



ATTO Technology, Inc.

# Product Release Notes

## ThunderLink® FC 2082/2162 and 3322/3162 Release 2.28- macOS®

### 1. General Release Information

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These product release notes define the new features, changes, known issues and release details that apply to the ThunderLink FC 2082/2162 and FC 3322/3162 Fibre Channel Thunderbolt Adapters, version 2.28, which was released on March 28, 2019. This information pertains to macOS® 10.11 and later.

### 2. Changes

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- **Version 2.28 (Released 03/28/2019)**
  - **Note:** It is recommended that the latest flash bundle available on ATTO website be utilized with this driver release.
    - Improve logging of out-of-resource errors.
    - Updated logging of task management events
    - Display the adapter port number in System Profiler
- **Version 2.27 (Released 11/05/2018)**
  - **Note:** It is recommended that the latest flash bundle available on ATTO website be utilized with this driver release.
  - **New Features/Enhancements**
    - Improved stability when the driver loads
- **Version 2.26 (Released 04/16/2018)**
  - **Note:** It is recommended that the latest flash bundle available on ATTO website be utilized with this driver release.
  - **New Features/Enhancements**
    - Added support for a new flash bundle format that supports smaller download portions compatible with the maximum transfer size for the driver
- **Version 2.25 (Released 12/18/2017)**
  - **Note:** It is recommended that the latest flash bundle available on ATTO website be utilized with this driver release.
  - **New Features/Enhancements**
    - Added atdevinfo, atfcinfo, and atlocate CLI tools to the release package
- **Version 2.20 (Released 09/25/2017)**
  - **Note:** It is recommended that the latest flash bundle available on ATTO website be utilized with this driver release.
  - **New Features/Enhancements**
    - Fixed a potential error when doing extended link bounce testing
    - Increased stability during tape I/O
    - Improvements to scheduling and processing device management
    - Changed the method for reporting device changes to macOS

- **Version 2.16 (Released 05/03/17)**
  - **New Features, Enhancements and Changes**
    - Added support for atinfo to display the SFP serial number
- **Version 2.10 (Released 12/20/16)**
  - **New Features, Enhancements and Changes**
    - Added link cable beacon feature
    - Improved the speed of reporting devices to the OS
    - Adjusted the default maximum transfer size to 512KB to improve third party storage controller performance
- **Version 2.05 (Released 09/20/16)**
  - **New Features, Enhancements and Changes**
    - Added support for macOS Sierra
    - Added '-t <number>' option to system NVRAM parameters to change the number of targets.
- **Version 2.00 (Released 06/30/16)**
  - **New Features, Enhancements and Changes**
    - Added rotational logging to the event log.
- **Version 1.15 (Released 08/06/15)**
  - **New Features, Enhancements and Changes**
    - Adjusted the format of the flash revision to MM/DD/YYYY to conform to other drivers format
    - Fixed processing of the max transfer size values set by the Config Tool
    - The event logging service has been improved to use less system resources
    - Added support for the T10-PI setting in atfcnv.
- **Version 1.10 (Released 03/16/15)**
  - **New Features, Enhancements and Changes**
    - Implemented a feature for FCP\_RSP underrun only when the FCP\_RSP frame indicates that the RSP\_INFO data is present
    - Added support for PLOGIs in direct P2P after the initialization sequence is complete.
- **Version 1.05 (Released 10/30/14)**
  - **New Features, Enhancements and Changes**
    - Addition of operating system Mac OS 10.10
      - Corrected an issue where a cable pull could result in I/O failure in MultiPath Director instead of failing over to an alternate path.
      - Addressed resource and performance issues concerning the number of logins being generated by NPIV ports.
      - Addressed a firmware issue causing an error when two or more NPIV ports are querying a switch.
      - Changed the default setting for the LoginToTargetsOnly HW parameter to DISABLED.
      - Addressed an issue where firmware is unable to sustain a chip reset while I/O is in progress.
- **Version 1.00 (Released 09/02/14)**
  - **New Features, Enhancements and Changes**
    - Initial release of Mac OS driver for the ThunderLink FC 2082 and 2162 devices.

### 3. Known Advisements

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- *When interfacing the ATTO ThunderLink 2082 to a 16Gb Fibre Channel switch that uses SFP+ transceivers from Avago (including Avago SPFs re-branded by a switch manufacturer), a link-up delay of up to 60 seconds may be observed if the switch port is set to auto-speed detect. To rectify the delay, set the speed of the interfacing switch port to 8Gb. Avago Part #: 57-000088-01 Contact ATTO Tech Support for more information.*

- *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

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Product Name	SKU
ThunderLink FC 2082	TLFC-2082-D00/DE0
ThunderLink FC 2162	TLFC-2162-D00/DE0
ThunderLink FC 3322	TLFC-3322-D00/DE0
ThunderLink FC 3162	TLFC-3162-D00/DE0

#### 5. Contacting ATTO Support

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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](mailto:techsupport@attotech.com)