### **Overview**

The application is a simple demonstration program that uses the KSDK software. The application is enumerated as HID-compliant mouse and keyboard devices.

## **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 files for lite version examples are in:

<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:

<SDK\_Install>/boards/<board>/usb\_examples/usb\_device\_composite\_hid\_mouse\_hid\_keyboard/<RTOS>/<toolchain>.

Note

The RTOSes are bare metal or FreeRTOS OS.

## **Getting Started**

#### **Hardware Settings**

• The Jumper settings:

J11 5-6, J24 1-2 for micro USB connector. 1-2, J24 2-3, and remove J11 5-6 for using TWR-SER mini USB connector.

### 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.