Overview

This Host HID example is a simple demonstration program that uses the KSDK.
The application supports the mouse device. It prints the mouse operation when the mouse device is attached.

System Requirement

Hardware requirements

- J-Link ARM

- P&E Micro Multi-link universal

- Mini/micro USB cable

- USB A to micro AB cable

- Hardware (tower/base board, ...) for a specific device

- Personal Computer(PC)

Software requirements

- The project path is:

  <SDK_Install>/boards/<board>/usb_examples/usb_host_hid_mouse/<RTOS>/<toolchain>.

  Note

      The RTOSes are bare metal, FreeRTOS OS, µCOS/II or µCOS/III.

Getting Started

Hardware Settings

- The Jumper settings:
  J22 1-2.

Prepare the example

1. Download the program to the target board.

2. Power off the target board and power on again.

3. Connect devices to the board.

Note

    For detailed instructions, see the appropriate board User's Guide.

Run the example

1. Connect the board UART to the PC and open the COM port in a terminal tool.

2. Plug in the HUB or the mouse device to the board. The attached information prints out in the terminal.

3. The mouse operation information prints in the terminal when you operate the mouse.

   The application prints the mouse operation information in one line. Each line contains the following sequential string: "Left Click", "Middle Click", "Right Click", "Right"/"Left" movement, "UP"/"Down" movement and "Wheel Down"/"Wheel Up" movement. White space replaces the above string if the mouse doesn't have the corresponding operation.

   For example, when the mouse moves right and up,

```
"                              Right UP              "
```

prints in the terminal.

The following figure is an example to attach one mouse device.

```
host init done
hid mouse attached:pid=0x2510vid=0x93a address=1
mouse attached
control transfer error
                                        Wheel Down
                   Right Click

Left Click

                           Right Down
                               UP
                               UP
                           Right UP
                               UP
                               UP
                           Right UP
                           Left   UP
                           Left
                           Left   Down
                           Left   Down
                           Left   Down
                           Left   Down
```

Figure 1: Attach mouse