



ATTO Technology, Inc.

Product Release Notes

12Gb SAS/SATA Release v1.17 – macOS®

1. General Release Information

These product release notes define the new features, changes, known issues and release details that apply to the 12Gb SAS/SATA adapters and ThunderLink SH 3128 adapter, version 1.17, that was released on 02/25/2025. This information pertains to macOS 15 Sequoia, macOS 14 Sonoma, macOS 13 Ventura, and macOS 12 Monterey.

2. Changes

- **Version 1.17 (Released 02/25/2025)**
 - **New Features**
 - Added support for auto-rebuilding RAID groups
 - Includes support for displaying virtual port information and device node addresses
 - **Incident Resolutions/Bug Fixes/Changes**
 - Includes fix for SATA discovery issue with devices that support getting sense data
 - Added *atdevcfg* to driver installer and support for *atdpm* CLI tool
 - Added support for macOS 15 Sequoia
- **Version 1.16 (Released 06/07/2024)**
 - **It is recommended that firmware version 221213 be utilized with this driver release.**
 - **New Features**
 - N/A
 - **Incident Resolutions/Bug Fixes/Changes**
 - Added kext approval documentation to installer
 - Updated readme content for accuracy and clarity
 - Renamed the contents of DMG for clarity
 - Driver parameters from legacy ThunderLink drivers will now be honored
 - Changed DMG volume name
- **Version 1.15 (Released 07/25/2023)**
 - **It is recommended that firmware version 221213 be utilized with this driver release.**
 - **New Features**
 - Changed the default target execution throttle to 128
 - Updated the installer for Apple Silicon
 - **Incident Resolutions/Bug Fixes/Changes**
 - N/A
- **Version 1.14 (Released 01/30/2023)**
 - **It is recommended that firmware version 221213 be utilized with this driver release.**
 - **New Features**
 - Increased the VSA RAID limits
 - RAID members can now be removed for a RAID group
 - Added support for the device maintenance mode NVRAM setting
 - Added Thunderbolt adapter support
 - **Incident Resolutions/Bug Fixes/Changes**
 - Fixed the installer README formatting in macOS Ventura

- Fixed an issue with logging cable fault interrupts on certain ports
 - Install atfc instead of atlocate
 - Loosened DMA alignment restrictions
 - Fixed logging priority orders for errors and warnings
 - Fixed SMP error eventlog text
- **Version 1.13 (Released 02/08/2022)**
 - **Note:** It is recommended that firmware dated 08/13/2019 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Added VPD B6 to supported VPS pages response for zoned SATA disks
 - Added macOS Monterey to the readme
 - A restart is no longer required when the installer completes
- **Version 1.12 (Released 06/23/2021)**
 - **Note:** It is recommended that firmware dated 08/13/2019 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Improvements when creating a macOS RAID volume on Apple Silicon.
 - Correctly read system nvram settings on Apple Silicon.
- **Version 1.11 (Released 02/3/2021)**
 - **Note:** It is recommended that firmware dated 08/13/2019 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Add support for Apple Silicon
- **Version 1.10 (Released 01/21/2021)**
 - **Note:** It is recommended that firmware dated 04/12/2019 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Add feature to allow the user to set a max PHY speed
 - Fix chip reset processing to wait for devices
 - Report device arrivals and removals to the OS in logical order when hot plugging different devices into the same port.
 - Add feature to blink the SGPIO Error LED during a rebuild if the application requests it through SES commands to the ATTO Virtual SES device
 - Fix case where RAID members are not discovered on hot plug
 - Log an event for a firmware reset
 - Add atsascfg to driver package
 - Notarize macOS installer package instead of DMG
- **Version 1.09 (Released 09/19/2019)**
 - **Note:** It is recommended that firmware dated 04/12/2019 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Fix cases where SCSI Overrun errors were not reported correctly.
 - Change the driver event log filter parameter from being based on the log type to being based on the log level. See the driver readme for further details.
 - Improve the speed of Format Unit commands for SATA devices that support SCT Write Same.
 - macOS multipathing enabled
 - Dark mode support
 - Added support for macOS Catalina
- **Version 1.08 (Released 11/12/2018)**
 - **Note:** It is recommended that firmware dated 11/02/2018 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Added an adaptive device wait NVMRAM setting that extends the device wait time and count until SAS discovery is complete
 - Added a boot device wait NVRAM setting that alters the device wait feature to only wait for boot devices configured by Power Center Pro
 - Enabled Power Center Pro on externally connected drives
 - Added the ability to present the virtual SES device when no devices are attached

- **Version 1.07 (Released (08/22/2018))**
 - **Note:** It is recommended that firmware dated 08/17/2018 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Fixed an issue with Virtual SES devices not being presented
- **Version 1.06 (Released (04/18/2018))**
 - **Note:** It is recommended that firmware dated 12/01/2017 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Added support for a new flash bundle format that supports smaller download chunks compatible with the maximum transfer size for the driver
 - Increased I/O resources to improve performance with certain I/O workloads
 - Fixed an issue where attempting to load the driver after the installer completes forced the “System Extensions Blocked” popup to appear when the driver is installed for the first time. The driver will not be loaded without a reboot on subsequent upgrades.
- **Version 1.05 (Released (12/12/2017))**
 - **Note:** It is recommended that firmware dated 12/01/2017 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Added SMR drive support
 - Added *atlocate*, *atdevinfo* and *atsasinfo* CLI tools
 - Added support for displaying SATA device temperature in *atdevinfo*
 - Added support for *atsasinfo* to replace *atsasphy*
 - Sense data with RECOVERED ERROR sense key is now reported correctly to the OS
 - Changed the method for reporting device changes to macOS
 - Fixed a discovery issue that could cause devices to be blocked from the system
- **Version 1.00 (Released (08/03/2017))**
 - **Note:** It is recommended that firmware dated 5/30/2017 be used with this driver release.
 - **New Features, Enhancements and Changes**
 - Initial release of macOS drivers for the ExpressSAS 12Gb host adapters.

3. Known Issues/Advisements

- macOS High Sierra has introduced User-Approved Kernel Extension Loading. For additional information on this update, please visit:
<http://developer.apple.com/library/content/technotes/tn2459>

4. Affected Products

Product Name	SKU
ExpressSAS H1280	ESAH-1280-000
ExpressSAS H1208	ESAH-1208-000
ExpressSAS H120F	ESAH-120F-000
ExpressSAS H12F0	ESAH-12F0-000
ExpressSAS H1244	ESAH-1244-000
ExpressSAS H1248	ESAH-1248-000
ThunderLink SH 3128	TLSH-3128-D00/DE0

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@atto.com