



ExpressSAS RAID Flash Bundle v080123

1. General Release Information

These product release notes define the new features, changes, known issues and release details that apply to the ExpressSAS RAID adapter flash bundle package, version 080123, which was released on 01/24/2008. This information pertains to the flash bundles and BIOS utility associated with the ExpressSAS RAID product.

2. Changes

- **Version 080123 (Released 1/24/2008)**
 - The following apply to changes made from v1.20 to v2.00
 - **New Features**
 - **Performance improvements:** Up to 5x improvement in IOPS performance.
 - **Pass-through mode:** Provides support for operation of the RAID adapter with non-block devices such as tape drives and libraries.
 - **Auto rebuild:** Support added to allow users to set the adapter to automatically begin a rebuild of a RAID group when a failed drive is replaced with a new, clean drive.
 - **Staggered drive spin-up:** Support added to set the interval to spin drives up individually ultimately lowering the power consumption on the enclosure power supply.
 - **SES support:** Added support to monitor the health of the storage enclosure and its respective devices.
 - **SpeedRead functionality:** Added adaptive speedread control to provide optimal performance based on the read I/O of your application (i.e. sequential vs. random).
 - **Incident Resolutions/Bug Fixes/Changes**
 - Enhanced device enumeration to improve user experience by providing feedback while waiting for drives to be discovered.
 - Improved messaging during the configuration of hot spares.
 - Reassign I/O base registers when a system BIOS improperly assigns I/O addresses to avoid system hangs on some platforms.
 - Improved detection of mapped partitions to avoid failed deleting RAID group attempt when no partitions are mapped.
 - Fixed system hang with drive pull during DVRAID group rebuild.
 - Improved interoperability with Promise RAID array.
 - Improved error handling with drive pull with speed read enabled
 - Improved auto-mapping implementation.
 - Addressed a firmware hang when a cable is pulled under certain conditions.
 - Improved conversion processing.
 - Modified driver initialization to account for drives not being available during initialization.
 - Addressed an issue with multiple RAID groups requiring rebuilds simultaneously.
 - Addressed firmware crash when playing back HD with Avid Nitris.
 - Expanded drive configurations for DVRAID
 - Modified faulted rebuild event log message.

3. Known Issues/Advisements

- The BlockDevIdentify command does not work correctly for Fujitsu drives. Drive activity light only flashes once when this option is enabled.
- Adapter target device discovery does not work properly if a SATA array has been previously connected (without being power-cycled) to another HBA (ie. a second ATTO HBA or another vendor's).
- Setting the RAIDCommandTimeout parameter to 500 msec or below causes a RAID group to go offline when using SATA drives.

4. Affected Products

Product Name	SKU
ExpressSAS R348 RAID Adapter	ESAS-R348-000
ExpressSAS R380 RAID Adapter	ESAS-R380-000

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