USB4 2.0 ENGINEERING CHANGE NOTICE FORM

Title: tActivateSSC Update
Applied to: USB4 Specification Version 2.0

Brief description of the functional changes:

- Relaxing tActivateSSC requirement for Link Initialization
- Assigning upper bound to for the tSSCActivated parameter at Link Initialization

Benefits as a result of the changes:

The maximal value of tActivateSSC is set such that it bounds the transition time from CLx to CL0. It defines the time between sending the first TS4.0 with SSC deactivated and sending TS4.1 with SSC enabled. This change relaxes the unnecessary timing restriction for Link Initialization, allowing more robustness to implementations. Additionally it assigns an upper bound to the tSSCActivated parameter in order to avoid system hangs.

An assessment of the impact to the existing revision and systems that currently conform to the USB specification:

NA

An analysis of the hardware implications:

NA

An analysis of the software implications:

NA

An analysis of the compliance testing implications:

NA

USB4 2.0 ENGINEERING CHANGE NOTICE FORM

Actual Change

(a). Section 4.6

From Text:

Parameter	Description	Min	Max	Units
tActivateSSC	Time between transmitting the first trit of the first TS4 and activating SSC.	--	10	µs
tSSCActivated	Time after activating SSC that the transmitter sends TS4 with *Counter* field set to 0h.	2	-- (Transition to Training from CLd) 5 (Otherwise)	µs

To Text:

Parameter	Description	Min	Max	Units
tActivateSSC	Time between transmitting the first trit of the first TS4 and activating SSC.	--	1000 (Transition to Training from CLd) 10 (Otherwise)	µs
tSSCActivated	Time after activating SSC that the transmitter sends TS4 with *Counter* field set to 0h.	2	~~--~~1000 (Transition to Training from CLd) 5 (Otherwise)	µs