USB4 2.0 ENGINEERING CHANGE NOTICE FORM

Title: Adding Timing Requirement for LFPS Response
Applied to: USB4 Specification Version 2.0

Brief description of the functional changes:
When a Port exits CL1 or CL2 due to detecting LFPS, the LFPS response should come within a certain time to limit the CL1/2 exit times.

Benefits as a result of the proposed changes:
Limit CL1 and CL2 exit times.

An assessment of the impact to the existing revision and systems that currently conform to the USB specification:
None.

An analysis of the hardware implications:
None.

An analysis of the software implications:
None

An analysis of the compliance testing implications:
Need to verify the LFPS response comes within the allowed timing.

USB4 2.0 ENGINEERING CHANGE NOTICE FORM

Actual Change

(a). 4.2.1.6.5.4 – Gen 4 Exit Flow from CL1 or CL2 State

To Text:

The Port shall stop sending LFPS within tStopLFPS2 time after the conditions are met.
If the exit from CL1 or CL2 was initiated by detecting LFPS on the Lane 0 receiver, the Port shall transmit the LFPS on the Lane 0 transmitter within tWarmupCL1 or tWarmupCL2 respectively.
If the receiver did not detect LFPS after tTrainingAbort2 time, the Router shall initiate a Disconnect by driving SBTX to a logical low state for tDisconnectTx.