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The USB 3.0 Promoter Group announces a means to confirm whether a USB-C device or charger is authentic or not-- cryptographic-based authentication able to check product capabilities and certification status.



The process takes place as soon as a wired connection is made, before the transfer of power or data. As such it should both protect against non-compliant chargers and the risks involved with maliciously embedded hardware or software. Such a system can be useful in applications such as phones only allowing charging from certified chargers, or a company setting a PC policy granting access solely to verified USB storage devices.

The system uses a standard protocol to authenticate certified USB-C chargers, devices, cables and power sources, with authentication taking place over either USB data bus or power delivery channels. Further protection comes from 128-bit security for certificate format, digital signing, hash and random number generation.

“USB is well-established as the favored choice for connecting and charging devices,” the USB 3.0 Promoter Group says. “In support of the growing USB Type-C ecosystem, we anticipated the need for a solution extending the integrity of the USB interface. The new USB Type-C Authentication protocol equips product OEMs with the proper tools to defend against ‘bad’ USB cables, devices and non-compliant USB Chargers.”

Go USB 3.0 Promoter Group Defines Authentication Protocol for USB-C