MCCI Mode Switch

This document contains instructions on how configure the MCCI Model 3411 USB3.2 Gen2 Test Device https://store.mcci.com/collections/usb-test-devices/products/model-3411.

The MCCI device is a multi-mode device. In order to work correctly with USB-IF tools (USB4CV, XHCICV), it must be put into the mode that makes it behave as USB-IF compliance device. In this mode it will work identically to the Microsoft SuperMUTT. If it is not configured correctly, USB-IF tools will fail to identify it as a compliance device.

Version 1.0
04/19/2023

Mode Switching Instructions

1. Connect the MCCI to the PC using a micro-B cable.
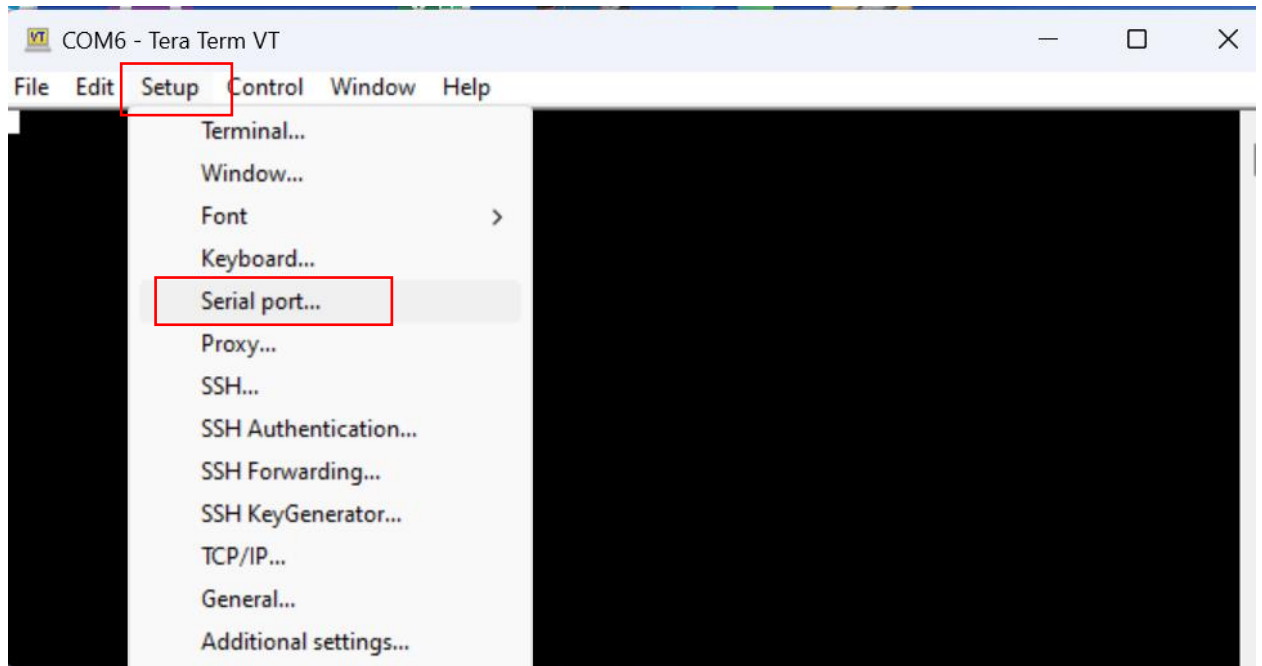2. Go to Device Manager and confirm that you see COM port.
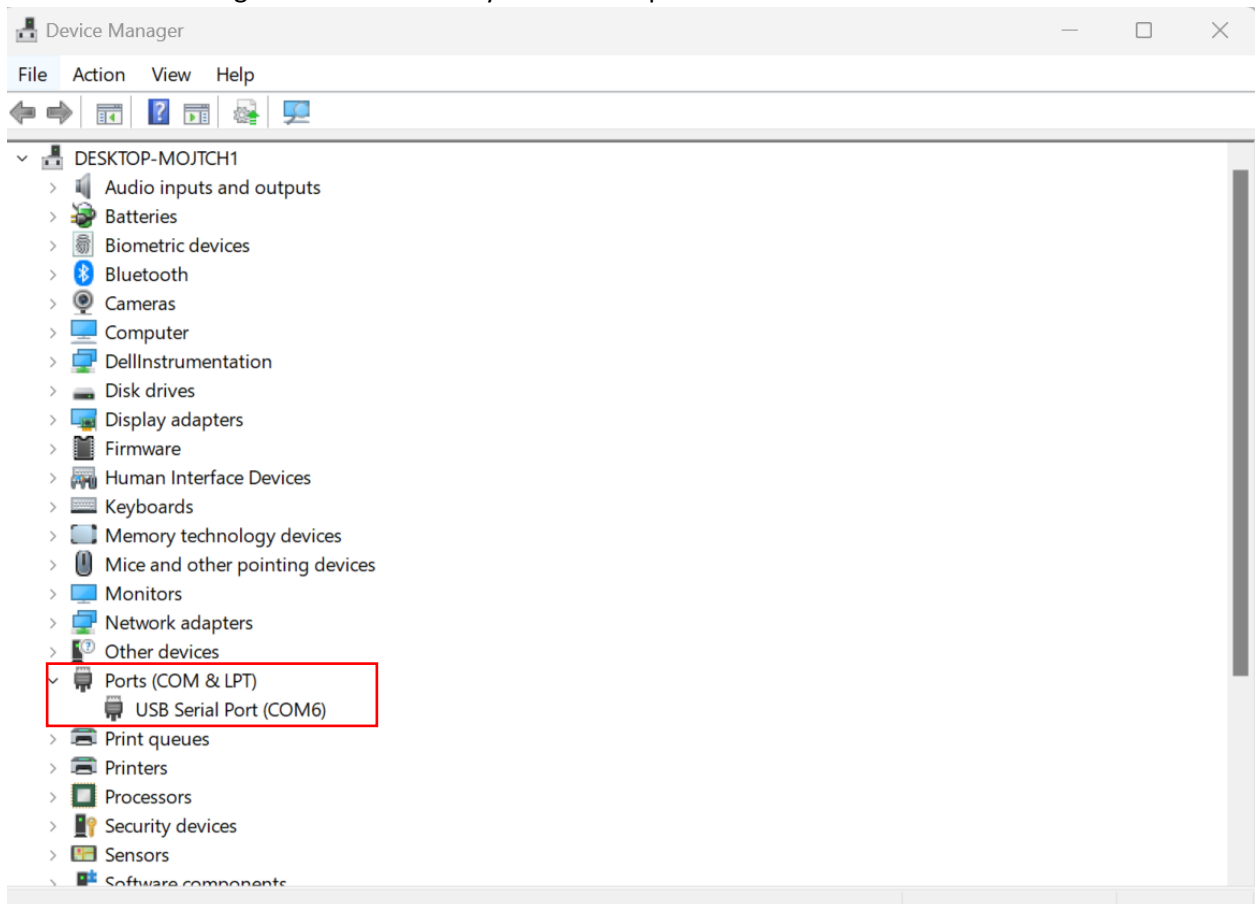
3. Download a terminal program such as Tera Term.
4. These instructions use Tera Term as an example.
5. Install Tera Term.
6. Once you launch Tera Term, a New Connection window will open. Choose Serial and select the COM port that the MCCI is connected to. Then press OK
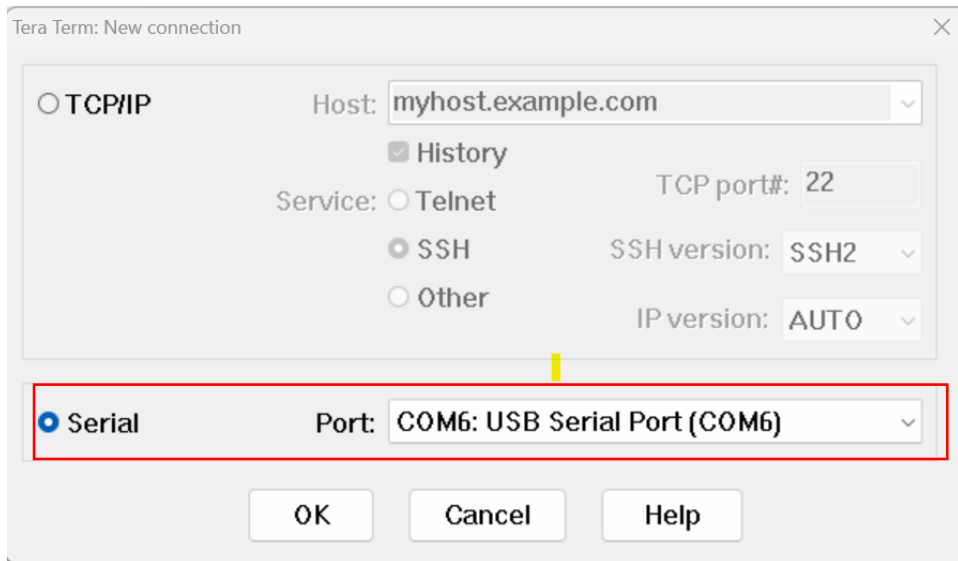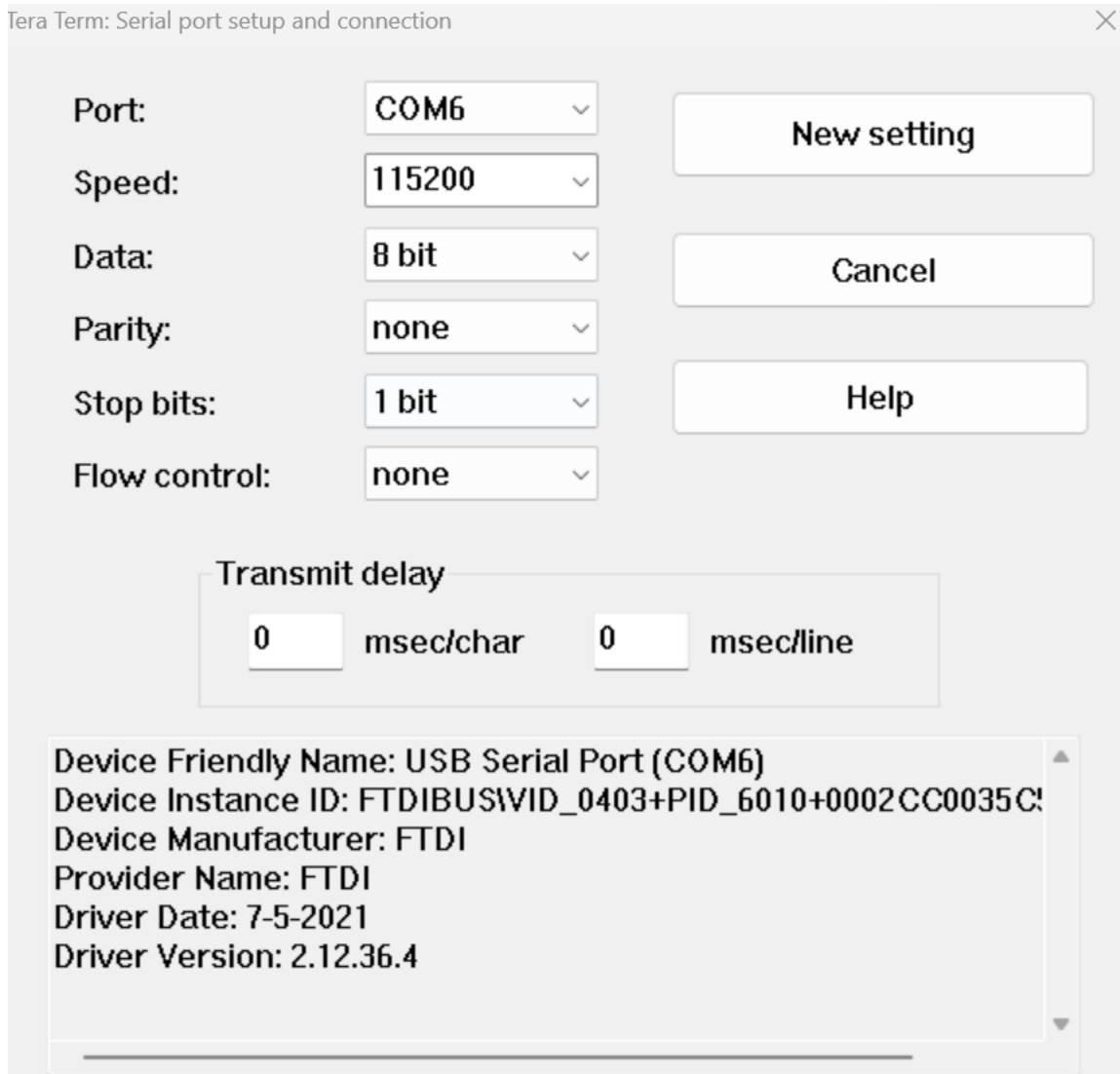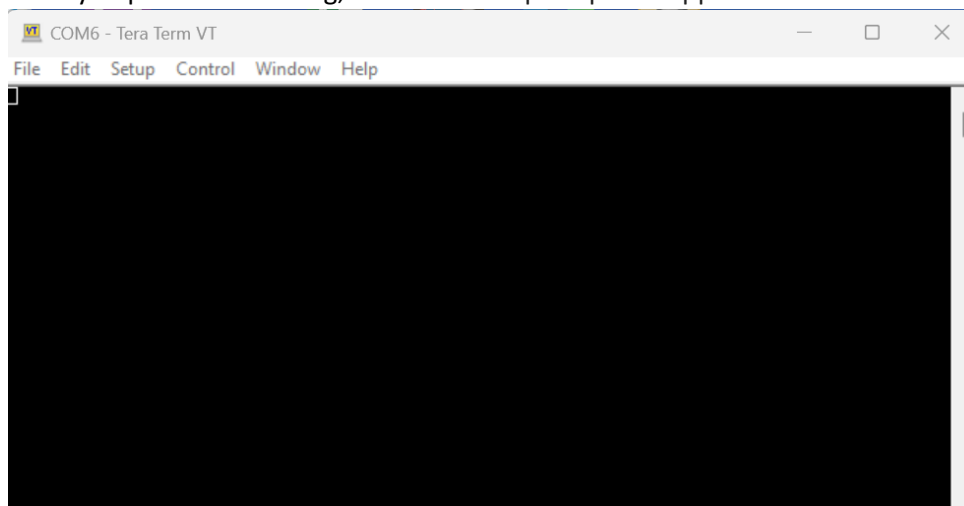
7. Then a command prompt will appear.
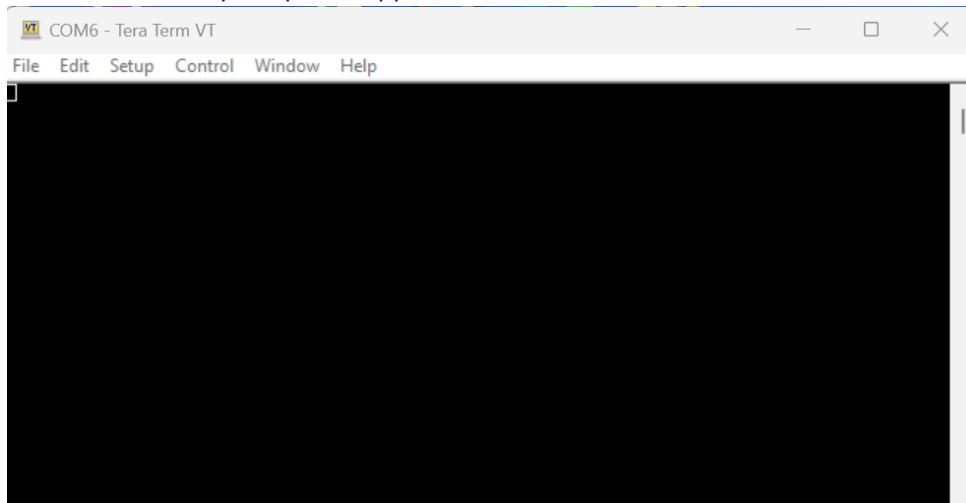
8. Then go to **Setup** and choose **Serial Port**

9. Then make sure the setting matches the setting below in the picture. Then press New setting
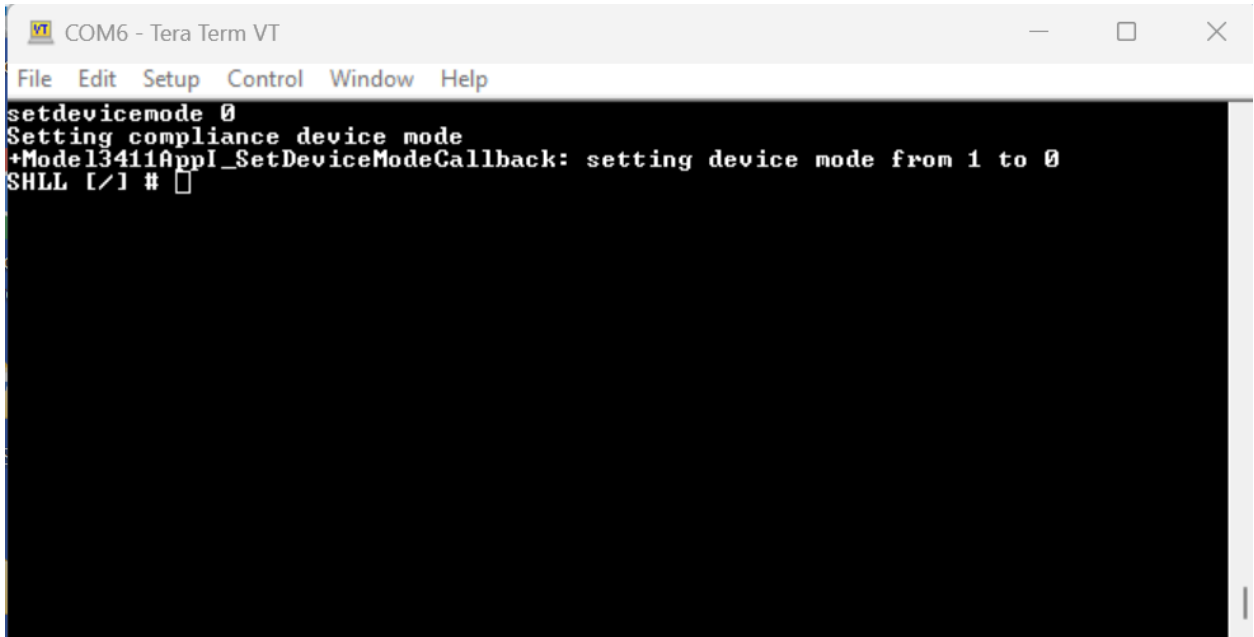
Tera Term: Serial port setup and connection

Port: COM6

Speed: 115200

Data: 8 bit

Parity: none

Stop bits: 1 bit

Flow control: none

New setting

Cancel

Help

Transmit delay

0 msec/char   0 msec/line

Device Friendly Name: USB Serial Port (COM6)
Device Instance ID: FTDIBUS\VID_0403+PID_6010+0002CC0035C!
Device Manufacturer: FTDI
Provider Name: FTDI
Driver Date: 7-5-2021
Driver Version: 2.12.36.4

10. Once you press New setting, the command prompt will appear.

COM6 - Tera Term VT

File   Edit   Setup   Control   Window   Help
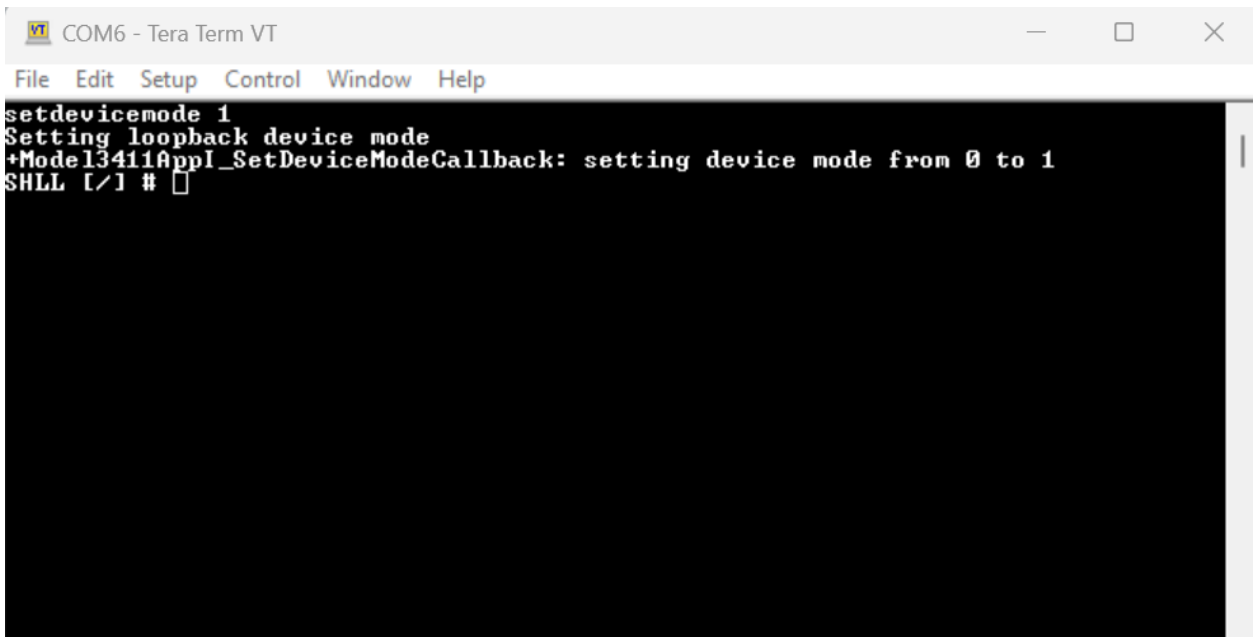
11. Now, you can change the device mode using setdevicemode command.

    setdevicemode 0   → USB-IF compliance device mode

    setdevicemode 1   → Loopback device mode

12. Once you select which mode you want the MCCI device to be in, you can close the prompt window

Verifying MCCI Device Mode

The device will present a different VID/PID, depending which mode it is in.

The MCCI device has two modes, a USB-IF compliance device mode and a Loopback device mode. Each mode has its own VID/PID. The VID/PID for the USB-IF compliance device mode is VID=040E, PID=F644 and the VID/PID for the Loopback device mode is VID=040E, PID=F645. Below is a Device summary showing the VID/PID.

If USB4CV or XHCICV does not recognize the device, check the VID/PID and make sure it is configured as a USB-IF compliance device.

Figure 1: USB-IF XHCI compliance device mode

APPLICATION: USB 3 Gen X Command Verifier
TEST SUITE: Device Summary.cvtests
OPERATING SYSTEM:
WORKSTATION:
DATE: Wednesday, April 19, 2023
TIME: 09:38:51 AM
OPERATOR: Dell_XPS_8940_#1
NUMBER OF TESTS: 1
LOG NAME: Device Summary - 2023-04-19 09-38-43
RESULT: passed

Initialize Test Suite

```
INFO        Test log initialized.
INFO        Log Level: Normal
INFO        User Input module initialized
INFO        Windows 10 Pro (Build 22000.1.amd64fre.co_release.210604-1628)
INFO        CVApp.exe ver 4.1.0.0
INFO        BaseUtilities.dll ver 4.1.0.0
INFO        CommandVerifierLog.dll ver 4.1.0.0
INFO        GuiHelper.dll ver 4.1.0.0
INFO        TestUtilities.dll ver 4.1.0.0
INFO        TestSuiteEngine.dll ver 4.1.0.0
INFO        xhci_DevIOCTL.dll ver 2.2.7.0
INFO        xhci_TestServices.dll ver 2.2.7.0
INFO        USBUtilities.dll ver 1.4.5.1
INFO        StackSwitcher.dll ver 1.4.5.1
INFO        xhci_CommandVerifierServices.dll ver 2.2.7.0
INFO        VIFReader.dll ver 4.1.0.0
INFO        XHCISpecVersion: 1.10.
INFO        Host 1 selected: xHCI Host:  VID=0x1B21, PID=0x2142 (PCI bus 4, device 0, function 0)
INFO        User selection from list: "SSP  Device addr=1:   VID=040E, PID=F645"
INFO        Please select USB Device  to test
INFO        USB Device Under Test is operating at SuperSpeedPlus Gen2x1.
INFO        Topology: XHCI HC -- DUT
```

Figure 2: Loopback device mode