USB Type-C ENGINEERING CHANGE NOTICE

Title: Rp in Explicit Power Contract Applied to: USB Type-C Specification Release 1.1, April 3, 2015
Brief description of the functional changes:
Clarifies when the Rp resistor should change from default to 1.5 or 3.0 upon completion of an explicit power contract.
Benefits as a result of the changes:
Clear definition of when the Rp value must change.
An assessment of the impact to the existing revision and systems that currently conform to the USB specification:
No impact if the initial Rp value advertised 1.5 or 3.0 amps. Current lack of definition has test equipment makers guessing when to test for the 1.5 or 3.0 amp resistors to be presented if a default value is presented before the contract.
An analysis of the hardware implications:
None
An analysis of the software implications:
Minor, the resistor is being changed, but when it is changed might be different because of this.
An analysis of the compliance testing implications:
Minor, when the Rp value is sampled might have to be done at a different time.

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Actual Change

(a). From, Section 4.6.2.4, Page 152

While an explicit *USB PD* contract is in place, the provider shall advertise a USB Type-C Current of either 1.5 A or 3.0 A.

(a). To, Section 4.6.2.4, Page 152

While an explicit *USB PD* contract is in place, the provider shall advertise a USB Type C Current of either 1.5 A or 3.0 A. Refer to the USB Power Delivery Revision 2.0 specification section 1.6 for a definition of an Explicit contract. If the source initially advertises Default current, it shall change the Rp to advertise 1.5 A or 3.0 A after the GoodCRC is received in response to Accept and before the source sends any other messages. While an *USB PD* Explicit Contract is in place, the Source shall advertise a USB Type-C Current of either 1.5 A or 3.0 A. The Source upon entry into an Explicit Contract shall advertise an Rp value of 1.5 A or 3.0 A after it receives the GoodCRC in response to the first PS RDY Message and before it sends any other messages. Refer to the USB Power Delivery specification section 1.6 for a definition of an Explicit Contract.

Commented [DR1]: Remove default condition.