ATTO

ATTO Technology, Inc.

Product Release Notes

ExpressSAS 6Gb RAID Release v3.02 - Mac® OS X

1. General Release Information

These product release notes define the new features, changes, known issues and release details that apply to the ExpressSAS 6Gb RAID adapter product v3.02 that was released on April 23, 2012. This information pertains to Mac OS X 10.4.2, and later, for PowerPC systems, as well as Mac OS X 10.4.7, and later, for Intel® systems.

2. Changes

- *Version 3.02 (Released 4/23/2012)*
    - o **Note:** It is recommended that firmware dated 2/17/2012 be utilized with this driver release.
    - o **New Features, Enhancements and Changes**
        - Several enhancements have been made throughout the driver to resolve Thunderbolt hot plugging and sleep issues.
        - The minimum device wait time when resuming from sleep was increased from 5 to 15 seconds.
        - When resuming from sleep, device state changes are ignored until the device wait time has elapsed.

- *Version 3.01 (Released 2/22/2012)*
    - o **Note:** It is recommended that firmware dated 2/17/2012 be utilized with this driver release.
    - o **New Features, Enhancements and Changes**
        - The fan controller daemon was updated to print a message and use default settings if an error occurs while reading the plist file from the disk.
        - The installer has been updated to set the correct permissions for the /Library/LaunchDaemons directory in OS X 10.5.8, and earlier.
        - Added support for the atreset CLI tool.
        - Corrected an issue where resources are exhausted while command coalescing.

- *Version 3.00 (Released 12/15/2011)*
    - o **Note:** It is recommended that firmware dated 12/15/2011 be utilized with this driver release.
    - o **New Features, Enhancements and Changes**
        - Thunderbolt hot plugging is supported.
        - Added MSI support for 64-bit platforms.
        - The fan controller daemon was updated to function correctly on Xserve systems.
        - Several enhancements have been made to chip reset processing.
        - Enhancements have been made to error recovery and task management while using command coalescing.
        - Report which type of boot image is present on the card with Configuration Tool version 4.02 and later (BIOS, EFI 32-bit or EFI 64-bit).

- *Version 2.10 (Released 06/29/2011)*
  - o **Note:** It is recommended that firmware dated 06/22/2011 be utilized with this driver release.
  - o **New Features, Enhancements and Changes**
    - We now set the default fan controller speed to 1500 RPM on all systems. This speed can also be set by the user via the fan controller daemon.
    - The driver to firmware communication mechanism has been changed. Driver v2.10, or later, is required to support firmware v2.50, and later. Additionally, the v2.10 driver supports earlier firmware versions from v2.00 up through v2.20.
    - The maximum transfer size value has been lowered to 4MB.
    - When resuming from sleep, the driver now waits two seconds before accessing the hardware to give the firmware adequate time to initialize.

- *Version 2.07 (Released 06/10/2011)*
  - o **Note:** It is recommended that firmware dated 04/18/2011 be utilized with this driver release.
  - o **New Features, Enhancements and Changes**
    - Mac OS X Lion Support
    - R60F, R608 and R644 support virtual SES.
    - Added a property to enable the driver in Thunderbolt topologies.
    - This version is included on the OS X Lion DVD.

- *Version 2.06 (Released 03/25/2011)*
  - o **Note:** It is recommended that firmware dated 03/25/2011 be utilized with this driver release.
  - o **New Features, Enhancements and Changes**
    - Increased performance for transactional and streaming applications.
    - Improved handling and discovery of drives during system reboot and when drives are pulled or reset.
    - Expanded reporting for disk drive Vendor ID.
    - NCQ is now enabled by default.
    - Resolved various, minor incident fixes to improve overall performance

- *Version 2.05 (Released 02/16/2011)*
  - o **Note:** It is recommended that firmware dated 02/11/2011 be utilized with this driver release.
  - o **New Features, Enhancements and Changes**
    - Performance improvements in IOPs and MB/s applications.
    - CacheAssure™ performance improvements when in High Protection mode.
    - SAS Multiplexing implemented. This enables the user to achieve performance improvements with 6Gb RAID when using slower 3Gb drives.
    - Improved compatibility between the operating systems range of physical memory and the physical memory of the hardware.
    - Increased the default scatter/gather list size to 512 bytes.
    - Enhanced compatibility and stability on PowerPC systems.

- *Version 2.01 (Released 11/30/2010)*
  - o **Note:** It is recommended that firmware dated 11/19/10 be utilized with this driver release.
  - o **New Features, Enhancements and Changes**
    - Enhanced communication with the SMC controller in a fan controller.

- *Version 2.00 (Released 9/22/2010)*
  - o **Note:** It is recommended that firmware dated 09/17/10 be utilized with this driver release.
    Note: "Any upgrade from a previous version to 2.00 for the driver and firmware must be done in a specific order. Version 2.00 firmware must be updated first with a flash bundle using the ATTO Configuration Tool. Once the new firmware is flashed, "DO NOT REBOOT," the 2.00 driver should be loaded. Your system will appear to freeze for up to three minutes while the new driver is loaded. A reboot is required to use the new update."

- o **New Features, Enhancements and Changes**
  - Initial Release and added support for the R60F.
  - The driver to firmware communication mechanism has been improved. Driver versions 2.00 and later are only supported with version 2.00 and later firmware.
  - The fan controller daemon was updated to enhance support of MacPro5.1 systems.

- *Version 1.00 (Released 5/21/2010)*
  - o **Note:** It is recommended that firmware dated 05/20/10 be utilized with this driver release.
  - o **New Features, Enhancements and Changes**
    - Initial release for the R644, R680 and R608.

Known Issues/Advisements

- "Deep" sleep is supported only on Intel Macs. PowerPC Macs will sleep, but not "deep" sleep, so the sleep light will not pulsate. The only side effect is that when PowerPC systems are put to sleep, the fan speed will increase to the max until the system is awakened.

3. Affected Products

Product Name	SKU
ExpressSAS R644 RAID Adapter	ESAS-R644-000
ExpressSAS R680 RAID Adapter	ESAS-R680-000
ExpressSAS R608 RAID Adapter	ESAS-R608-000
ExpressSAS R60F RAID Adapter	ESAS-R60F-000
ExpressSAS R644 RAID Adapter with CacheAssure	ESAS-R644-C00
ExpressSAS R680 RAID Adapter with CacheAssure	ESAS-R680-C00
ExpressSAS R608 RAID Adapter with CacheAssure	ESAS-R608-C00
ExpressSAS R60F RAID Adapter with CacheAssure	ESAS-R60F-C00

4. Contacting ATTO Support

ATTO Technology, Inc. is renowned for its technical support services. ATTO's goal is to provide you the quickest response possible for your technical support needs, and is available Monday-Friday, 8:00 AM to 6:00 PM EST (except holidays and plant closings).

ATTO Technical Support can be contacted via phone or email:

- Phone: 716.691.1999 ext. 242
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