

USB Power Delivery ENGINEERING CHANGE NOTICE

Title: Remove requirement for Passive Cables to support Enter_USB

**Applied to: USB Power Delivery Specification Revision 3.0
Version 2.0**

Brief description of the functional changes proposed:
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Clarification that passive cables do not support the Enter_USB command.

Benefits as a result of the proposed changes:
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Brings the PD spec requirements in alignment with recent ECN to the USB Type-C specification.

An assessment of the impact to the existing revision and systems that currently conform to the USB specification:
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None. There are no existing systems.

An analysis of the hardware implications:
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Removes requirement to add an unneeded feature to simple eMarkers.
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An analysis of the software implications:
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None.

An analysis of the compliance testing implications:
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None.

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Actual Change Requested

(a). Section 6.4.8, Page 167

From Text:

The *Enter_USB* Message **Shall** be sent by the DFP to its UFP Port Partner and to the Cable Plug(s), when in an Explicit Contract, to enter a specified USB Mode of operation. The recipient of the Message **Shall** respond by sending either an *Accept* Message in response to a **Valid** request or a *Reject* Message in response to an **Invalid** request.

To Text:

The *Enter_USB* Message **Shall** be sent by the DFP to its UFP Port Partner and to the Cable Plug(s) of an **Active Cable**, when in an Explicit Contract, to enter a specified USB Mode of operation. The recipient of the Message **Shall** respond by sending either an *Accept* Message in response to a **Valid** request or a *Reject* Message in response to an **Invalid** request.

(b). Section 6.12.2, Page 237, Table 6-70

From Text:

Table 6-70 Applicability of Data Messages

Message Type	Source	Sink	Dual-Role Power	Cable Plug SOP'	Cable Plug SOP''	VPD ⁶
Transmitted Message						
<i>Source_Capabilities</i>	N	NA	N	NA	NA	NA
<i>Request</i>	NA	N		NA	NA	NA
<i>Get_Country_Info</i>	CN ⁵ /O	CN ⁵ /O		NA	NA	NA
<i>BIST</i>	N ¹	N ¹		NA	NA	NA
<i>Sink_Capabilities</i>	NA	N	N	NA	NA	NA
<i>Battery_Status</i>	CN ²	CN ²		NA	NA	NA
<i>Alert</i>	R	R		NA	NA	NA
<i>Enter_USB</i>	CN ⁷ /O	CN ⁷ /O		NA	NA	NA
Received Message						
<i>Source_Capabilities</i>	NS	N	N	I	I	I
<i>Request</i>	N	NS		I	I	I
<i>Get_Country_Info</i>	CN ⁵ /NS	CN ⁵ /NS		I	I	I
<i>BIST</i>	N ¹	N ¹		N ¹	N ¹	N ¹
<i>Sink_Capabilities</i>	CN ⁴	NS	CN ⁴	I	I	I
<i>Battery_Status</i>	CN ³ /NS	CN ³ /NS		I	I	I
<i>Alert</i>	R/NS	R/NS		I	I	I
<i>Enter_USB</i>	CN ⁷ /O	CN ⁷ /O		CN ⁷ /O	I	I

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Message Type	Source	Sink	Dual-Role Power	Cable Plug SOP'	Cable Plug SOP''	VPD ⁶
<p>Note 1: For details of which BIST Modes and Messages Shall be supported see Section 5.9 and Section 6.4.3.</p> <p>Note 2: Shall be supported by products that contain batteries.</p> <p>Note 3: Shall be supported by products that support the <i>Get_Battery_Status</i> Message.</p> <p>Note 4: Shall be supported by products that support the <i>Get_Sink_Cap</i> Message.</p> <p>Note 5: Shall be supported when required by a country authority.</p> <p>Note 6: VPD includes CT-VPDs when not Connected to a Charger. PD communication with a CT-VPD Shall only take place when not Connected to a Charger.</p> <p>Note 7: Shall be supported by products that support <i>[USB4]</i>.</p>						

To Text:

Table 6-70 Applicability of Data Messages

Message Type	Source	Sink	Dual-Role Power	Cable Plug SOP'	Cable Plug SOP''	VPD ⁶
Transmitted Message						
<i>Source_Capabilities</i>	N	NA	N	NA	NA	NA
<i>Request</i>	NA	N		NA	NA	NA
<i>Get_Country_Info</i>	CN ⁵ /O	CN ⁵ /O		NA	NA	NA
<i>BIST</i>	N ¹	N ¹		NA	NA	NA
<i>Sink_Capabilities</i>	NA	N	N	NA	NA	NA
<i>Battery_Status</i>	CN ²	CN ²		NA	NA	NA
<i>Alert</i>	R	R		NA	NA	NA
<i>Enter_USB</i>	CN ⁷ /O	CN ⁷ /O		NA	NA	NA
Received Message						
<i>Source_Capabilities</i>	NS	N	N	I	I	I
<i>Request</i>	N	NS		I	I	I
<i>Get_Country_Info</i>	CN ⁵ /NS	CN ⁵ /NS		I	I	I
<i>BIST</i>	N ¹	N ¹		N ¹	N ¹	N ¹
<i>Sink_Capabilities</i>	CN ⁴	NS	CN ⁴	I	I	I
<i>Battery_Status</i>	CN ³ /NS	CN ³ /NS		I	I	I
<i>Alert</i>	R/NS	R/NS		I	I	I
<i>Enter_USB</i>	CN ⁷ /O	CN ⁷ /O		CN ⁸ /I Q	CN ⁸ /I	I
<p>Note 1: For details of which BIST Modes and Messages Shall be supported see Section 5.9 and Section 6.4.3.</p> <p>Note 2: Shall be supported by products that contain batteries.</p> <p>Note 3: Shall be supported by products that support the <i>Get_Battery_Status</i> Message.</p> <p>Note 4: Shall be supported by products that support the <i>Get_Sink_Cap</i> Message.</p> <p>Note 5: Shall be supported when required by a country authority.</p> <p>Note 6: VPD includes CT-VPDs when not Connected to a Charger. PD communication with a CT-VPD Shall only take place when not Connected to a Charger.</p> <p>Note 7: Shall be supported by products that support <i>[USB4]</i>.</p> <p>Note 8: Shall be supported by Active Cables that support <i>[USB4]</i>.</p>						