

USB Future Specifications Industry Reviews

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The new USB Type-C cable and connector under the USB 3.1 Specification is under development by the USB 3.0 Promoter Group. The pre-release draft specification review process is now closed for accepting new requests to participate. Expect to see the 1.0 release of the new specification being made around the end of July 2014.

USB Type-C Cable and Connector

The USB Type-C Cable and Connector specification will define a new USB cable and connector, built initially on existing USB 3.1 and USB 2.0 technologies, that is being developed to help enable thinner and sleeker product designs, enhance usability and provide a growth path for performance enhancements for future versions of USB. This supplement to the USB 3.1 specification is anticipated to be completed by the middle of this year.

Key characteristics of the USB Type-C connector and cable solution include:

- *An entirely new design tailored to work well with emerging product designs*
- *New smaller size – similar in size to the existing USB 2.0 Micro-B*
- *Usability enhancements – users will no longer need to be concerned with plug orientation/cable direction, making it easier to plug in*
- *The Type-C connector and cable will support scalable power charging*
- *Scalability – the connector design will scale for future USB bus performance*

As the new USB Type-C plug and receptacle will not directly mate with existing USB plugs and receptacles (Type-A, Type-B, Micro-B, etc.), the Type-C specification will define passive new-to-existing cables and adapters to allow users to use their existing products.

USB Power Delivery, Revision 2.0

The USB Power Delivery specification is being updated to enable USB PD to support the forthcoming USB Type-C Cable and Connector specification. Focus areas of the update are definition of a new digital baseband physical layer for USB PD communications signaling and defining additional extensions to the vendor-defined messaging capabilities of USB PD. The USB Type-C functional interface accommodates USB PD communications on a wire that is independent of VBUS and therefore allows an alternate physical layer solution that isn't RF-based.

The update will also include incorporation of any previously approved ECNs that haven't previously been folded into a printing of the specification.

This specification update will be released in coordination with the USB Type-C specification.