array doesn't have any data access (read, write or format) in 10 minutes, it will automatically enter stand-by mode. In this window, you also can select a value from low to high for RAID rebuild priority



RAID 1 Rebuild Procedure

1. If one mSATA SSD of RAID 1 array has been broken, you have to replace it with another good mSATA SSD which capacity should be equal to or larger than RAID 1 capacity.
2. Once the adapter detects a new mSATA SSD installed, it will automatically rebuild RAID 1.
3. You can open JMicron HW RAID Manager to see RAID 1 rebuild status.



Getting The Latest Driver, Software or Document

To get the latest driver, software and document, please visit the following website:

http://www.drivers-download.com

In "Drivers Search" section, please enter the Download code (DL code): **DL-0171601** to search for the latest driver, software or document.

(*) – This feature is available for some models only.