



ExpressSAS Host Adapter Release v1.20 - Linux

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 v1.20 that was released on 10/29/09. This information pertains to the Linux OS.

2. Changes

- **Version 1.20 (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 from v1.19 to v1.20
- **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.
 - Implemented simplified power management feature.
 - Removed "num_ioreq" module parameter
 - Added "io_time_out" module parameter (default value of 30 seconds)

- **Version 1.19 (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 from v1.15 to v1.19
- **New Features, Enhancements and Changes**
 - Enhanced Event Logging
 - Added direct attached device discovery to the SMP API.
 - Reduced default number of commands per LUN from 32 to 7.
 - Resolved driver compilation issue for kernel 2.6.25
 - Fixed a resource leak when aborting commands that could eventually lead to failing commands.
 - Fixed return codes from the abort handler that could cause incorrect errors when aborting commands.
 - 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 1.15 (Released 11/18/2008)**
 - **Note:** It is recommended that firmware dated 11/18/08 be utilized with this driver release.
 - The following apply to changes made from v1.13 to v1.15
 - **New Features, Enhancements and Changes**
 - Resolved driver compilation issue for kernel 2.6.25
 - Resolved driver compilation issue for kernel 2.6.22 and older
 - 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
 - Fixed a bug in Linux Rescan Host Routine that could lead to invalid outstanding references to the driver. This would prevent the driver from being unloaded
 - Fixes to reset and abort handling.

- **Version 1.13 (Released 9/26/2008)**
 - **Note:** It is recommended that firmware dated 07/17/08 be utilized with this driver release.
 - The following apply to changes made from v1.11 to v1.13
 - **New Features, Enhancements and Changes**
 - Fixed compilation issue in RH4U3
 - Updated compilation of driver for SUSE Xen Kernel
 - Certified with Novell SUSE® LINUX Enterprise Server 10 for AMD64® & Intel® EM64T® Service Pack 1 for SUSE® SLES 10

- **Version 1.11 (Released 7/24/2008)**
 - **Note:** It is recommended that firmware dated 07/17/08 be utilized with this driver release.
 - The following apply to changes made from v1.10 to v1.11
 - **New Features, Enhancements and Changes**
 - Improvements made to power management to support hibernation
 - Improved support for kernel 2.6.25

- **Version 1.10 (Released 5/14/2008)**
 - **Note:** It is recommended that firmware dated 05/09/08 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.
 - Support added for ExpressSAS H30F
 - Initialization enhancements incorporated to support transport firmware updates
 - Improved power management functionality
 - Support added for Linux kernel 2.6.25
 - Addressed issues related to flashing the adapter while I/O is in progress
 - 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
 - Addressed an issue with installation in SUSE 9

- **Version 1.00 (Released 10/19/2007)**
 - Initial release for the ExpressSAS H380 and H308 Host adapters

3. Known Issues/Advisements

- Reference DOS/BIOS and Configuration Tool release notes for additional information

4. Affected Products

| Product Name | SKU |
|------------------------------|---------------|
| ExpressSAS H30F Host Adapter | ESAS-H30F-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