2.6 Running a Precompiled Application Example

This section gives a detail explanation on how to open, build and program an existing application example.

Prerequisites

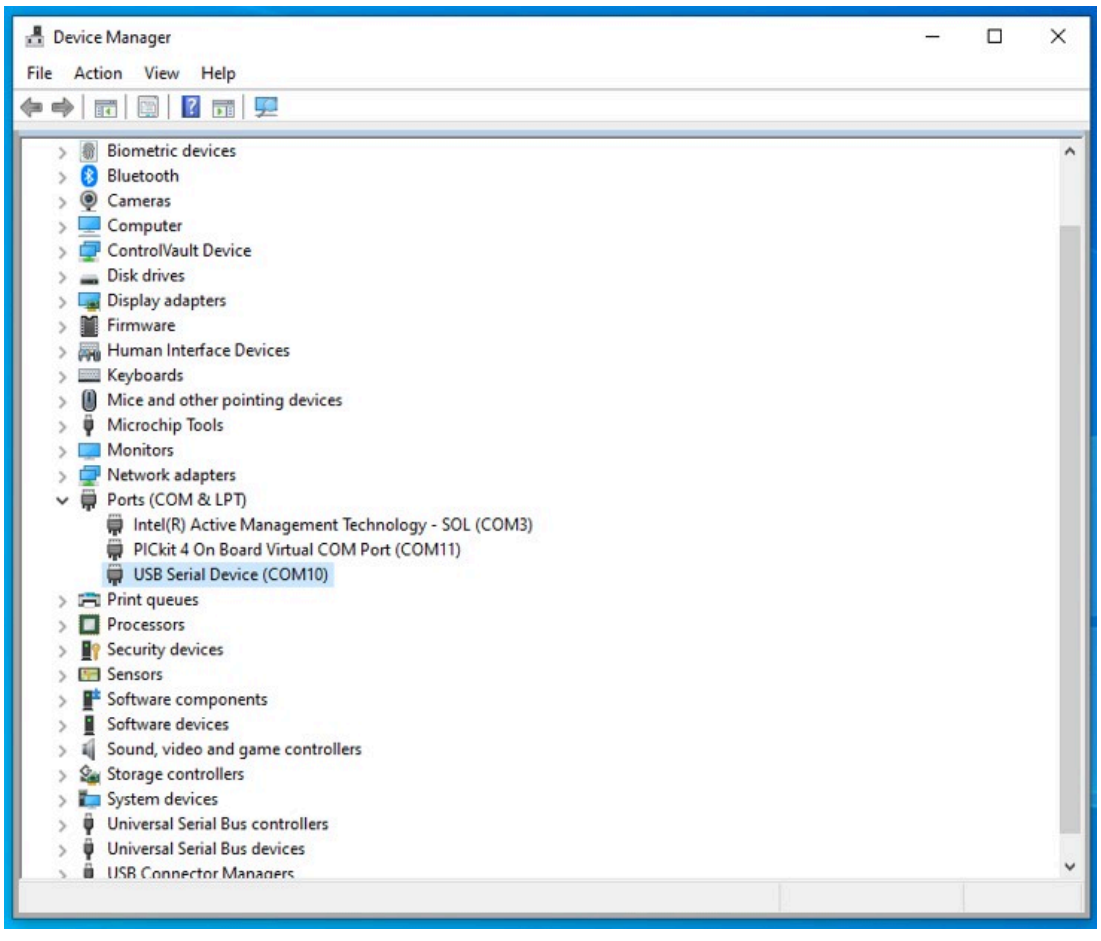
1. Install MPLAB X IDE
2. Install XC32 Compliler
3. Install 2.2 Installing Device Family Part Pack
4. Install MCC Plugin
5. Install 2.4 Install Harmony 3 Dependencies

COM Port Setup

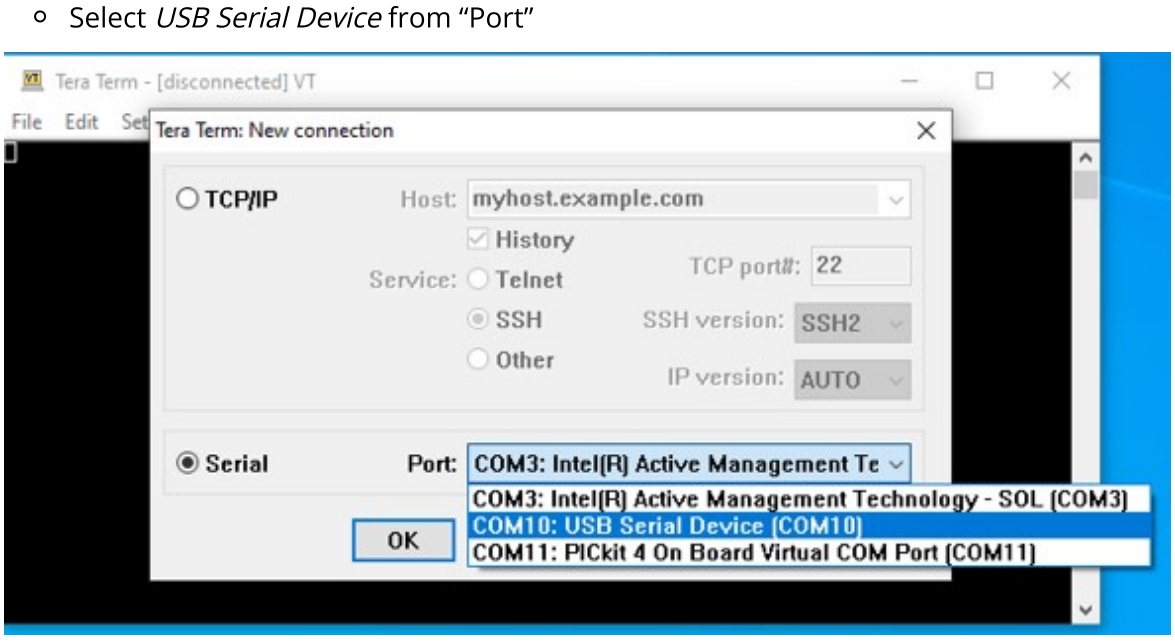
To resolve COM port issues that prevent the output of text to the Tera Term terminal using the WBZ451 curiosity board, follow these steps:

1. Close Tera Term and unplug the curiosity board from the computer.
2. Open Device Manager.

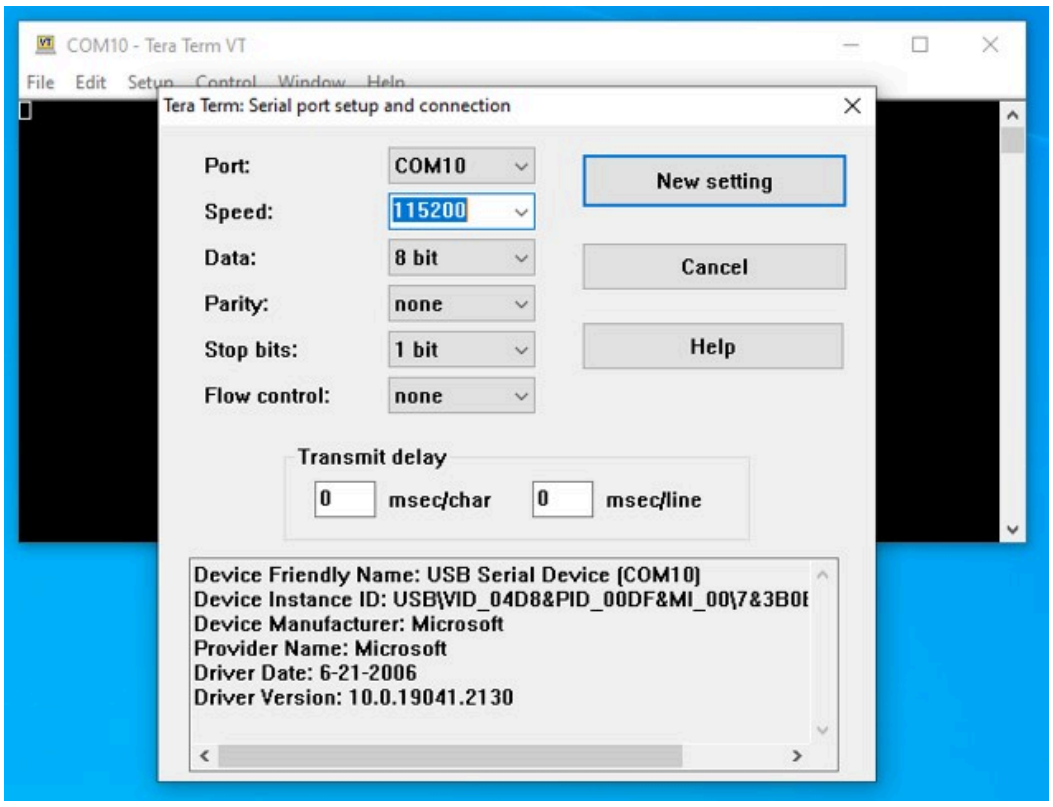
Figure 2-20. Device Manager



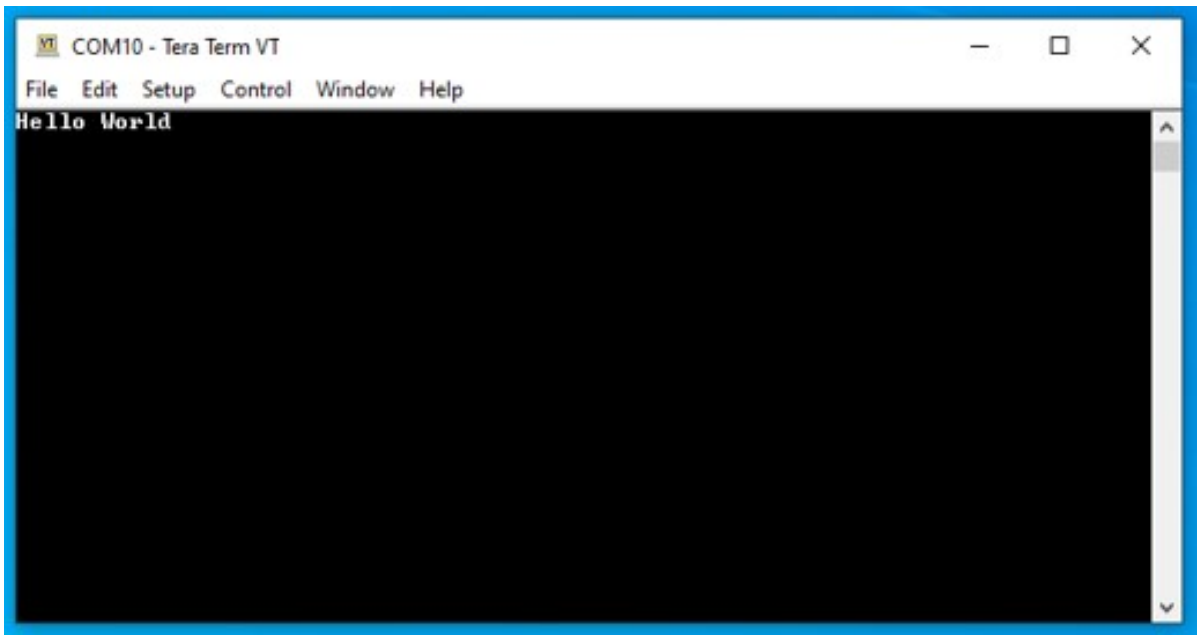
3. Plug the Curiosity board back into the computer.
4. In the Tera Term window, select “Serial”.
    - Select *USB Serial Device* from “Port”



5. In the **Setup** tab, change the value from 9600 to 115200 in “Speed”. Click **New setting** to apply the changes.



6. Press the reset button on the board to see text on the terminal if the curiosity board is programmed to do that.



Opening , Building and Programming an Existing Application Example

1. Connect Curiosity Board to the PC using USB cable
2. Open MPLAB X IDE
3. Select File > Open Project
4. Browse to project location of choice (In this example, it is "ble_sensor_app") project, select project file from the location "`<Harmony Content Path>\wireless_apps_pic32cxbz2_wbz45\apps\ble\advanced applications\ble_sensor\firmware\ble_sensor.X`"

ATTENTION
If multiple projects are open within IDE, IDE may not choose to build/program the "ble_sensor" project Select the "ble_sensor" project, right click and select the setting "Set as Main Project""Information related to the workings of the application example are available in "PIC32CXBZ3 WBZ35 Application Developer's Guide" available in the ble_sensor”

“Information related to the workings of the application example are available in *PIC32CXBZ3 WBZ35 Application Developer's Guide*" available in the ble_sensor folder”

5. Open Project Properties:
    - Select WBZ451 Curiosity Board as hardware tool for programming
    - Ensure correct DFP v1.0.xx is selected as mentioned in the Tools and Harmony Components
6. Select XC32 compiler
7. Select option **Build Project** in IDE to compile the application example
8. Select option **Run Project** in IDE to program the target – the onboard debugger will program the example application

Note: A smartphone app might be needed to explore the full feature set of BLE Application examples.