Overcoming when an ATTO Thunderbolt™ adapter may become non-responsive

Scenario:
The ATTO ThunderLink® 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 13in 2016

<table>
<thead>
<tr>
<th>Thunderbolt Bus 0</th>
<th>Left Side Back Port</th>
<th>Left Side Front Port</th>
<th>Route String 3</th>
<th>Route String 1</th>
<th>3rd Party Vendor</th>
<th>ATTO</th>
</tr>
</thead>
</table>

### iMac Pro 2017

<table>
<thead>
<tr>
<th>Thunderbolt Bus 0</th>
<th>Thunderbolt Bus 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left TB Port</td>
<td>Left Middle TB Port</td>
</tr>
<tr>
<td>Route String 3</td>
<td>Route String 1</td>
</tr>
<tr>
<td>3rd Party Vendor</td>
<td>ATTO</td>
</tr>
</tbody>
</table>

### iMac Pro 2019

<table>
<thead>
<tr>
<th>Thunderbolt Bus 0</th>
<th>Left Side Port</th>
<th>Right Side Port</th>
<th>Route String 3</th>
<th>Route String 1</th>
<th>3rd Party Vendor</th>
<th>ATTO</th>
</tr>
</thead>
</table>

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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.

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