USB Type-C ENGINEERING CHANGE NOTICE

Title: USB2 DCR Update
Applied to: USB Type-C® Specification Release 2.1, May 2021

Brief description of the functional changes proposed:
Update the USB Type-C cable DCR requirements to match the "USB 2.0 DCR ECN (Final) 20180814.pdf".

Benefits as a result of the proposed changes:
Consistent requirements for USB2 hosts, hubs and devices between the USB2 specification and the USB Type-C specification.

An assessment of the impact to the existing revision and systems that currently conform to the USB specification:
Existing USB-C host, hubs, and devices may not meet the new requirements. However, USB2 compliance does not check the DCR directly but rather checks squelch, disconnect, receiver sensitivity.

An analysis of the hardware implications:
New host, hub, and device designs will need to meet the new requirements

An analysis of the software implications:
None

An analysis of the compliance testing implications:
USB2 compliance has been updated with the "USB 2.0 DCR ECN (Final) 20180814.pdf" with the following changes: Squelch EL_16: Waiver granted for squelch below +/- 100mV to +/-40mV

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Actual Changes:

(a). Section 3.7.8.5, Table 3-37 Page 131

From Text:

Table Error! No text of specified style in document.**-37 Maximum DC Resistance Requirement (Normative)**

	Maximum DC Resistance
USB Type-C Device (USB 2.0 High-speed capable)	19 Ω
USB Type-C Captive Device (USB 2.0 High-speed capable)	25 Ω

To Text:

Table Error! No text of specified style in document.**-37 Maximum DC Resistance Requirement (Normative)**

	Maximum DC Resistance
USB Type-C Hosts, Hubs, or Dual Role Host/Device (USB 2.0 High-speed capable)	13 Ω
USB Type-C Device only (USB 2.0 High-speed capable)	17 Ω
USB Type-C Captive Device (USB 2.0 High-speed capable)	23 Ω