

USB4 1.0 ENGINEERING CHANGE NOTICE FORM

Title: Enter Sleep Signals for a Host Router
Applied to: USB4 Specification Version 1.0

Brief description of the functional changes:

Removes PERST# as an explicit mechanism to initiate sleep entry at a Host Router.

Benefits as a result of the changes:

Simplifies sleep entry. Removes the requirement to support PERST# as a mechanism to initiate sleep entry at a Host Router.
--

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 (simplification)

An analysis of the software implications:
--

None (not used today)

An analysis of the compliance testing implications:
--

None

USB4 1.0 ENGINEERING CHANGE NOTICE FORM

Actual Change

(a). Section 4.5.1 Entry to Sleep

Change the following text:

A Router shall enter sleep state when the *Enter Sleep* bit is set to 1b and one of the following sleep events occur:

- Host Router
 - ~~○ The Router is a PCIe Host Router and it receives a PCIe PERST# signal that transitions from logical high to logical low. If the Router tunnels PCIe traffic, then it shall send at least 3 PERST Active Tunneled Packets on each Downstream Facing Port before entering Sleep state.~~
 - The Router receives an implementation-specific signal indicating entry to Sleep state.
- Device Router
 - The Router tunnels PCIe traffic and receives a PERST Active Tunneled Packet on the Upstream Facing Port.
 - The Router receives an LT_LRoff Transaction on the Sideband Channel of an Upstream Facing Port.