# **USB Type-C ENGINEERING CHANGE NOTICE**

Title: USB Type-C ECR for Receptacle Connector SI

2019
Brief description of the functional changes proposed:
Further clarify that the mated connector SI requirements apply to only the receptacle connector by changing the section title from Mated Connector to Receptacle Connector. Update the text to reflect changes needed for the section title change.
Benefits as a result of the proposed changes:
Eliminates confusion regarding if the plug connector also has the same SI requirements.
An assessment of the impact to the existing revision and systems that currently conform to the USB specification:
N/A
An analysis of the hardware implications:
N/A
An analysis of the software implications:
N/A
An analysis of the compliance testing implications:
N/A

Requirements

### **USB Type-C ENGINEERING CHANGE NOTICE**

## **Actual Change Requested**

# (a). Section 3.7.4, Pages 112 – 113 (includes incorporation of the previous clarification ECN)

#### From Text:

#### 3.7.4 Mated Connector (Normative – USB4 Gen3)

The mated connector requirements for *USB4* Gen3 is normative and listed in Table 3-29. Unless otherwise specified, the items to be specified are identical to what defined in Section 3.7.3 and the parameters used to calculate the integrated parameters are the same as defined in Section 3.7.2.4 for the *USB4* Gen3 cable assembly.

The mated connector requirements only apply to the certification of the USB Type-C receptacle connector. The requirements defined in this section do not apply to the USB Type-C plug connector, as the limits factor in the electrical characteristics of test fixture specifically designed for testing of the USB Type-C receptacle. The USB Type-C plug connector does not have a set of requirements defined at the mated connector level as there are tradeoffs allowed to achieve acceptable performance at the finished assembly level.

Table 3-29 USB Type-C Mated Connector Signal Integrity Characteristics for USB4 Gen3 (Normative)

#### To Text:

#### 3.7.4 Mated Receptacle Connector SI Requirements and Testing (Normative – USB4 Gen3)

The <u>USB Type-C mated receptacle</u> connector requirements for <u>USB4</u> Gen3 <u>is are</u> normative and listed in Table 3-29. Unless otherwise specified, the items to be specified are identical to what <u>is</u> defined in Section 3.7.3 and the parameters used to calculate the integrated parameters are the same as defined in Section 3.7.2.4 for the <u>USB4</u> Gen3 cable assembly.

The mated connector requirements only apply to the certification of the USB Type-C receptacle connector. The requirements defined in this section do not apply to the USB Type-C plug connector, as the limits in Table 3-29 factor in the electrical characteristics of test fixture that includes a USB Type-C plug connector specifically designed selected for testing of the USB Type-C receptacle. The USB Type-C plug connector does not have a set of requirements defined at the mated connector level as there are tradeoffs allowed to achieve acceptable performance at the finished cable assembly level.

Table 3-29 USB Type-C <u>Mated Receptacle</u> Connector Signal Integrity Characteristics for USB4 Gen3 (Normative)