USB-IF Waiver Request

The USB-IF can grant a waiver to a device that violates the USB specification or fails a certification test. Although rarely granted, the waiver forgives the violation and permits the device to use the official logo.

Vendors are expected to design to the USB specification and only devices that comply with the USB specification are able to use the logo. The USB-IF recognizes, however, that some violations are minor and have, effectively, no negative affect.

The criterion for granting a waiver varies greatly and tends to be specific to the device. Some general factors used to consider granting or denying waiver requests are:

* + Violation’s effect on end-user experience
  + Violation’s affect on other USB product
  + Number of affected product
  + Cost of corrective action to the vendor

Waiver decisions are at the discretion of the USB-IF Compliance Chairman and members of the Certification Review Board.

Waivers may not be publicized without written permission of the USB-IF.

A waiver is applied to a TID of a particular device and cannot be propagated or transferred to other devices without permission of the USB-IF.

Waivers cannot be granted to devices that do not have a TID assigned to them. Vendors may ask if a specific violation can be wavered without a TID, but the reply is unofficial and will not be recorded.

Waivers are not granted to devices that have multiple violations.

Fill out the attached form and send to the USB-IF Administration:

Mail: USB-IF  
5440 S.W. Westgate Drive  
Suite 217   
Portland, Oregon 97221

Email: Admin@usb.org

Fascimile: (503) 297-1090

USB-IF Waiver Request Form

Company making the waiver request:

Company:

Contact:

Email:

Phone:

Affected product:

Company:

TID:       VID16:       PID16:

Name:

Model:

Revision:

Description:

Waiver Transfer Request Only

Transfer Waiver from TID: n/a

Waiver Request:

Subject of waiver request (a one line summary of the waiver request)

TD.7.31 fails due to USB 3.1 redriver (TUSB1142) between USB host and connector consuming portion of Polling.LFPS.

Identify specification section or specific test where violation occurs.

Section 7.5.4.3.2 in the USB 3.1 Specification requires three conditions to exit Polling.LFPS:

1. At least 16 consecutive Polling.LFPS burst are transmitted.

2. Two consecutive Polling.LFPS bursts are received.

3. Four consecutive Polling.LFPS burst are sent after receiving one Polling.LFPS burst.

Because there is a redriver between host and USB connector, the redriver may consume some of the 16 consecutive Polling.LFPS while the redriver is performing Rx.Detect. This may cause less than 16 consecutive Polling.LFPS burst to be seen by exerciser. As a result, the TD.7.31 Hot Reset Failure Test may fail.

Reason for waiver request:

USB Host Type-C port with a USB3.1 redriver may consume some of the Polling.LFPS but the conditions 2 and 3 for exiting Polling.LFPS will still be meet.

Impact on end-user:

None

Impact on other USB devices:

None, USB devices can still complete exit from Polling.LFPS correctly.

Justification for waiver:

The USB 3.1 Gen 1 Redriver does not impact the Polling.LFPS handshake. Several initial Polling.LFPS bursts may be dropped if the redriver takes longer to complete receiver detection than 1 or both of the devices on either side. Repeating LFPS bursts is enabled by redriver in both directions concurrently, guaranteeing that both sides will complete conditions 2 & 3 listed in section 7.5.4.3.2 of the USB 3.1 specification.

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| Will corrective actions be taken for future revisions?: | | | |
| YES |  | When |  |
| NO |  | | |