

Thunderbolt 3 has a great opportunity to establish Thunderbolt technology as a standard outside of the Apple niche and a real competitor, or even successor, to USB protocols.

Thunderbolt was always a versatile, powerful and innovative standard but it couldn't find the same mass market appeal as USB due to Thunderbolts higher price point and lack of availability in comparison to the universal appeal of USB.

Thunderbolt 3 is designed to succeed in this area where previous Thunderbolt standards have failed. The developers have not only added features and increased data rates on the technical side with the new generation but have also taken decisive steps on a practical level to make Thunderbolt a mass market breakthrough.

COMPETITION & COOPERATION – USB SUPPORT FOR THUNDERBOLT

In the past, Thunderbolt used a bespoke plug, which was difficult to find outside of the Apple ecosystem. Nine years after Thunderbolts launch even the most optimistic supporter has to admit that Thunderbolt won't be replacing USB in the foreseeable future. Instead of playing the role of the unrecognised, superior standard, Thunderbolt 3 is attempting to bridge the gap with crucial new advances. For the first time, instead of a proprietary plug, Thunderbolt 3 features a USB-C plug design. A Thunderbolt integrated USB controller allows users to connect any USB equipment to a Thunderbolt socket. Instead of being perceived as an expensive USB alternative, Thunderbolt now has the potential to be considered 'the better USB'.

FACING THE COMPETITION

Thunderbolt 3 is looking to designate itself as "the better USB" instead of "the better alternative to USB". But if this is to happen, Thunderbolt must be able to offer added value over USB, and when the raw technical data is looked at, there's nothing for Thunderbolt to fear. With native DisplayPort functionality, the graphics output of Thunderbolt outshines the processor intensive USB graphics cards by using similar technology to that of USB alternate mode.

PERFORMANCE

4 PCI express lanes and 8 DisplayPort 1.2 lanes provide enormous 40Gbps data transfer rates

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BANDWIDTH

Allows two 4K displays to be connected on a single Thunderbolt cable

CAPABILITIES

A docking station could be used to output Gigabit Ethernet, USB 3.1 and 5K resolution video & audio using, all using Thunderbolt technology

THE FUTURE OF THUNDERBOLT 3

The developers behind Thunderbolt have done nearly everything right with the latest generation of the technology. However, Thunderbolt 3 does have its downside, whilst 40Gbps is a fantastic bandwidth far and above that of USB, the integrated active electronics make the cables much more expensive than USB. Whether this will be a strong enough argument either way will be seen in the future sales of Thunderbolt technology. Equipment for Thunderbolt is also still in short supply and as a brand, Thunderbolt is not comparable to the household name that is USB. Currently the future of Thunderbolt is still unknown but it can be viewed with a lot more optimism than ever before.

With regards to the Thunderbolt products available from Lindy a decision was made to increase the number of products that are equipped with Thunderbolt technology. Lindy's Head of Global Marketing & Brand Management, Christian Westenhöfer explains the decision-making process that led to Lindy's increased support for Thunderbolt:



"When Thunderbolt came to our table as a topic, many were sceptical at first. Thunderbolt was known by most people as an interface designed for a small niche of Apple products. We never wanted to be a cheap supplier of Apple alternatives, it's just not something Lindy is interested in. But with Thunderbolt 3 we began to drop our reservations and see the possibilities of a standard that could actually enhance and compete with USB. We became convinced that in the future, Thunderbolt wont just be found in the Apple ecosystem, but with the move to a USB Type C connector there's real potential of Thunderbolt finding a larger audience. Right now, with generation 3, it has become the perfect time for Lindy to expand our range of Thunderbolt products. It has always been an innovative and technically impressive standard, but now it is on the verge of becoming an established standard as a true competitor to USB."

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