

Scope

This document describes how to test USB Host CDC example.

Preparation

Host

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

Device

A board, i.e. twrk70f120m, which is running dev_cdc_virtual_com 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>`

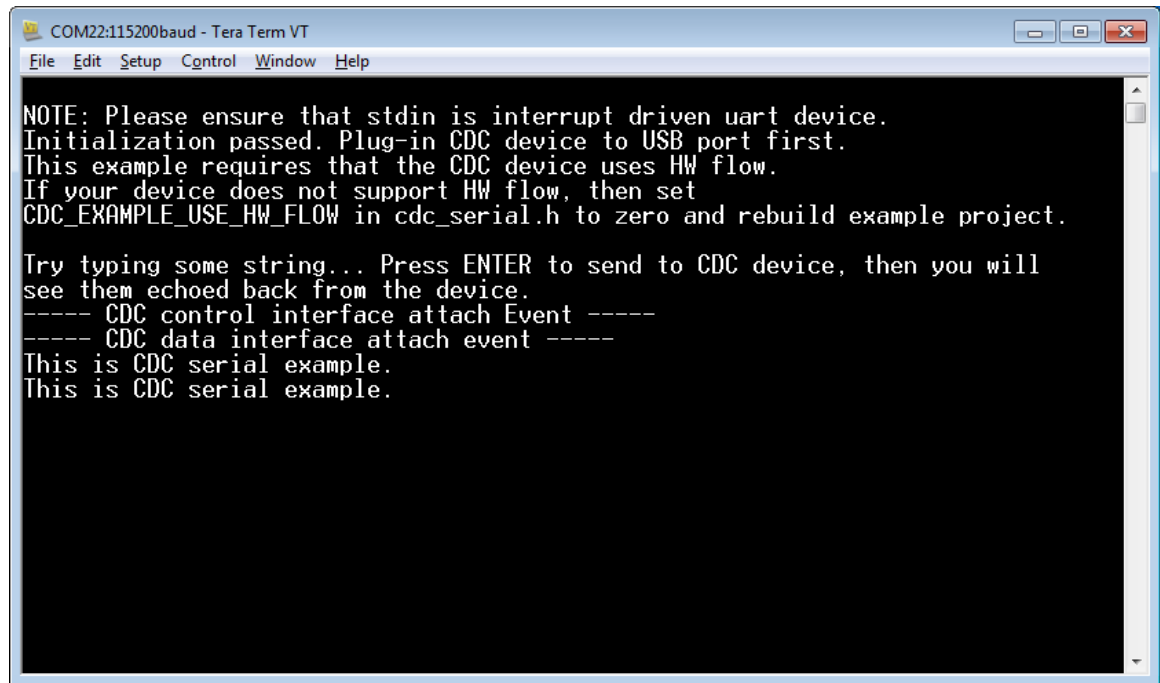
Refer to **Integration of the USB Stack and Kinetis SDK_review.pdf**(`<install_dir>/doc`) on how to build the corresponding libraries.

Steps

Follow the steps to run the CDC serial demo.

1. Run the `host_cdc_serial` example and you will see the printed guide note. Users can follow that note and do some modifications. For example, choose “ittyb” as stdin port for `twrk22f120m` to ensure the stdin is interrupt driven.
2. Plug-in the CDC device and you will see some attach information printed out.
3. Type some string and the string will be sent to CDC device if either of the following becomes TRUE:
 - Any “\r” or “\n” received.
 - The string length is greater than `CDC_MAX_PKT_SIZE`

After that CDC host will read back the string and put it to stdout.



COM22:115200baud - Tera Term VT

File Edit Setup Control Window Help

```
NOTE: Please ensure that stdin is interrupt driven uart device.
Initialization passed. Plug-in CDC device to USB port first.
This example requires that the CDC device uses HW flow.
If your device does not support HW flow, then set
CDC_EXAMPLE_USE_HW_FLOW in cdc_serial.h to zero and rebuild example project.

Try typing some string... Press ENTER to send to CDC device, then you will
see them echoed back from the device.
----- CDC control interface attach Event -----
----- CDC data interface attach event -----
This is CDC serial example.
This is CDC serial example.
```

Note:

- If you want to disable character echo back while typing, set `CDC_SERIAL_ECHO_BACK` in `cdc_serial.h` to 0.
- When hotplug the device during transferring a file, make sure that the file sending process in terminal tools(e.g. Tera Term) has been finished before next time you plug in the device.