USB Type-C ENGINEERING CHANGE NOTICE

Title: Power-Only Plug
Applied to: USB Type-C Specification Release 1.2, March 25, 2016

Brief description of the functional changes proposed:
Add USB Power-Only Type-C plug option.

Benefits as a result of the proposed changes:
There is a market need for a power-only version of the Type-C plug and the description is already documented in the Type-C Cable and Connector Compliance Specification. This ECR defines the requirements for the USB Power-Only Type-C plug for use on captive cables only and required support of the CC pin in the application.

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:
Provides support for an existing configuration defined in the compliance specification. Clarification is needed to define exactly which existing tests are required for compliance certification.

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Actual Change Requested

(a). Section 2.1, Page 21
From Text:

Figure 2-2 illustrates the comprehensive functional signal plan for the USB Type-C plug. Only one CC pin is connected through the cable to establish signal orientation and the other CC pin is repurposed as V$_{CONN}$ for powering electronics in the USB Type-C plug. Also, only one set of _USB 2.0_ D+/D− wires are implemented in a USB Type-C cable. For USB Type-C cables that only intend to support _USB 2.0_ functionality, the _USB 3.1_ and SBU signals are not implemented.

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(b). Section 2.2, Page 22
From Text:

The following USB Type-C receptacles and plugs are defined.

• USB Type-C receptacle for _USB 2.0_, _USB 3.1_ and full-featured platforms and devices

• USB Full-Featured Type-C plug

• _USB 2.0_ Type-C plug

• USB Power-Only Type-C plug

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(c). Section 3.1.1, Page 27
From Text:

The USB Type-C™ specification defines the following standard connectors:

• USB Type-C receptacle

• USB Full-Featured Type-C plug

• USB 2.0 Type-C plug

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• USB Type-C receptacle

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(d). Section 3.2.1, Page 28
From Text:
Figure 3-1 and Figure 3-3 show, respectively, the USB Type-C receptacle and USB Full-Featured Type-C plug interface dimensions.

Figure 3-9 shows the *USB 2.0* Type-C plug interface dimensions. The dimensions that govern the mating interoperability are specified. All the REF dimensions are provided for reference only, not hard requirements.

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Figure 3-9 shows the *USB 2.0* Type-C plug interface dimensions. The dimensions that govern the mating interoperability are specified. All the REF dimensions are provided for reference only, not hard requirements.

The USB Power-Only Type-C plug is a depopulated version of the USB Full-Featured Type-C plug or the *USB 2.0* Type-C plug. The interface dimensions shall conform to Figure 3-3 or Figure 3-9. Contacts for CC, V$_{BUS}$, and GND (i.e., A1, A4, A5, A9, A12, B1, B4, B9, and B12) shall be present. Physical presence of contacts in the other 15 contact locations is optional. The USB Power-Only Type-C plug shall only be used on a captive cable application. Implementation of of Rp, Rd, or CC communication on pin A5 is required in the application.