

Overview

The application is a simple demonstration program based on the MCUXpresso SDK. The application is enumerated as HID-compliant mouse and keyboard devices.

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 files for lite version examples are in:
`<MCUXpresso_SDK_Install>/boards/<board>/usb_examples/usb_device_composite_hid_mouse_hid_keyboard-_lite/<rtos>/<toolchain>.`
For non-lite version example, the files are in:
`<MCUXpresso_SDK_Install>/boards/<board>/usb_examples/usb_device_composite_hid_mouse_hid_keyboard/<rtos>/<toolchain>.`

Note

The <rtos> is Bare Metal or FreeRTOS OS.

Getting Started

Hardware Settings

- Jumper settings for REV B:
J17 1-2 and 3-5. Besides, two 33ohm resistors (R225 and R227) have to be populated on nets K21_MICRO_USB_-DP and K21_MICRO_USB_DN and two 33ohm resistors (R224 and R226) on nets USB0_DP and USB0_DN have to be removed for using micro USB connector. 1-2 and 3-5. Besides , two 33ohm resistors (R224 and R226) have to be populated on nets USB0_DP and USB0_DN and two 33ohm resistors (R225 and R227) on nets K21_MICRO_USB_DP and K21_MICRO_USB_DN have to be removed for using TWR-SER board's mini USB connector.
- The Jumper settings REV C:
J17 1-2 and 3-5, J24 1-2 for micro USB connector. 1-2, J24 2-3 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. Connect the target board to the external power source (the example is self-powered).
3. Power off the target board. And then power on again.
4. Connect a USB cable between the PC and the USB device port of the board.

Note

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

Run the example

1. Plug in the device, which is running the composite example, into PC. An HID-compliant mouse and a keyboard are enumerated in the Device Manager.
2. For the HID mouse, the mouse arrow moving on the PC screen in the rectangular rotation.
3. For the HID keyboard, see the screen while scrolling up and down.