



3Gb ExpressSAS Host Adapter Release v1.27 - Windows®

1. General Release Information

These product release notes define the new features, changes, known issues and release details that apply to the ExpressSAS Host Adapter products v1.27 that was released on 05/31/11. This information pertains to the Microsoft® Windows OS including Windows 7, XP, Vista, Server 2003, and Server 2008 for x86 and x64 platforms.

2. Changes

- **Version 1.27 (Released 05/31/11)**
 - **Note:** It is recommended that firmware dated 06/02/11 be utilized with this driver release.
 - The following apply to changes made from v1.25 to v1.27
 - **New Features, Enhancements and Changes**
 - Corrected an issue that could result in a degraded adapter if the driver is loaded, unloaded and loaded again without a reboot
 - Corrected an issue on the H308/H380 where the sorting routine was corrupting the target database

- **Version 1.25 (Released 06/30/10)**
 - **Note:** It is recommended that firmware dated 06/23/10 be utilized with this driver release.
 - The following apply to changes made from v1.16 to v1.25
 - **New Features, Enhancements and Changes**
 - Controller reset enhancement regarding task management failures.
 - The discovery process has been improved to recover commands that time out.
 - Initial discovery process modified to halt and allow driver loading to continue when the Device Wait Time is exhausted. Any pending discovery will resume when driver loading completes.
 - CSMI reporting improvement. Unknown port ID for a PHY that is down, or is not the lowest PHY in a wide port, are now reported, in lieu of the PHY ID.
 - Improved controller reset stability concerning resets due to the heartbeat.
 - Added support for atinfo to display attached devices, such as a targets serial number.

- **Version 1.16 (Released 10/29/09)**
 - **Note:** It is recommended that firmware dated 10/22/09 be utilized with this driver release.
 - The following apply to changes made in v1.16
 - **New Features, Enhancements and Changes**
 - CSMI support added.
 - Descriptive strings for sense keys to SCSI error event logging added.
 - Improved task management commands for enhanced recovery processing.
 - Aborts are escalated to target resets for SATA devices.
 - Enhanced expander discovery commands.
 - Improved device wait count setting when handling power cycle devices.
 - SMP API direct attached target discovery report enhanced.

- **Version 1.15 (Released 07/31/09)**
 - **Note:** It is recommended that firmware dated 07/27/09 be utilized with this driver release.
 - The following apply to changes made in v1.15
 - **New Features, Enhancements and Changes**
 - Documented support for Windows 7.
 - Enhanced event logging.
 - Added direct attached device discovery to the SMP API.
 - When a discovery completes, devices that are still present are reported to the OS and I/O resumes immediately.
 - The heartbeat will only be active when I/O is not in progress.

- **Version 1.14 (Released 4/30/2009)**
 - **Note:** It is recommended that firmware dated 04/24/09 be utilized with this driver release.
 - The following apply to changes made from v1.13 to v1.14
 - **New Features, Enhancements and Changes**
 - SATA NCQ is disabled in NVRAM by default
 - OEM Specific registry setting for drives with sector sizes between 513 and 767 bytes

- **Version 1.13 (Released 1/30/2009)**
 - **Note:** It is recommended that firmware dated 01/26/09 be utilized with this driver release.
 - The following apply to changes made from v1.12 to v1.13
 - **New Features, Enhancements and Changes**
 - Resolved an issue regarding the HBA not coming up at full speed under PCI Express 2.0. The problem occurred when using a specific Intel chipset, the MCH 5400

- **Version 1.12 (Released 11/18/2008)**
 - **Note:** It is recommended that firmware dated 2008_11_18 be utilized with this driver release.
 - The following apply to changes made from v1.10 to v1.12
 - **New Features, Enhancements and Changes**
 - Implemented support to disable SATA NCQ
 - Implemented support to disable target ID assignment based on SAS address
 - Implemented support for the H3RO
 - Improve discovery processing to ensure discovery is retried when the firmware returns a partial topology
 - In firmware version 2.01 and later, verified the length of writes to correct an issue with ATAPI devices
 - Implemented support to disable target ID assignment based on SAS address
 - Resolved an issue where event log entries during the initial driver load and adapter initialization would always have an adapter number of one

- **Version 1.10 (Released 5/14/2008)**
 - **Note:** It is recommended that firmware dated 2008_05_09 be utilized with this driver release.
 - The following apply to changes made from v1.00 to v1.10
 - **New Features, Enhancements and Changes**
 - Added support for ExpressSAS H30F: With this release, ATTO has released an ExpressSAS H30F Host Adapter model with 16 internal mini-SAS ports for increased connectivity.
 - Added full support for Server 2008
 - Support added for ExpressSAS H30F
 - Initialization enhancements incorporated to support transport firmware updates
 - Improved power management functionality
 - Improved handling of event log to prevent logging from being stopped if the buffer became full
 - Enhanced support for applications to perform SMP commands
 - After initial discovery has completed, devices are now presented to the OS in order of ascending SAS address with SMP devices sorted last

- Improved SATA device affiliation behind expanders when devices are moved between two adapters
- **Version 1.00 (Released 10/19/2007)**
 - Initial release for the ExpressSAS H380 and H308 Host adapters

3. Known Issues/Advisements

- Refer to the DOS release notes for firmware issues affecting all platforms
- Windows 2000 fails when booting from an H380 adapter, caused by a bug in Windows. A workaround is available. Call for details.

1. Affected Products

Product Name	SKU
ExpressSAS H380 Host Adapter	ESAS-H380-000
ExpressSAS H308 Host Adapter	ESAS-H308-000
ExpressSAS H30F Host Adapter	ESAS-H30F-000

2. 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