AMPAK

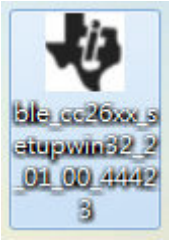
WMCT-759B

Hardware & Software Setup Guide

Rev. 0.0

1. Download & Install BLE-Stack

The latest BLE software can be downloaded at http://www.ti.com/tool/ble-stack?DCMP=wbu-blestack&HQS=ble-stack. After the BLE-Stack software installation is complete, the Prolific driver must be associated with the device in order to use the BTool application.



2. Associate Prolific Driver with WMCT-759B

To associate the Prolific driver, you must first connect the WMCT-759B to the PC's USB port, or to a USB hub that connects to the PC.

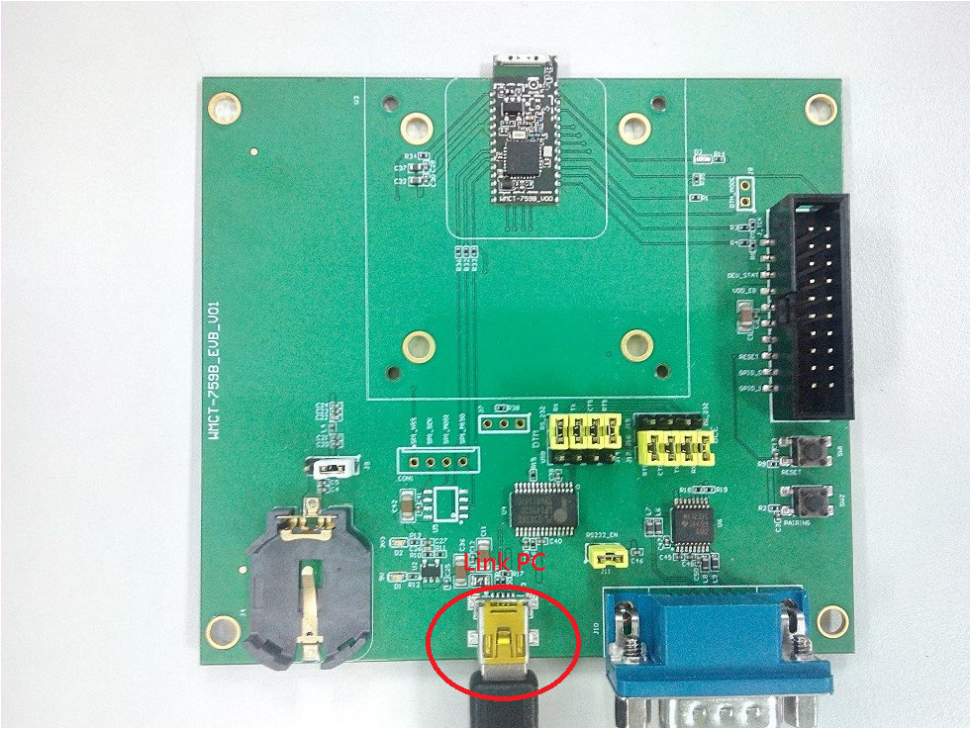


Figure 1 Connect the WMCT-759B to the PC' USB port

This section will guide you on how to install the PL-2303 Windows Driver. You can download the latest Driver Installer program from Prolific Support website:
http://www.prolific.com.tw/US/ShowProduct.aspx?p_id=225&pcid=41

2.1 Power on your computer and boot to Windows. Run or double-click the PL-2303 Windows Driver Installer program.(e.g.PL2303_Prolific_DriverInstaller_v1.12.0.exe)

2.2 The InstallShield Wizard will be displayed to inform you that the PL-2303 USB-to-Serial driver will be installed on your computer. Click Next to continue.

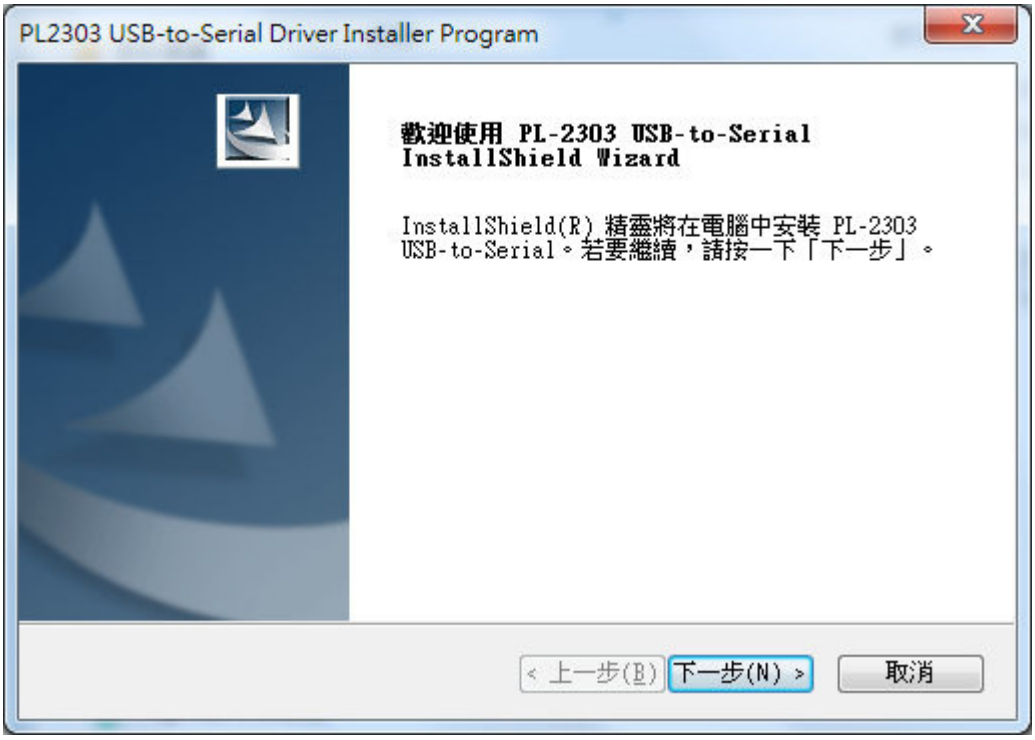


Figure 2 InstallShield Wizard

2.3 The PL-2303 Driver Installer program will then start to install the drivers needed.

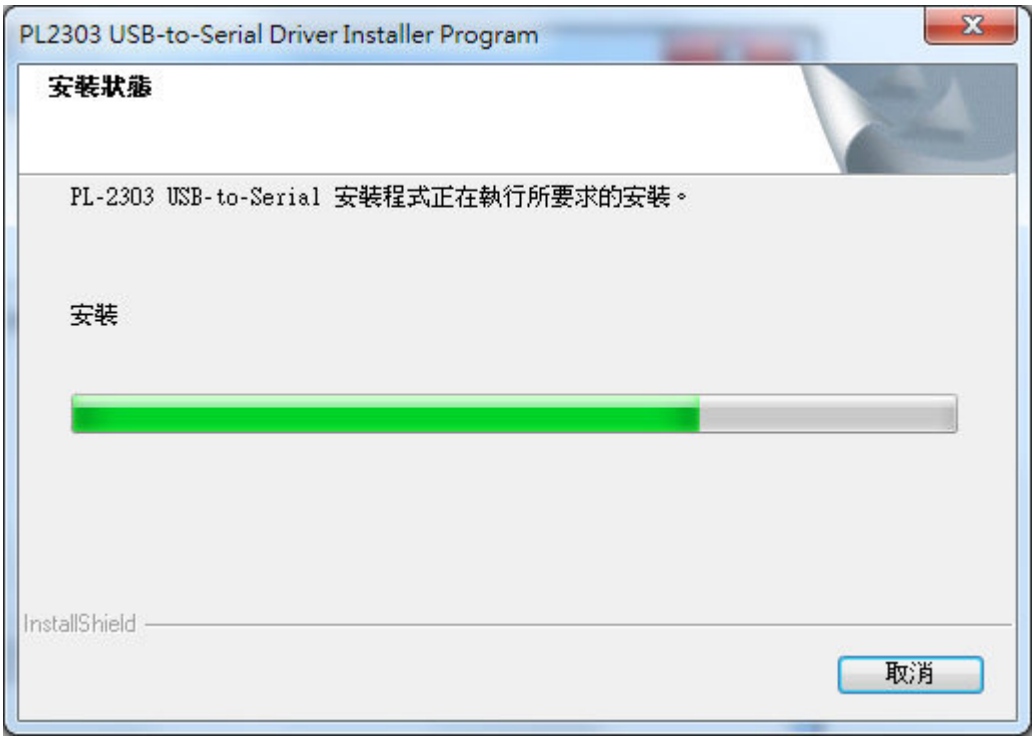


Figure 3 Installer program

2.4 Click the Finish button to close the InstallShield program. If you have plugged the cable into the PC while running the setup installation, please unplug and replug the cable for the system to detect the device.

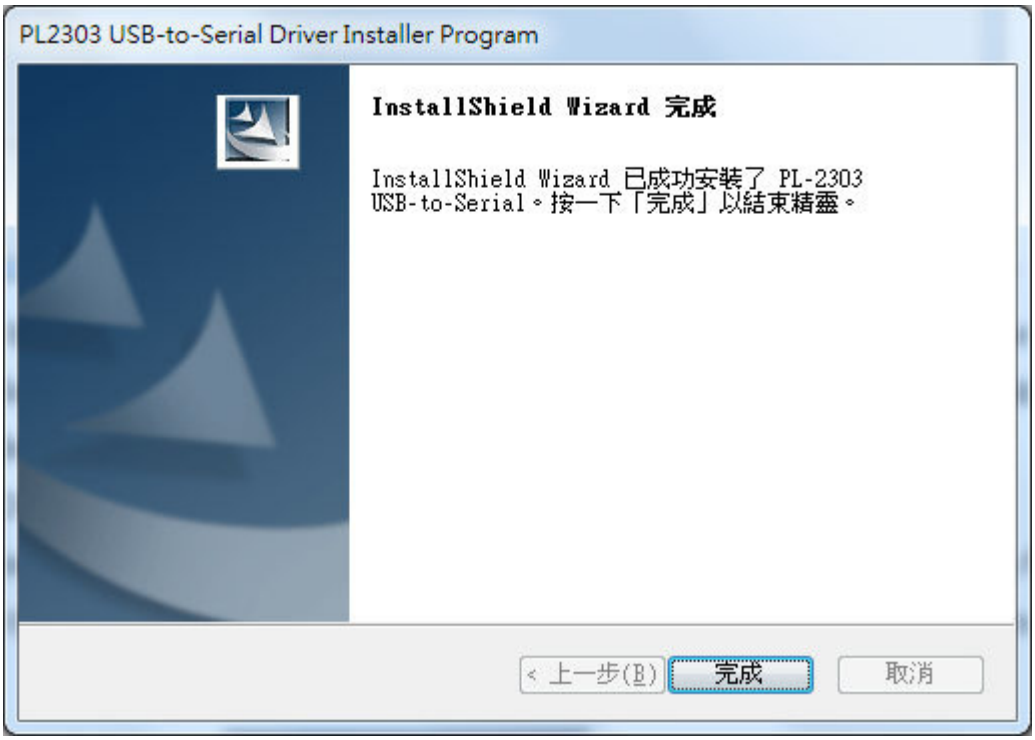


Figure 4 InstallShield Wizard Finish

2.5 Plug in the USB to Serial adapter to the PC USB port. Windows should detect the driver as Prolific USB-to-Serial Com Port. Go to Device Manager and check for the “Prolific USB-to-Serial Com Port” device and the COM port number assigned by Windows. See the next section.

3. Determining the COM Port

You will need to know which COM port Windows has assigned to the serial port. To find out, right-click on the “Computer” icon on your Start and select “Properties”, shown in Figure 5.

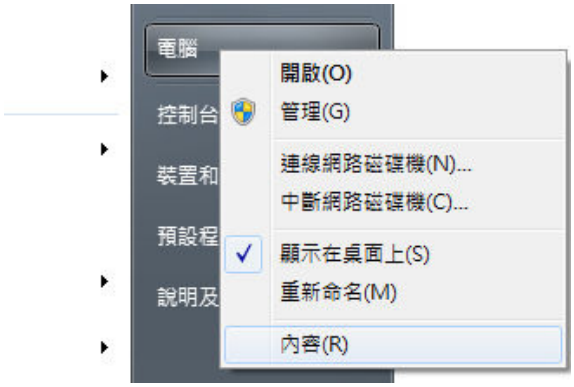


Figure 5 Win7 PC, Finding Computer Properties

The “System” window should open up. Click “Device Manager”:

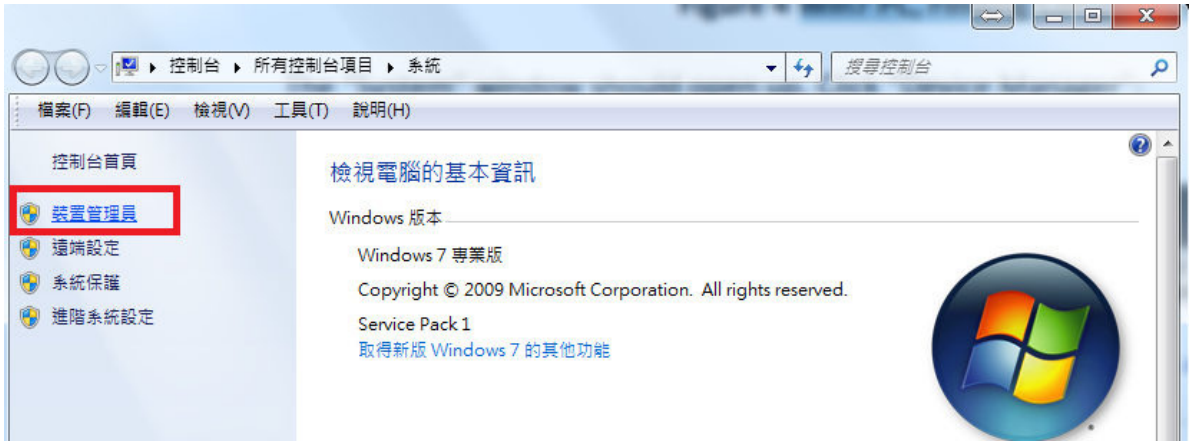


Figure 6 Win7 PC, Finding Device Manager

A list of all hardware devices should appear. Under the section “Ports (COM & LPT)”, the port should appear.

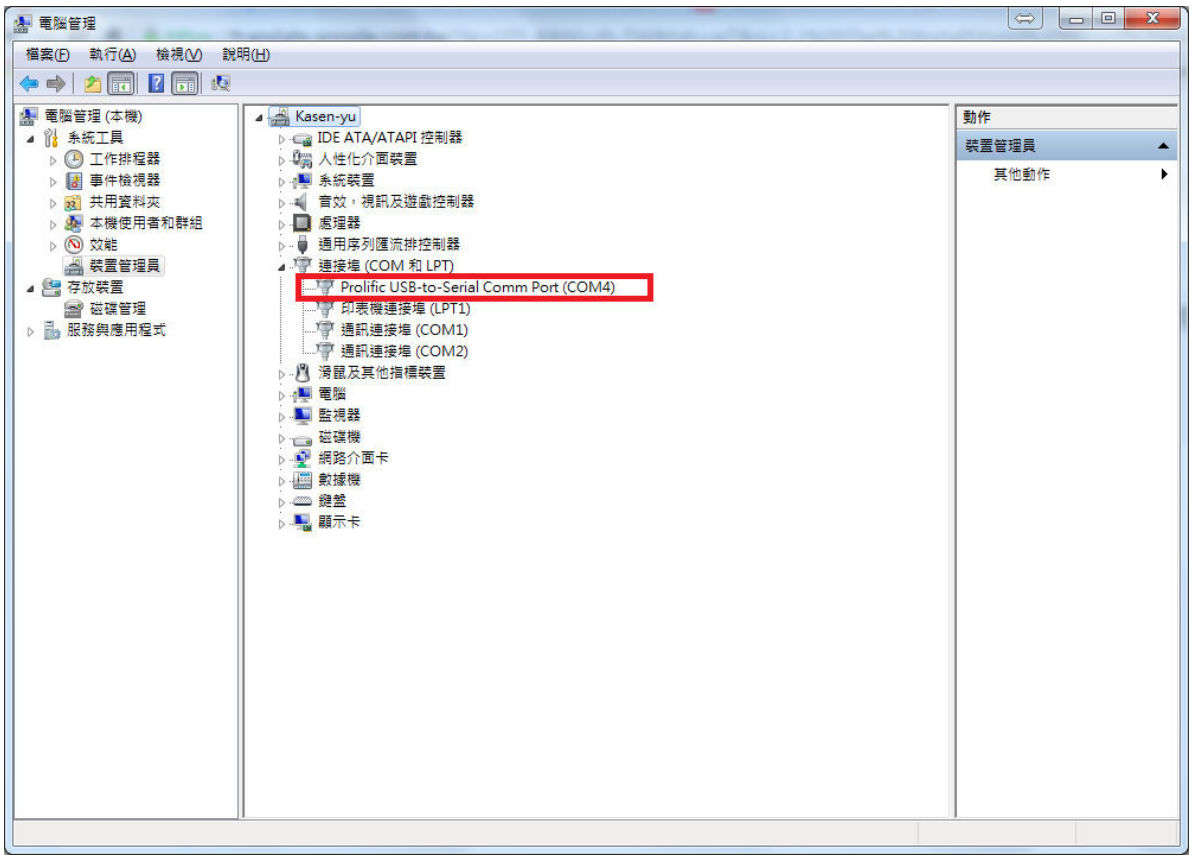
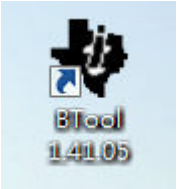


Figure 7 Win7 PC, Connected Ports List

Take note of this port number, as it will be needed in order to use BTool. You may close the device manager at this point.

4. Starting the Application BToll



On Start-up you should be able to set the Serial Port Settings. Set the “Port” value to the COM port earlier noted in Section 3. Baud rate select 115200. For the other settings, use the default values as shown in Figure 8. Press “OK” to connect to the Host Board

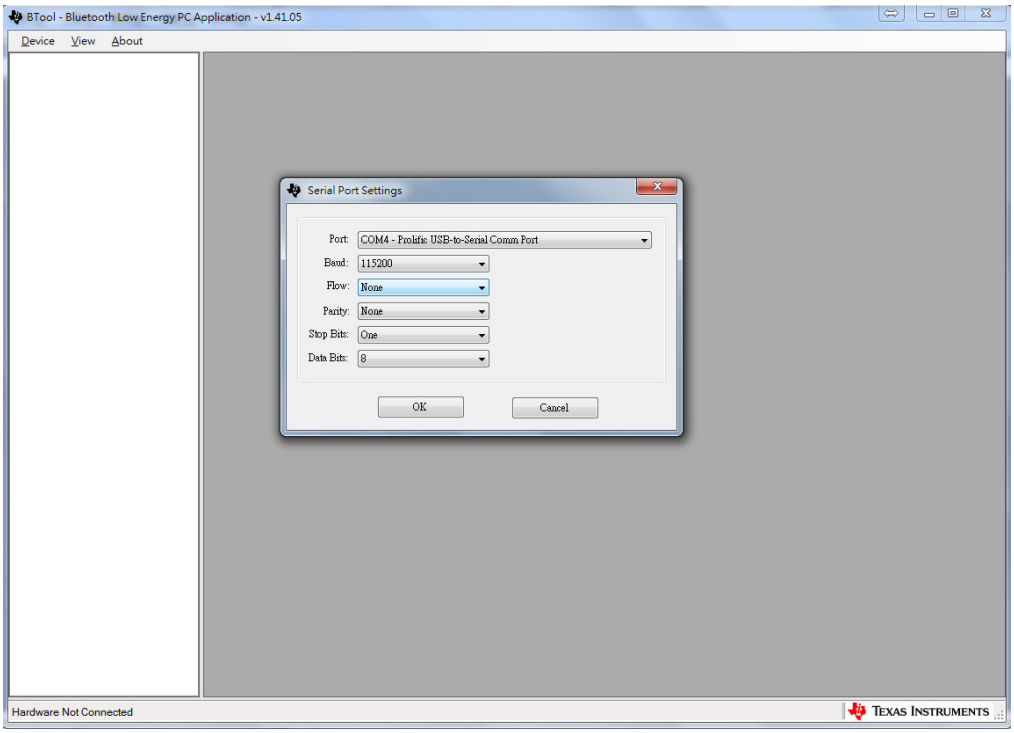


Figure 8 BTool, Serial Port settings

When connected you should see the screen presented in Figure 9. The screen indicates that you now have a serial port connection to the MWCT-759B Board.

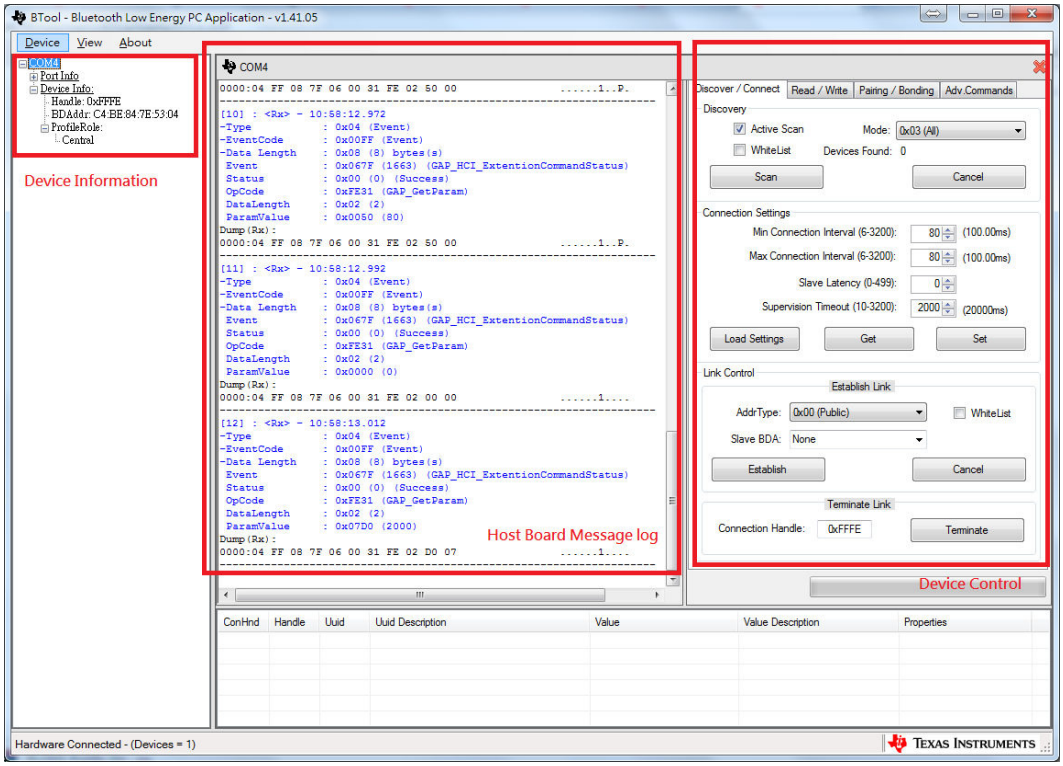
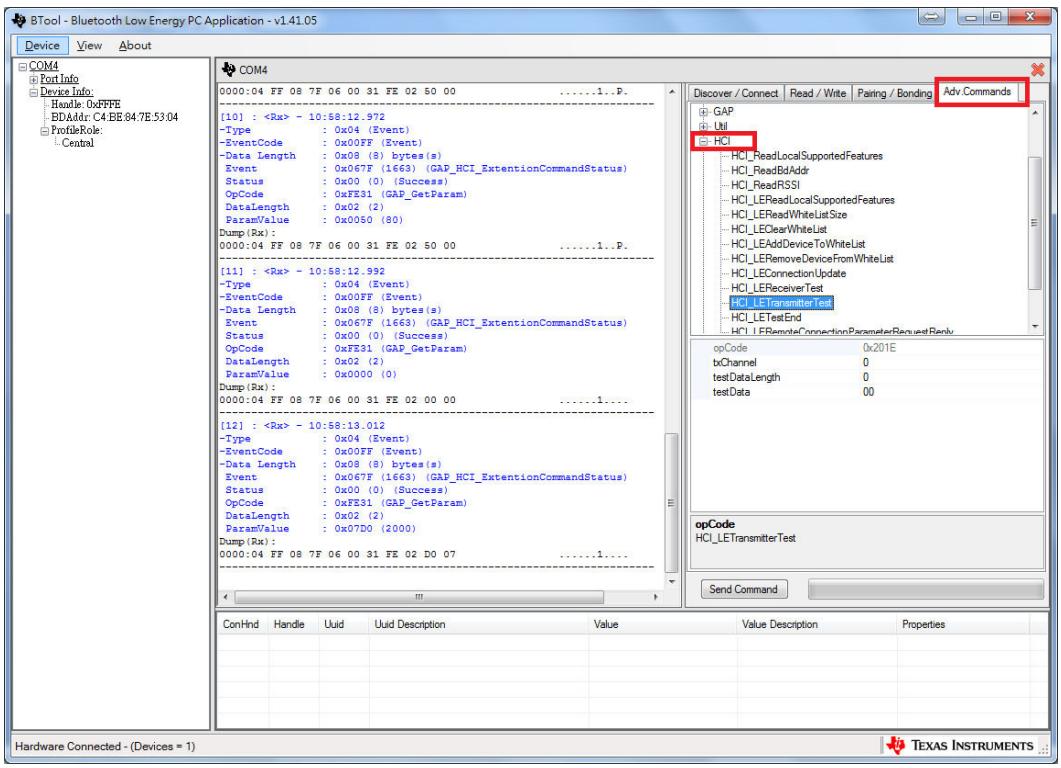


Figure 9 BTool, Overview

4.1 TX test

Step1. Select Adv. Command clicking to the “HCI” and found the “HCI_LETransmitterTest”.

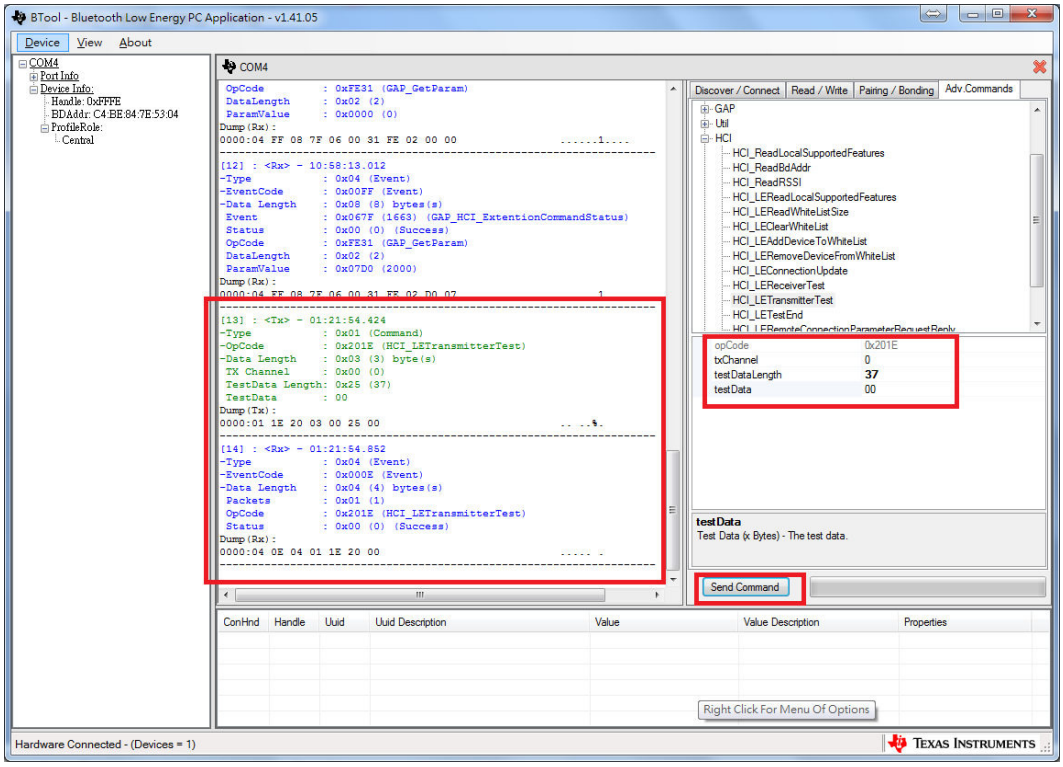


Step2. Before establishing a transmitter test, you will want to set up the desired transmission parameters. After parameter setting, click “Send Command” button to begin testing.

txChannel= (F-2402)/2 ; L(2402)=0 ; M(2440)=19 ; H(2480)=39

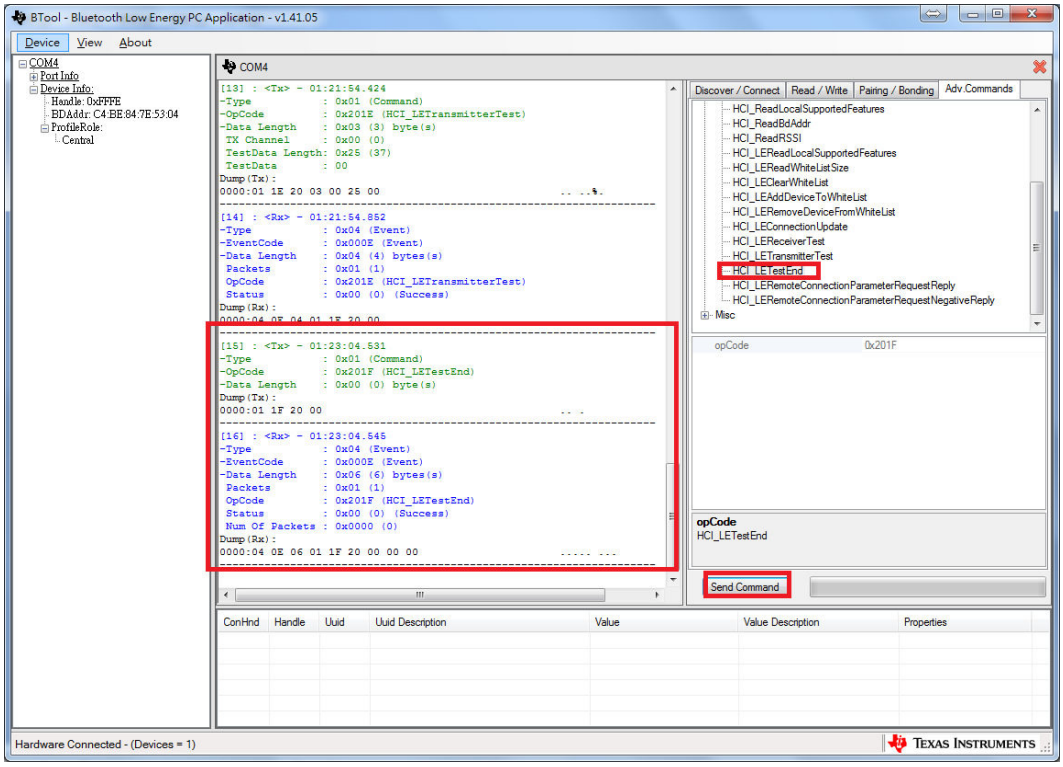
testDataLength= 37

testData=00 00=PRBS9 ; 01=11110000 ; 02=10101010



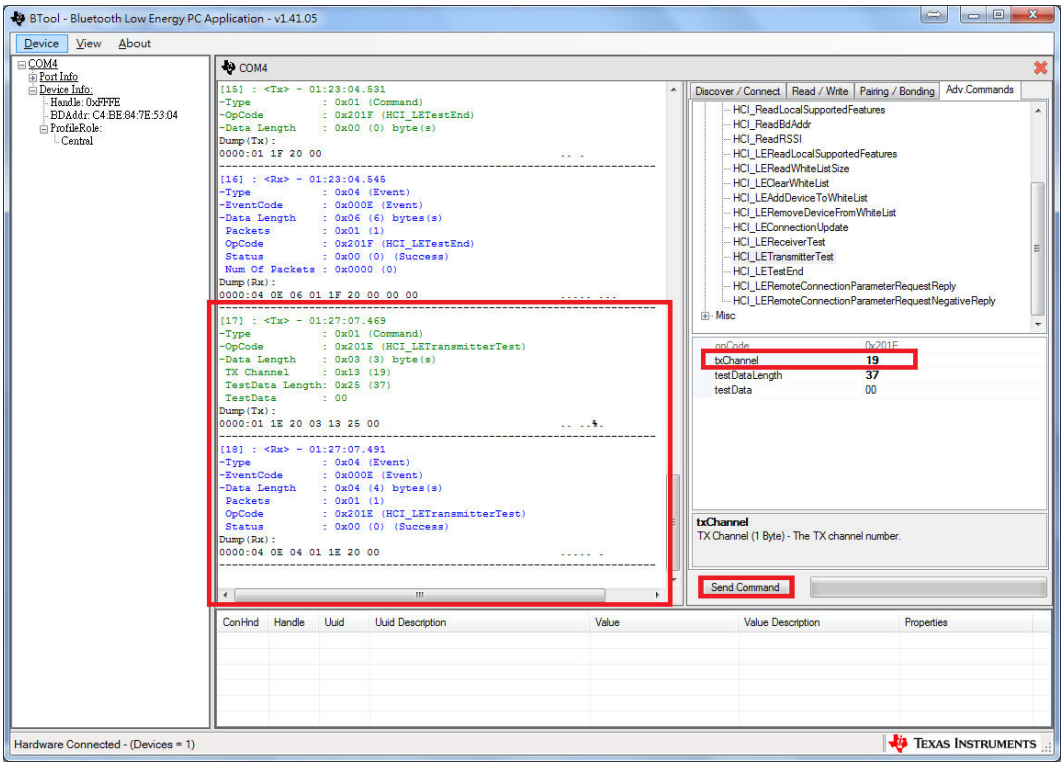
Step3 Change TX Channel

Step3.1. Select “HCI_LETestEnd” and click the “Send Command” button to end this test.



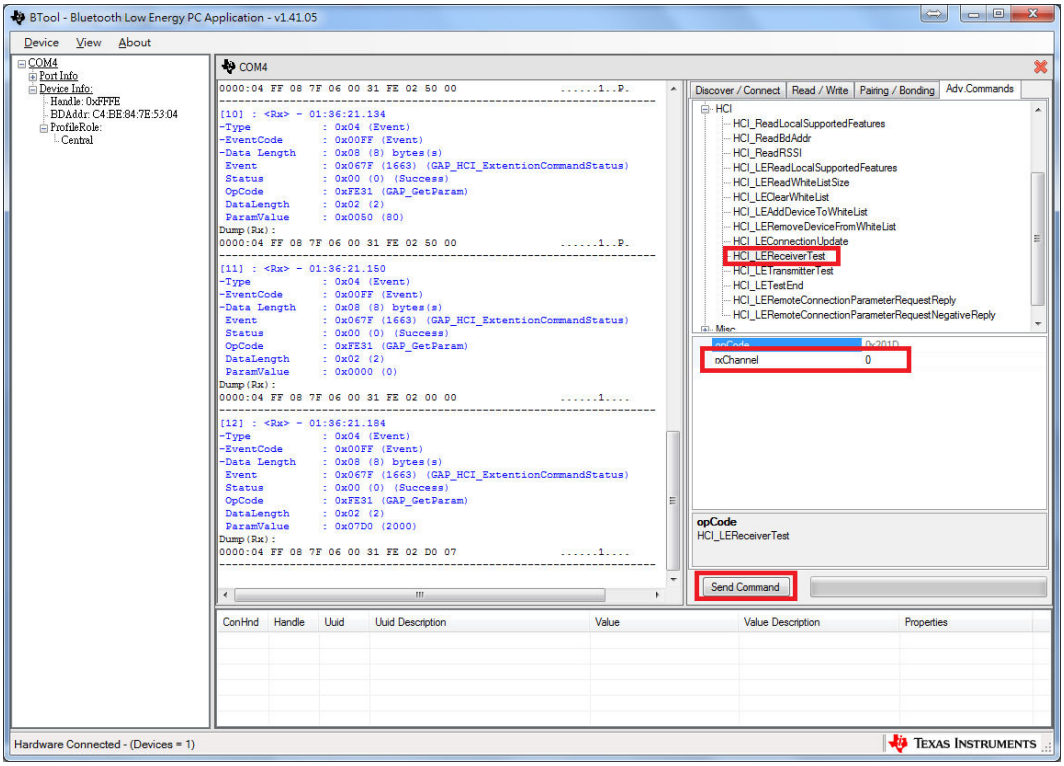
Step3.2. Select HCI_LETransmitterTest and change parameter of txChannel.

Click the “Send Command” button to begin testing.



4.2 RX test

Step1. Select Adv. Command clicking to the “HCI” and found the “HCI_LEReceiverTest”.

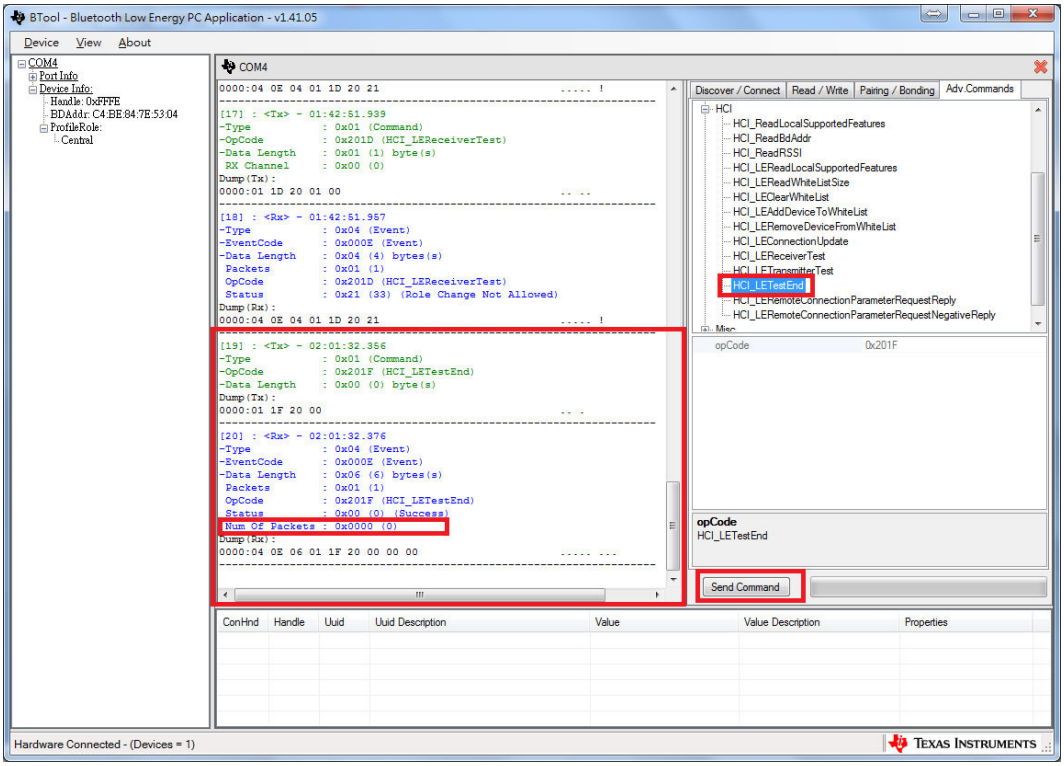


reChannel= (F-2402)/2 ; L(2402)=0 ; M(2440)=19 ; H(2480)=39

step1.1: Press the “Send Command” button to perform RX test.

step1.2: Using instrument to transmission packets.

step1.3: Perform HCI_LETestEnd, in message log window can find the number of received.



Step2. Change RX Channel

Please refer to Section 4.1 step 3.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

The product comply with the US portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device is intended only for OEM integrators under the following conditions:

1) The transmitter module may not be co-located with any other transmitter or antenna.

As long as 1 condition above is met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed

IMPORTANT NOTE

In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

The final end product must be labeled in a visible area with the following: "Contains FCC ID: ZQ6-WMCT759B".

Manual Information to the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user's manual of the end product which integrates this module.

The end user manual shall include all required regulatory information/warning as show in this manual.

第十二條→經型式認證合格之低功率射頻電機，非經許可，公司，商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
第十四條→低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。
前項合法通信，指依電信法規定作業之無線電通信。 低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

模組請加註

1. 本模組於取得認證後將依規定於模組本體標示審驗合格標籤
2. 系統廠商應於平台上標示「本產品內含射頻模組: **CCAFXXLPXXXXTX**)」字樣