



AN00136: Example USB Vendor Specific Device (README)

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vendor

XMOS

version

3.0.0

scope

Example

description

Example custom USB device demonstrating bulk transfers

category

General Purpose

keywords

USB

hardware

XK-EVK-XU316

1 Overview

This application note describes how to create a vendor specific USB device demonstrating simple USB bulk transfers over high speed USB.

The accompanying example code has been written for the *XK-EVK-XU316* board, however, since no hardware interfaces are used (other than USB) porting to another hardware platform is simple.

2 Key Features

The documented application is designed to run on the *XK-EVK-XU316* board and has the following key features:

- ▶ USB 2.0 compliance
 - ▶ Chapter 9 compliance
 - ▶ Full Speed (12Mbit/s), High Speed (480Mbit/s) data rates
- ▶ Control, Bulk, Isochronous and Interrupt transfer types available
- ▶ USB bus or self powered support



- ▶ Example code shows bulk transfers between host and device
- ▶ Two example host applications, both using [libusb](#) for USB device access
 - ▶ One using simple (but less efficient) synchronous *libusb* API
 - ▶ Another using more advanced (but more efficient) asynchronous *libusb* API
- ▶ Support for building host applications on *Windows*, *macOS* & *Linux*

3 Known Issues

- ▶ None

4 Required Tools

- ▶ XMOS XTC Tools: 15.3.0

5 Required Libraries (Dependencies)

- ▶ `lib_xud` (www.github.com/xmos/lib_xud)

6 Related Notes

- ▶ None

7 Support

This package is supported by XMOS Ltd. Issues can be raised against the software at: <http://www.xmos.com/support>



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