

Scope

This document describes how to test USB Device video virtual_camera example.

Preparation

Host

Personal computer running Windows 7.

Device

A board, i.e. frdmk82f, which is running dev_video_virtual_camera example.

Libraries dependency

The libraries dependency for various RTOS lists as following,

BM

Library project path:

- `<install_dir>/usb/usb_core/device/build/<tool_chain>/usbd_sdk_<board>_bm`
- `<install_dir>/lib/ksdk_platform_lib/<tool_chain>/<platform>`

FreeRTOS

Library project path:

- `<install_dir>/usb/usb_core/device/build/<tool_chain>/usbd_sdk_<board>_freertos`
- `<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/device/build/<tool_chain>/usbd_sdk_<board>_mqx`
- `<install_dir>/lib/ksdk_mqx_lib/<tool_chain>/<platform>`

uCOSii

Library project path:

- `<install_dir>/usb/usb_core/device/build/<tool_chain>/usbd_sdk_<board>_ucosii`

- `<install_dir>/lib/ksdk_ucosii_lib/<tool_chain>/<platform>`

uCOSiii

Library project path:

- `<install_dir>/usb/usb_core/device/build/<tool_chain>/usbd_sdk_<board>_ucosiii`
- `<install_dir>/lib/ksdk_ucosiii_lib/<tool_chain>/<platform>`

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

Steps

Follow the steps to run the dev_video_flexio_ov7670 demo.

1. Plug-in the device which is running dev_video_virtual_camera into PC. You will see an imaging device "USB VIDEO DEMO" enumerated in Device Manager.
2. Download and install PC video test tool "QQ International". The tool's link is <http://www.imqq.com/#download>.
3. Open the tool "Tencent QQ" and logging in.
4. Open the video test form: Main Menu ->Settings->General->Audio and Video->Video Settings. And then select "USB VIDEO DEMO" in DropBox.
5. You can see the video in the form.

Note

1. The resolution is 176*144, the video image format is MJPEG. The frame interval includes 30, 25, 20, 15, 10, and 5, and the default frame interval is 15.