



ATTO Technology, Inc.

Product Release Notes

ExpressSAS H6F0 GT HBA Release v1.16 – Windows®

1. General Release Information

These product release notes define the new features, changes, known issues and release details that apply to the ExpressSAS H6F0 GT host adapter product v1.16 that was released on May 2, 2014. This information pertains to the Microsoft Windows OS including Windows 8 (x86, x64), Windows 7 (x86, x64), Server 2012 (x64), Server 2008 (x86, x64) and Server 2008 R2 (x64) platforms.

2. Changes

- **Version 1.16 (Released 5/2/2014)**
 - **Note:** It is recommended that firmware dated 01/14/2014 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Fixed discovery code to clear the FIS before each new SATA command.
 - Change SAT translation code to clear FIS fields that were not set.

- **Version 1.15 (Released 12/19/2013)**
 - **Note:** It is recommended that firmware dated 12/10/2013 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Added uninstall functionality to the driver installer.
 - Corrected an issue where the device wait count would not be honored correctly when using direct attached SAS devices.
 - Fixed an issue where a timed out command could be lost.
 - Added support for Format Unit to SATA device.
 - Modified 'HwBuildRequest' to remove memory clear of Command Table.
 - Fix polling discovery to call deferred processes.

- **Version 1.10 (Released 06/04/2013)**
 - **Note:** It is recommended that firmware dated 05/30/2013 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Added under-run detection support to SMP pass-through ioctls.
 - Add several improvements to SATA task management processing.
 - Fix several rare cases where the adapter could go degraded upon returning from sleep.
 - Added support for descriptor based sense data.
 - Updated SCSI-to-ATA translation for the Test Unit Ready command to be compliant with specification.
 - Multiple Invalid Frame errors are required before Transport Layer Retries are disabled for a device.
 - Updated SCSI-to-ATA translation for Inquiry VPD page 89 to support any data length.
 - During a command retry, TLR is disabled in the active command when a target does not support it.
 - Several issues were corrected with failing over and retrying I/O when using a virtual x8 wide port.
 - Add Link Down Timeout in NVRAM.
 - Fix discovery to have dedicated resource so I/O does not starve discovery.

- Report target database changes in topology order.
- SATA devices are no longer disabled if task management fails.
- **Version 1.06 (Released 05/24/2012)**
 - **Note:** It is recommended that firmware dated 05/21/2012 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Modifications made to provide a quiescent period after a reset to prevent chip errors being asserted during power management.
 - Added support for *atreset*, *atdevupd*, and *atsastop* CLI tools.
 - The default device wait time when resuming from sleep has been increased to 15 seconds.
 - Added support for reporting the board temperature in *atinfo*.
 - Fixed a rare issue where task management for a SATA target could affect outstanding I/Os for other SATA targets.
 - Fixed support for SATA drives with non-512 byte sector sizes.
 - Resolved an issue where the residual length on data underruns and overruns was not reported correctly.
 - Prevent the assertion of a DMA error when an unassociated data FIS is received.
- **Version 1.05 (Released 01/31/2012)**
 - **Note:** It is recommended that firmware dated 01/31/2012 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Initial production release for the H6F0 GT.

3. Known Issues/Advisements

- The driver is not fully SAT compliant (SCSI-to-ATA Translation for SATA support). The following SCSI commands are not translated: REASSIGN BLOCKS, SECURITY PROTOCOL IN and SECURITY PROTOCOL OUT. There is no known user impact.

4. Affected Products

Product Name	SKU
ExpressSAS H6F0 Adapter	ESAS-H6F0-GT0

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 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
- E-Mail: techsupport@attotech.com