ATTO Technology, Inc.

Product Release Notes

ExpressSAS 6Gb RAID Release v2.07 - Linux

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 v2.07 that was released on April 21, 2011. This information pertains to the following Linux operating systems: Red Hat Enterprise Linux 4, 5 (x86, x64), openSUSE Linux 11 (x86, x64), SUSE Linux Enterprise Server 10, 11 (x86, x64), and Fedora Linux 12 (x86, x64).

2. Changes

- ***Version 2.07 (Released 04/21/2011)***
  - **Note:** It is recommended that firmware dated 04/18/2011 be used with this driver release.
  - **New Features, Enhancements and Changes**
    - Added support to the R60F, R608 and R644 for virtual SES

- ***Version 2.06 (Released 03/25/2011)***
  - **Note:** It is recommended that firmware dated 03/25/2011 be utilized with this driver release.
  - **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 2/16/11)***
  - **Note:** It is recommended that firmware dated 02/11/11 be utilized with this driver release.
  - **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 Commands per LUN to 64 which helped improve performance in Linux.
    - Increased the default scatter/gather list size to 512 bytes.

- ***Version 2.00 (Released 9/22/2010)***
  - **Note:** It is recommended that firmware dated 09/17/2010 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

©2011 ATTO Technology, Inc.

ATTO Configuration Tool or the Linux CLI tool, atflash_32 (for 32-bit OS) or atflash_x64 (for 64-bit OS) version 1.01. Once the new firmware is flashed, the 2.00 driver should be loaded using the "install.sh" script as described in the "installation instruction" in driver readme file. When the script asks if you would like to load the driver, type "N" for no and reboot the system to initiate all changes. Please note that if the driver is installed first you will not be able to install the 2.00 firmware using the ATTO Configuration Tool. Downgrading back to 1.00 will allow you to flash the 2.00 firmware.

- **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.
  - Added support for chained scatter/gather lists.

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

3. Known Issues/Advisements

- *** See known firmware issues in the DOS release notes ***

4. 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

5. 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 8:00 PM EST (except holidays and plant closings).

ATTO Technical Support can be contacted via phone or email:

- Phone: 716.691.1999 ext. 242
- E-Mail: techsupport@attotech.com

©2011 ATTO Technology, Inc.