

Thunderbolt™ FAQ

Q: What is Thunderbolt™?

A: Thunderbolt technology was designed to transmit data and video information over the same wire. Allowing simultaneous DisplayPort and PCI Express transactions across the single interface will minimize the number of discrete ports required by an ultra-slim device. Merging the high data-rate transfer interface with the external display interface requires less physical area for interconnect and a sleeker design. It was intended to simplify the connection of multiple peripherals to a Thunderbolt enabled compute platform. The latest generation, Thunderbolt 3, provides users bandwidth of 40Gb/s.

Q: How many devices can I connect using Thunderbolt?

A: Six (6) devices can be connected in daisy chain fashion.

Q: What type of cable can be used for Thunderbolt?

A: Thunderbolt 3 has both active and copper cabling options. Cables capable of 40Gb/s performance will be marked with a "3." Thunderbolt 2 cables have an additional optical cable option which can be used to extend to distances of up to 60 meters.

Q: Is Thunderbolt a proven technology?

A: Yes. Developed by Intel as an optical interface, it has since been engineered to allow for simplified cabling. Thunderbolt has been adopted by all of the top portable workbook, mobile workstation and all-in-one manufacturers. ATTO Thunderbolt devices take advantage of time-tested experience in high-performance storage protocols.

Q: Is it easy to connect devices to a system with Thunderbolt?

A: Thunderbolt makes it easy to add/connect peripherals to a system without changing an entire configuration.

Q: What are some typical Thunderbolt devices?

A: Native Thunderbolt devices include storage devices that use hard disk drives, SSD's or tape drives, video monitors, transcoders and others. By using an ATTO Thunderbolt adapter, product users can connect their Thunderbolt enabled platform to non-native storage and network devices or platforms that requires block or file level data using Fibre Channel, SAS/SATA or Ethernet.

Q: What environments Use Thunderbolt?

A: Some typical environments include imaging, digital video capture/ingest, digital video and audio post production, data collection in field locations, data archive and restore as well as many others. These environments use portable, mobile or all in one computing platforms that are Thunderbolt enabled.

Q: What does Plug and Play mean?

A: Devices conforming to Plug and Play Thunderbolt specification - means that devices should work as soon as they are connected.

Q: What if I unplug the cable going to the ATTO Thunderbolt™ product

A: ATTO specifically developed software drivers that are Thunderbolt aware which means in the event of a interruption/ cable pull, the software driver will first sense there have been an interruption in the connection, continue to wait for the connection to be re-established, then resume operation once the cable is replaced. Note: if a cable is pulled while data is being transferred, there is a risk that data may be lost as a result.

Q: Can I mix different Thunderbolt devices on the same bus?

A: Yes. You can mix up to six data and video devices in the same daisy chain by simply connecting a Thunderbolt cable to each device through the available ports.

Q. Can I use ATTO Thunderbolt products with any platform that has a USB-C connector?

A: No. Platforms must be marked as Thunderbolt supported. The port will be designated by the Intel Thunderbolt logo.

Q: What is the new Thunderbolt 3 connector style?

A: Thunderbolt 3 has changed connectors to incorporate a USB-C style connector. This is a slimmer port which is allowing for the wider adoption of Thunderbolt 3. Having a USB-C connector means that USB 3.1 and 2.0 devices may now be connected downstream from ATTO Thunderbolt 3 devices.

Q. Where do ATTO's current Thunderbolt 2 adapters fit into Thunderbolt 3 environments?

A: Legacy adapters are available which will allow the downstream connection of Thunderbolt 2 devices to Thunderbolt 3 platforms. This means you will be able to use any Thunderbolt 3 platform (with a legacy adapter) with our current Thunderbolt 2 products. With the legacy adapter, our Thunderbolt 2 adapters may also be daisy-chained downstream to our latest Thunderbolt 3 products. In addition Apple has a bidirectional legacy adapter allowing additional support of Thunderbolt 3 device with Thunderbolt 2 systems.