



USB 3.0 Hub Controller

(Ver 2.0)

This document describes the notification of μPD720211, USB 3.0 Hub controller.

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Notification	
20141020-1	Cannot support LED function.
20140307-1	Recommend applying FW for products supporting gang mode without a power switch

The information in this document is subject to change without notice.



20141020-1. Cannot support LED function

[Problem]

μPD720211 cannot support LED function (μPD720211 cannot support Port indicator control) in SuperSpeed mode.

LED function is available for USB2.0 mode only (green color only; amber color not supported).

[Workaround]

None available

[Note]

Please follow the pin connections as below.

Pin No	Pin Name	Description
2	SPISI/LED2B	Connect to SPI ROM when using ROM. Connect to pull up or pulldown resistor for setting the configuration by pin strapping.
15	LED1B/SUSPEND	Connect to external Suspend circuit if desired when using Suspend output mode. Connect to pull up or pulldown resistor for setting the configuration by pin strapping.

We will revise the documents (Datasheet and user's manual) to modify the below item.

- Remove the description of LED function

20140307-1. Recommend applying FW for products supporting gang mode without a power switch

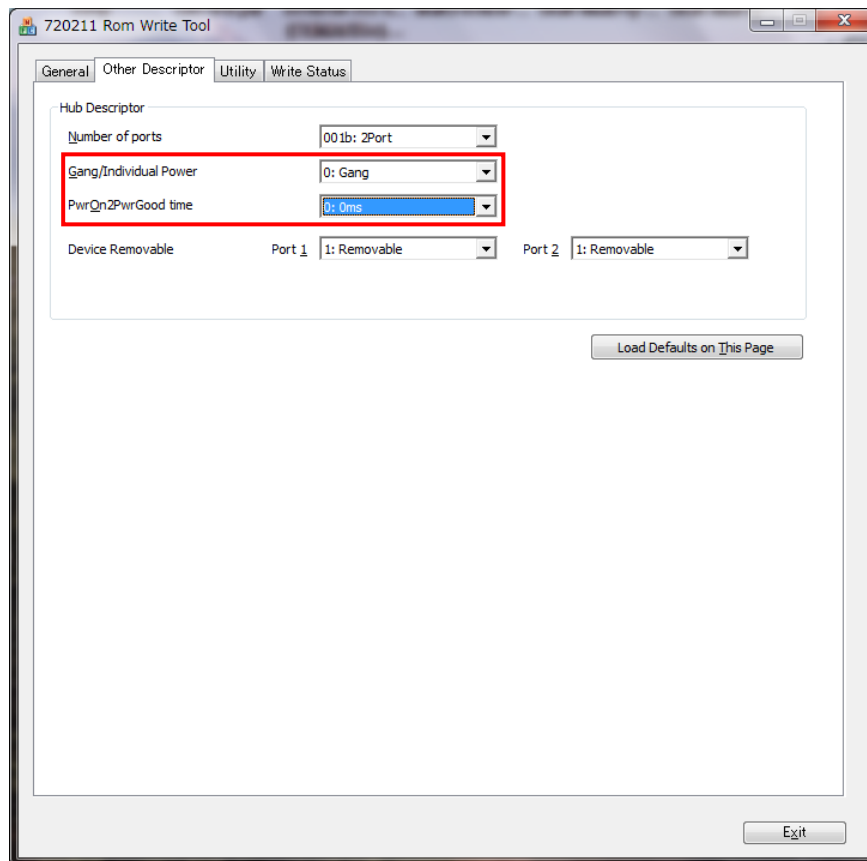
[Problem]

Some non-compliant USB 3.0 devices that are connected to uPD720211 cause the interoperability problem that they are not recognized by the PC after hibernation and resume when uPD720211 is used in the gang mode and VBUS on its downstream port is not controlled by a power switch. Those devices seem to have the restriction that they go out of control when detecting the disconnection of the far-end Rx termination while keeping VBUS.

[Workaround]

The external serial rom is needed to solve this problem although it is optional on uPD720211.

1. This problem is fixed by applying FW. Please apply FW Version 3.0.0.1 - 001 or later when the product supports the gang mode without power switch. Note that this workaround is enabled only when Gang/Individual Power is "0: Gang" and PwrOn2PwrGood time is "0: 0ms" in the uPD720211 ROM Writing Tool for Windows. And when this workaround is enabled, "Low Power Mode during Suspend" is forcibly disabled and power consumption is higher than when this workaround is disabled due to enabling the Rx termination.



2. Or, use a power switch in gang mode. In this case, PwrOn2Pwrgood time should be "1: 100ms" in the uPD720211 ROM Writing Tool and using this workaround has no effect on power consumption.

[History]

Rev	Document No.	Issue Date	Comments
2.0	ICTS2-IBB-14-5002	Oct. 20, 2014	2 nd edition
1.0	IBB-ED1-010040	Mar. 7, 2014	1 st edition.

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