

## Scope

This document describes how to test USB Host PHDC example.

## Preparation

### Host

A board, i.e. twrk22f120m, which is running host\_phdc example.

### Device

A board, i.e. twrk70f120m, which is running dev\_phdc\_weighscale example.

### 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 PHDC host demo.

1. Compile example.

Note: If this example runs on the MQX and SDK, STD\_FP\_IO needs to be set to 1 and rebuild the MQX related libraries. This STD\_FP\_IO can be found in `rtos/mqx/mqx_stdlib/source/include/std_prv.h`.

2. Run the `host_phdc` example.
3. Plug-in the PHDC device and you will see some attach information printed out.
4. The PHDC device will automatic send reports to host. You can see information of scan report number, time, value and unit of each data field in terminal tool