Overview

This Host MSD example supports the UFI and SCSI U-disk device.
The application prints the attached device information when the U-disk device is attached. The application executes UFI commands to test the attached device.

System Requirement

Hardware requirements

- Mini/micro USB cable

- USB A to micro AB cable

- Hardware (Tower module/base board, and so on) for a specific device

- Personal Computer (PC)

Software requirements

- The project path is:

    <MCUXpresso_SDK_Install>/boards/<board>/usb_examples/usb_host_msd_command/<rtos>/<toolchain>.

    Note

    The <rtos> is Bare Metal or FreeRTOS OS.

Getting Started

Hardware Settings

- The Jumper settings: 1-2, J4 1-2, J27 1-2 and remove all jumpers from J35 for micro USB connector. 1-2, J4 1-2, J27 2-3, and remove all jumpers from J35 for using TWR-SER mini USB connector.

    Note

    Set the hardware jumpers (Tower system/base module) to default settings.

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 U-disk device to the board. The attached information prints out in the terminal.

3. The test information prints in the terminal, "success" prints when one command succeeds and "fail" prints when one command fails. The test completes when there is a command fail or all the tests are done.

    The following figure is an example for attaching one U-disk device.

Figure 1: Attach U-disk device

4. To test throughput, set the MSD_THROUGHPUT_TEST_ENABLE to (1) in te file host_msd_command.h. An additional 64 K RAM is required to test the throughput. The macro is only supported on the TWR-K65F180M Tower System module and IAR.

The following figure is a throughput test example for attaching one U-disk device.

Figure 2: Throughput test

Note

Throughput test only supports the TWR-K65F180M Tower System module.