# **Technical Bulletin**



## Overcoming when an ATTO Thunderbolt<sup>™</sup> adapter may become non-responsive

### January 2020

#### Scenario:

The ATTO ThunderLink<sup>®</sup> may become non-responsive but may still appear available within the macOS. This also may occur with an ATTO FastFrame NIC in a third-party Thunderbolt chassis. This only occurs when the ATTO product is connected to a Mac using Thunderbolt Route String 3 AND any additional Thunderbolt device is connected to the Mac on Route String 1. A reboot of the Mac or Thunderbolt device will clear the issue, but it is likely to occur again.

#### **ATTO Products Affected:**

ATTO ThunderLink TLNS-3102, TLNS-3101, TLN3-3102, TLNS-3252, TLNQ-3402 and TLNQ-3401 ATTO FastFrame FFRM-NQ41, FFRM-NQ42, FFRM-N322, FFRM-N351 and FFRM-N352 when placed in a third party Thunderbolt 3 chassis.

#### Apple Mac Systems where the issue occurs:

Mac systems with Alpine Ridge Thunderbolt 3 chips. This includes MacBook Pro (2016), iMac Pro (2017), iMac (2017) & iMac (2019).

Mac systems that utilize the Titan Ridge Thunderbolt 3 chips have not presented this issue. If you are having trouble identifying if your Mac uses an Alpine Ridge or Titan Ridge Thunderbolt chip look at the Apple Specifications for the Thunderbolt ports. Alpine Ridge supports Display Port version 1.2 while Titan Ridge supports Display Port 1.4.

#### To Prevent the Issue:

The issue does not seem to occur if the ATTO product is connected to Thunderbolt Route String 1 on the Mac.

Macs that have two Thunderbolt ports use a single chip that is split into Route String 1 and Route String 3. Macs that have four Thunderbolt ports use two chips, each having a Route String 1 and Route String 3. Please refer to the drawings below to identify the proper port for connecting ATTO products.

MacBook Pro 15in 2016					
Thunderbolt Bus 0		Thunderbolt Bus 1			
Left Side Back Port	Left Side Front Port	<b>Right Side Front Port</b>	<b>Right Side Back Port</b>		
Route String 3	Route String 1	Route String 3	Route String 1		
3rd Party Vendor	ATTO	3rd Party Vendor	ATTO		

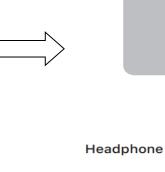


MacBook Pro 13in 2016				
Thunderbolt Bus 0				
Left Side Back Port	Left Side Front Port			
Route String 3	Route String 1			
3rd Party Vendor	ATTO			



Use for ATTO

iMac Pro 2017						
Thunderbolt Bus 0		Thunderbolt Bus 1				
Left TB Port	Left Middle TB Port	Right Middle TB Port	Right TB Port			
Route String 3	Route String 1	Route String 3	Route String 1			
3rd Party Vendor	ΑΤΤΟ	3rd Party Vendor	ΑΤΤΟ			

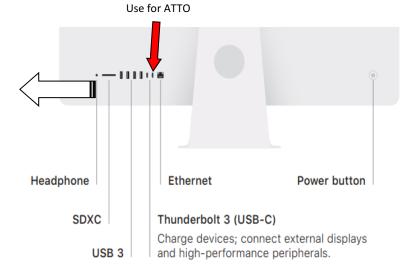


SDXC

USB 3

Ethernet Thunderbolt 3 (USB-C) Charge devices; connect

Charge devices; connect and high-performance p



iMac Pro 2019				
Thunderbolt Bus 0				
Left Side Port	Right Side Port			
Route String 3	Route String 1			
3rd Party Vendor	ATTO			

To verify if the ATTO product is connected to a Thunderbolt Route String 1 port:

- Go to the macOS System Information
- Select Thunderbolt
- Select the Thunderbolt Bus that the ATTO product is attached to.
- Look under the "ThunderLink" in question and look for "Route String". See highlighted section below.

	MacBook Pro			
Thunderbolt Device Tree				
ATA Thunderbolt Bus 0				
Apple Pay Thunderlink NS 310				
Audio Thunded ink EC 332				
Bluetooth Thunderbolt Bus 1				
Camera				
Card Reader				
Controller Thunderbolt Bus 0:				
Diagnostics				
	e Inc.			
	Book Pro			
Poute String: 0	0015A46E0289000			
FireWire Firmware Version: 41.2				
Graphics/Displays Domain UUID: 3D0				
Hardware RAID Port:				
Memory Status:	Device connected			
NVMExpress Link Status: Speed:	0x2 Up to 40 Gb/s x1			
PCI Current Link Width:				
Parallel SCSI Receptacle:	2			
	ware Version: 0.39.0			
Printers Port:	Pardea accessed			
SAS Link Status:	Device connected 0x2			
SATA/SATA Express Speed:	Up to 40 Gb/s x1			
SPI Current Link Width:	0x2			
Storage Receptacle:	1			
Thunderbolt Cable Firmware Ver	sion: 0.9.0 vare Version: 0.39.0			
USB Link Controller Pirm	ware version: 0.39.0			
Vetwork ThunderLink NS	3102:			
Firewall				
Locations Vendor Name:	ATTO Technology, Inc.			
Volumes Device Name:	ThunderLink NS 3102			
WWAN Device ID:	0x1F 0x15			
Wi-Fi Device Revision				
▼ Software UID:	0x001FB7DCF4B91100			
Route String:				
Accessionity Firmware Versio Applications Port (Upstream)				
Components Status:	: Device connected			
Developer Link Status:				
Disabled Software Speed:	Up to 40 Gb/s x1			
Current Link				
Entrol Link Control	er Firmware Version: 0.35.0			

For more information, please contact ATTO Technical Support at +1 716 691 1999, extension 242, or via email to <u>TechSupp@attotech.com</u>