Scope

This document describes how to test USB Host HID mouse KB example.

Preparation

Host

A board, i.e. twrk22f120m, which is running host_hid_keyboard_mouse_twrk22f120m example.

Device

A usb mouse or a usb KeyBoard, and a usb HUB when you want use the mouse and KB in the same time.

Libraries dependency

The libraries dependency for various RTOS lists as following,

BM

Library project path:

- <install_dir>/usb/usb_core/host/lib/bm/<tool_chain>/<soc_name>
- <install dir>/lib/ksdk platform lib/<tool chain>/<platform>

FreeRTOS

Library project path:

- <install dir>/usb/usb core/host/lib/freertos/<tool chain>/<soc name>
- <install_dir>/lib/ksdk_freertos_lib/<tool_chain>/<platform>

MQX

Library project path:

- <install dir>/rtos/mqx/mqx/build/<tool chain>/mqx <board>
- <install_dir>/rtos/mqx/mqx_stdlib/build/<tool_chain>/mqx_stdlib_<board>
- <install_dir>/usb/usb_core/host/lib/mqx/<tool_chain>/<soc_name>
- <install_dir>/lib/ksdk_mqx_lib/<tool_chain>/<platform>

uCOSii

Library project path:

<install_dir>/usb/usb_core/host/lib/ucosii/<tool_chain>/<soc_name>

<install_dir>/lib/ksdk_ucosii_lib/<tool_chain>/<platform>

uCOSiii

Library project path:

- <install_dir>/usb/usb_core/host/lib/ucosiii/<tool_chain>/<soc_name>
- <install_dir>/lib/ksdk_ucosiii_lib/<tool_chain>/<platform>

Refer to Integration of the USB Stack and Kinetis SDK_review.pdf(<install_dir>/doc) on how to build the corresponding libraries.

Steps

Follow the steps to run the HID mouse KB demo.

- 1. Run the host_hid_keyboard_mouse_twrk22f120m example and you will see the printed guide note.
- 2. Plug-in the device and you will see some attach information printed out. By the way, you need to plug in the usb hub first, when you want use the mouse and KB in the same time. Other times, the hub can plug or not.
- 3. If the mouse pluged and when you move the mouse, the relevant information will be output to the screen. Such as,

When the mouse moved up, you can see "UP" on the screen.

When the mouse moved down, you will get "DOWN".

4. If the KB pluged and when you press the KB, the relevant information will be output to the screen. Such as,

When the F key is pressed, you can see the letter "F" on the screen.

Note: As a simple demo, some special function keys beyond regular are not supported.