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Jorjin Certification Sample User Manual

WG7831DELF

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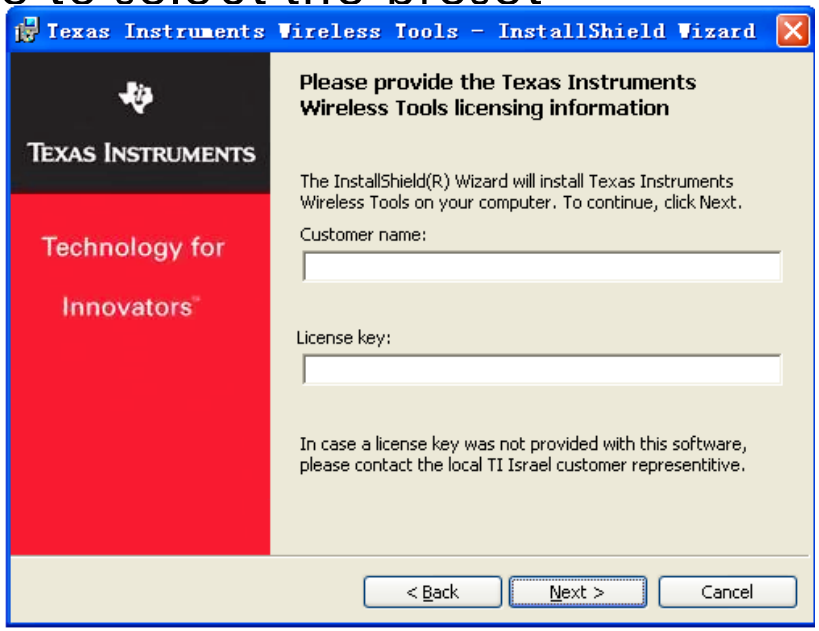
Software Installation

(1) Executive TI Wireless Tools HDK2.0.exe, met process of following screen , please fill in

Customer name = Random

License Key = 644509802

Others Were to select the preset



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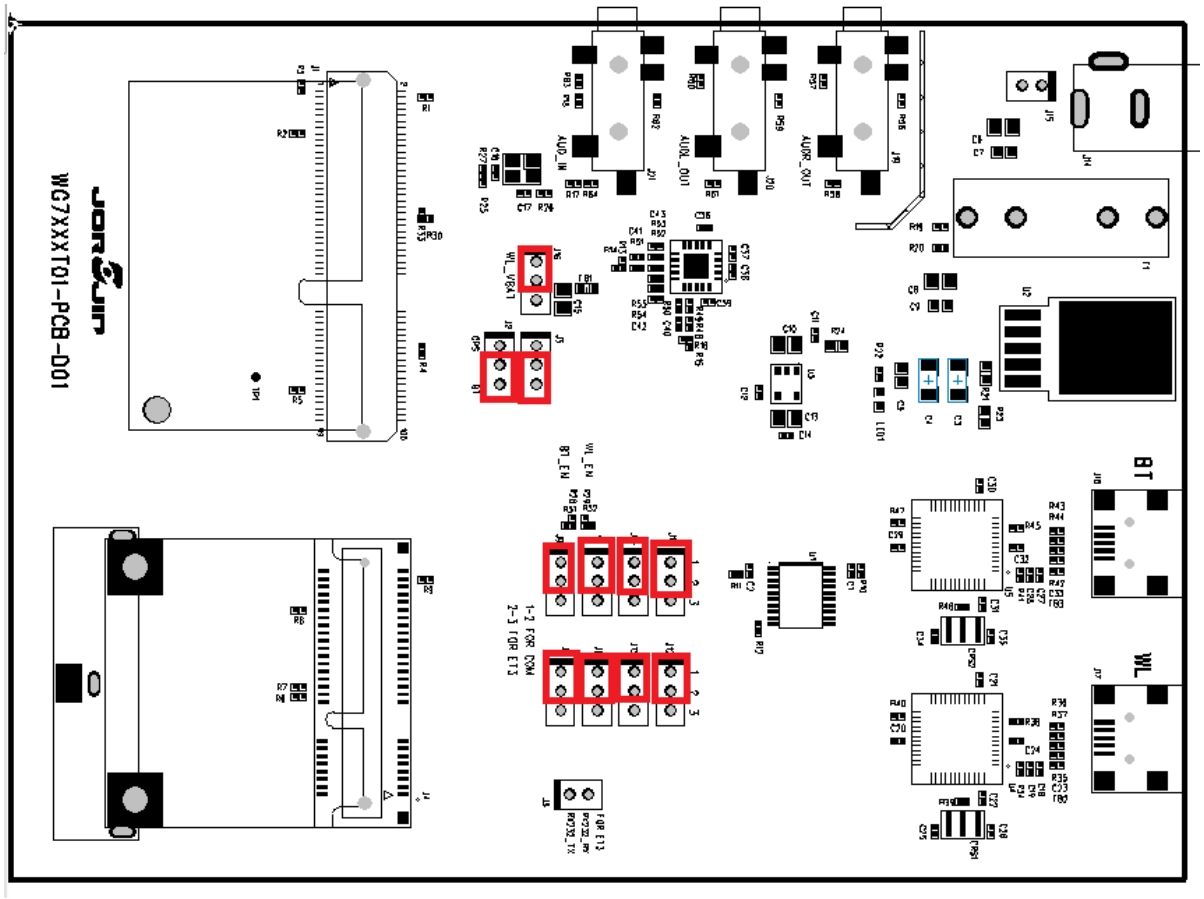
Transfer Description - 1

Jumper insertion position for the red box



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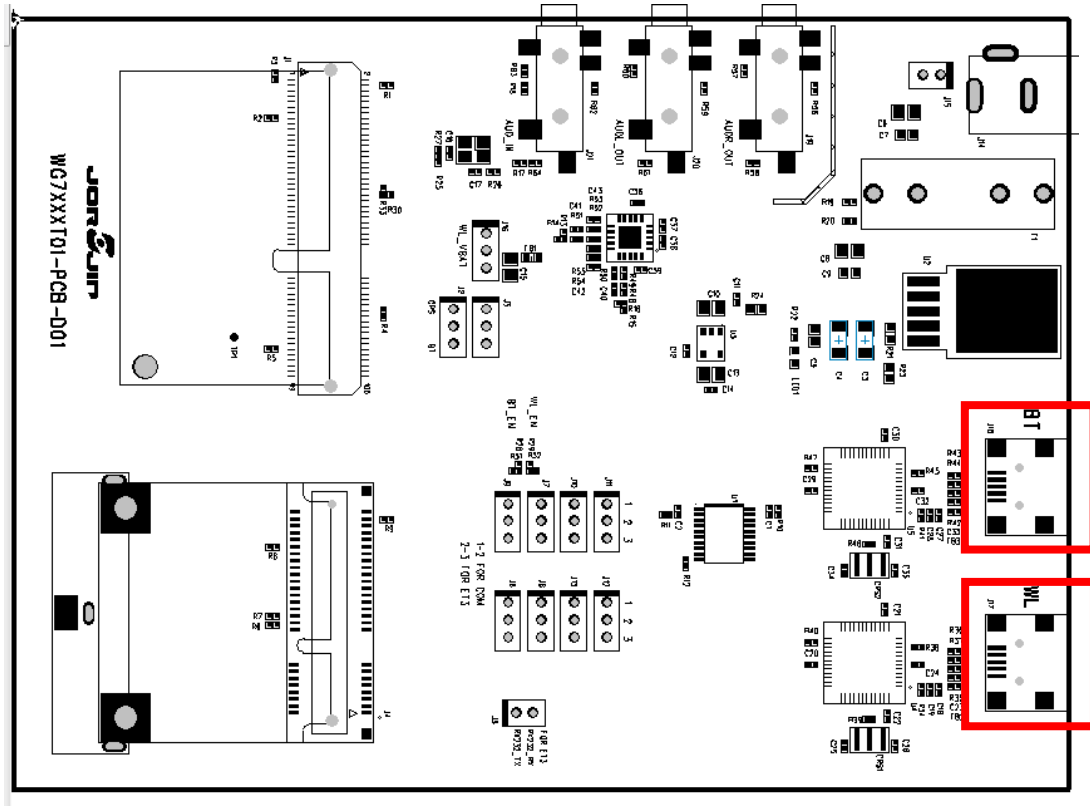
Transfer Description - 2



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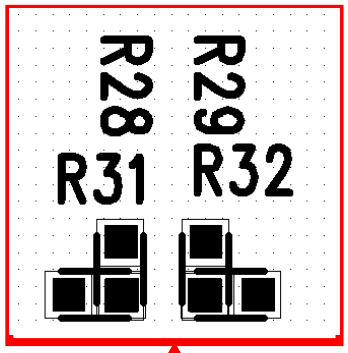
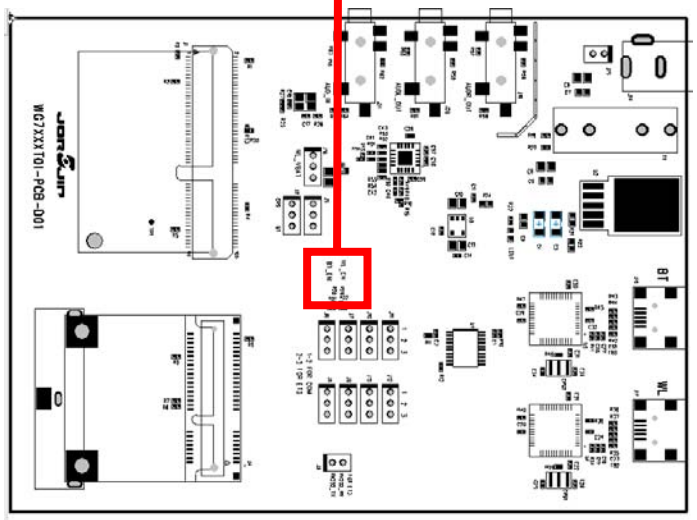
Transfer Description - 3

BT ON : R28
BT OFF : R31



WIFI ON : R29
WIFI OFF : R32



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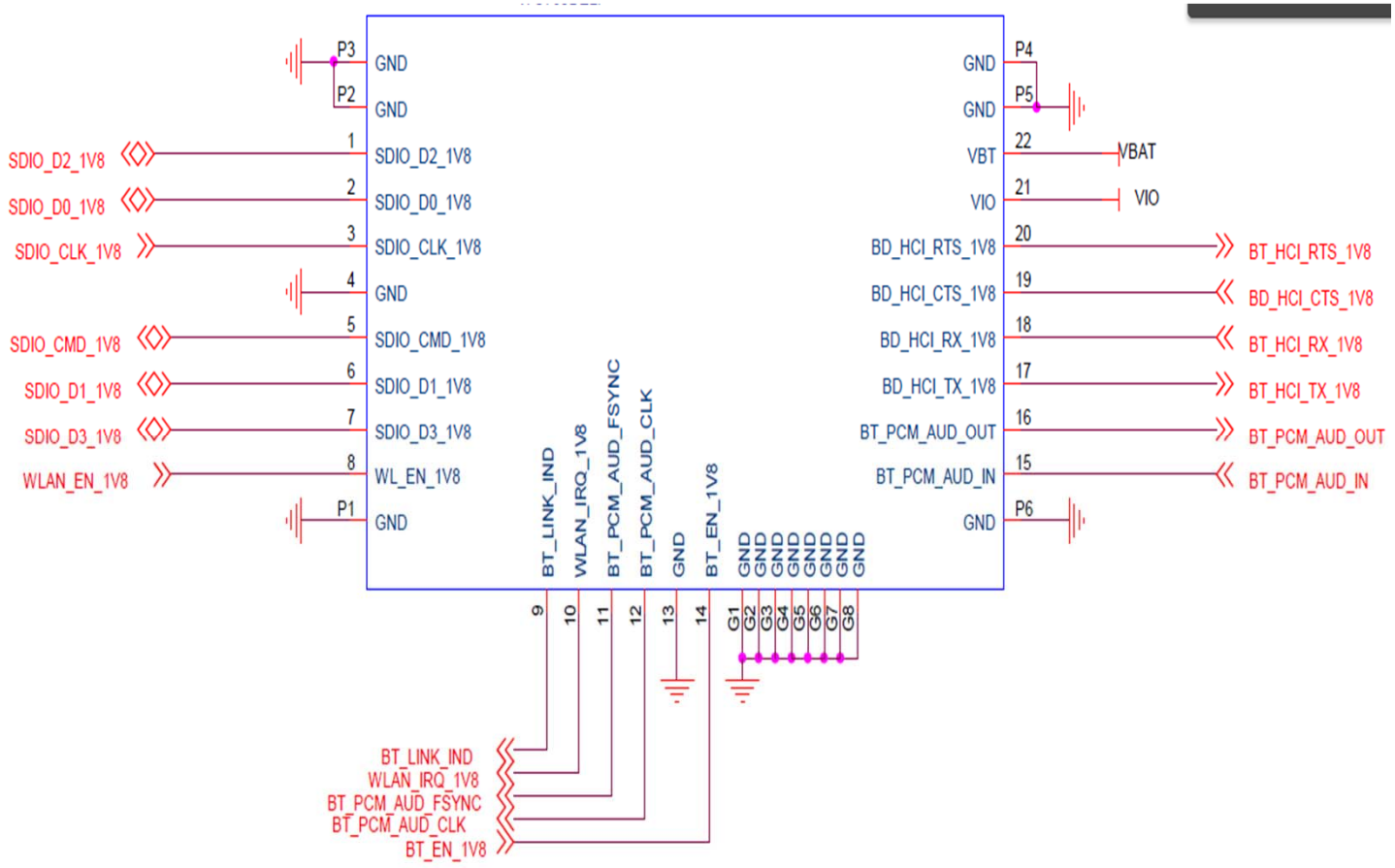
WG7831DELFA
Reference Schematics



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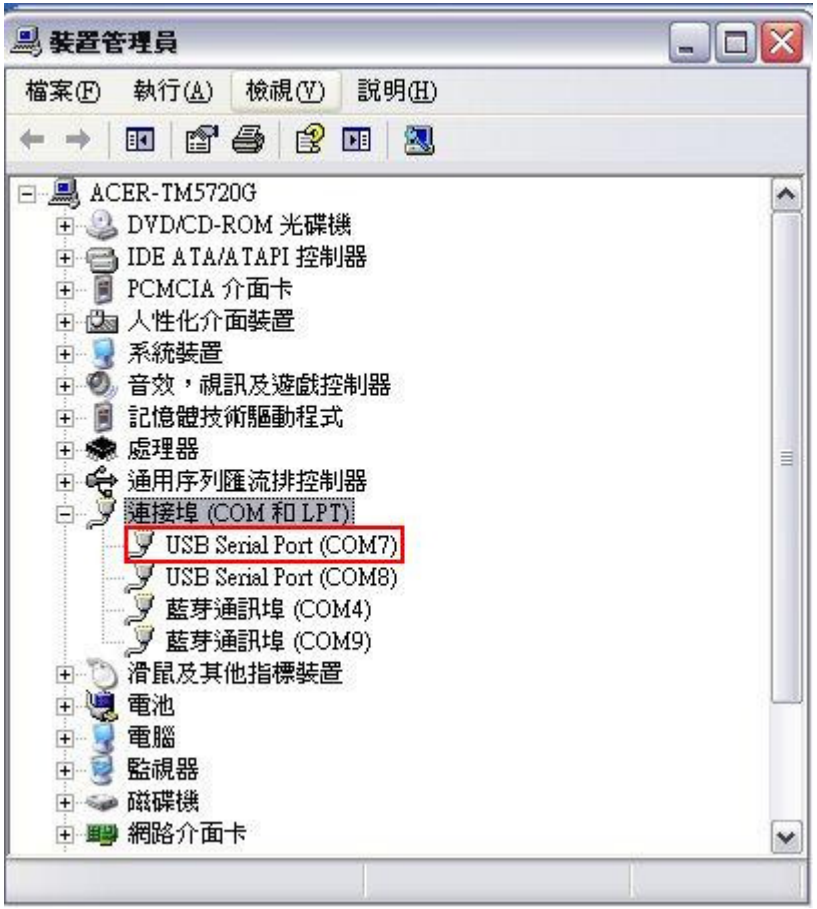
COM PORT Set



1. Install TI Wireless Tools
2. When the hardware is connected to the PC,
it is possible to find the port number for communication.
Under the Device Manager, select Ports (Com & LPT).
3. Run “RTTT” to start WiFi test software.

The USB ports are Com7 and Com8. Normally, the first port, Com7, is the communication port, while the next port, Com8, is the debug port.

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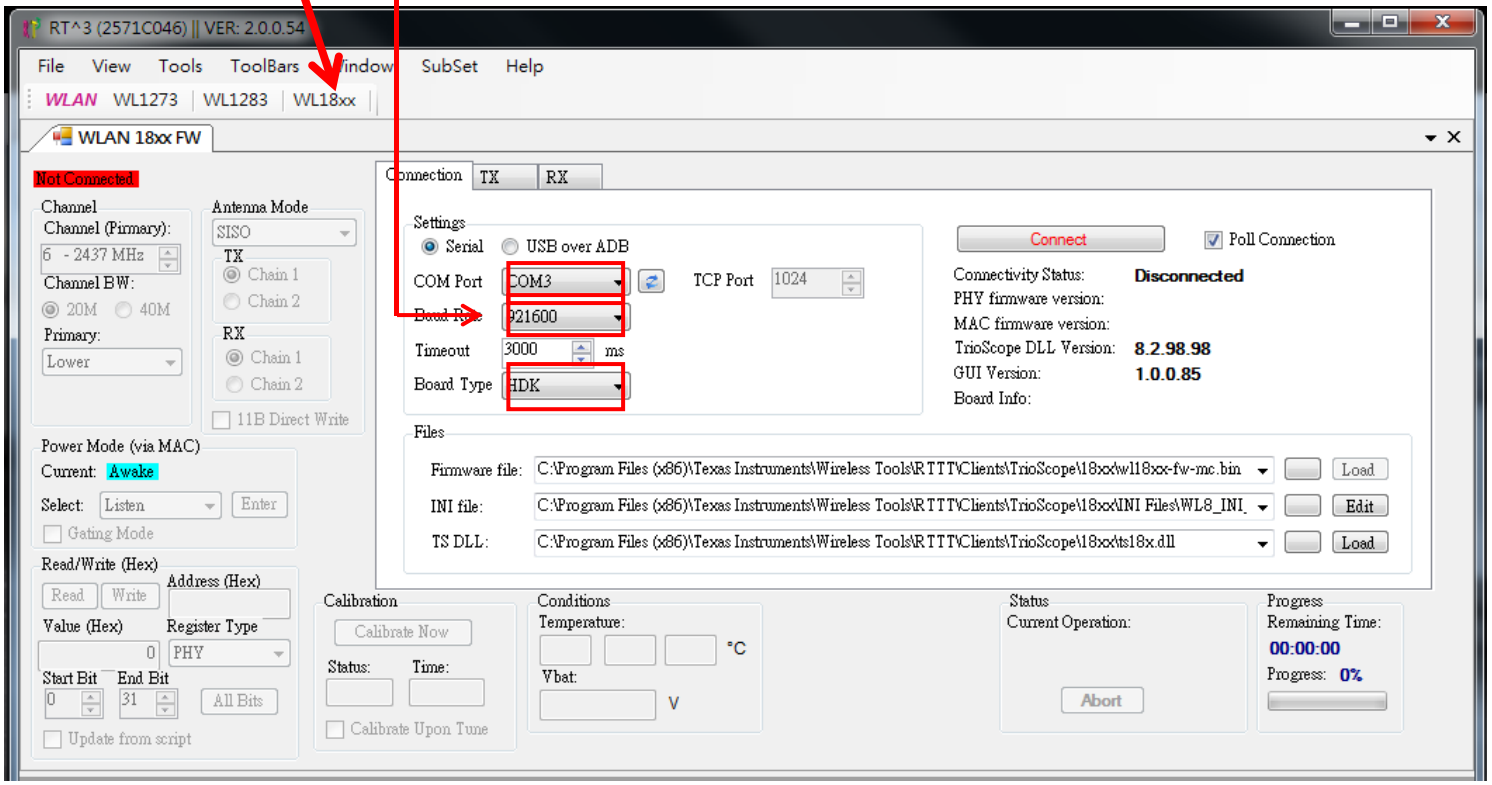
WIFI RTTT SET – 1 *(Set time the first operation)*

(1)Select WL18XX

(2) SET COM PORT
(3) SET Baud Rate (921600)
(4) SET Board Type : HDK



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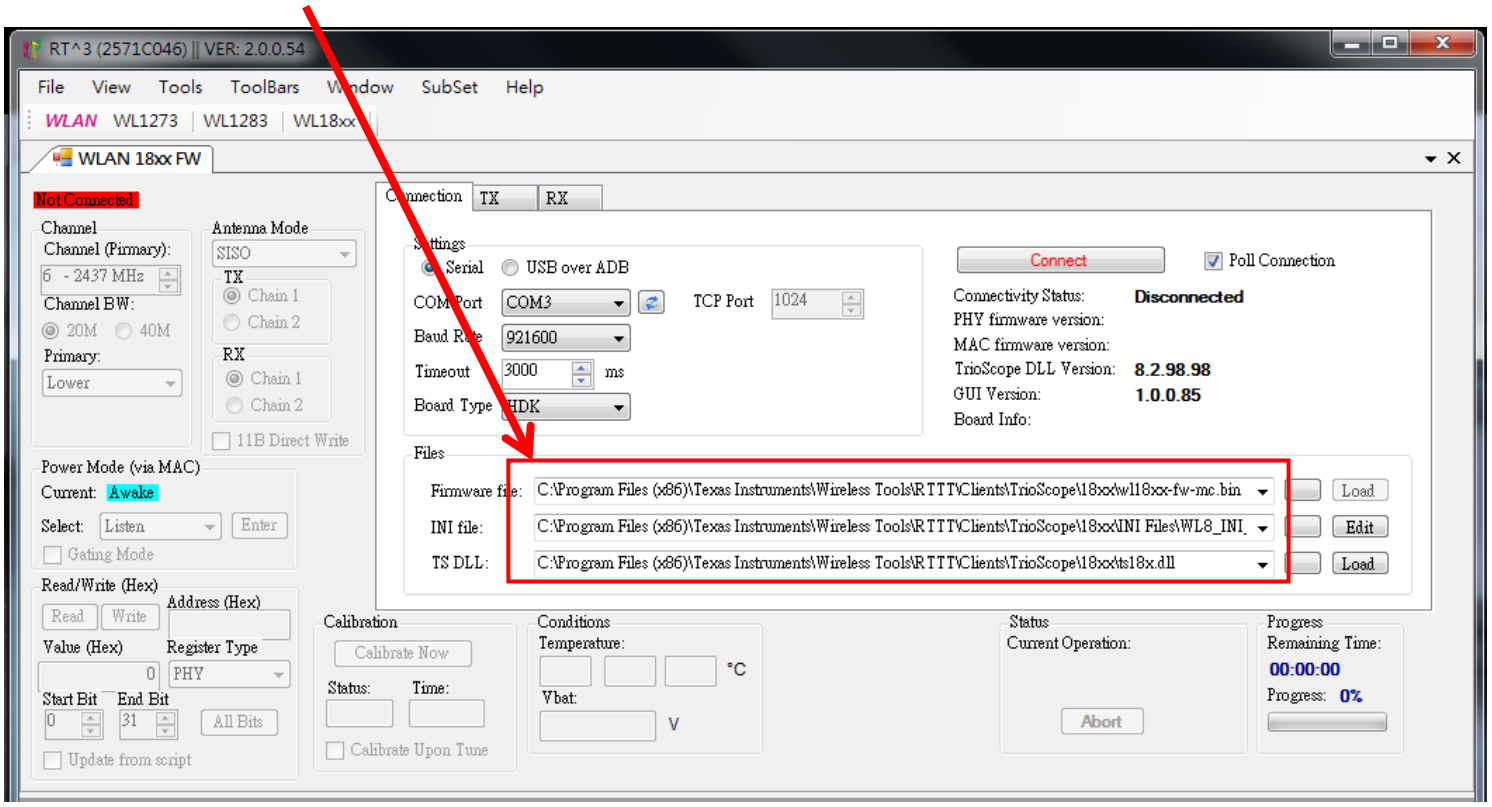
WIFI RTTT SET – 2 *(Set time the first operation)*

Set path

Firmware file : C:\Program Files (x86)\Texas Instruments\Wireless Tools\RTTT\Clients\TrioScope\18xx\wl18xx-fw-mc.bin
INI file : C:\Program Files (x86)\Texas Instruments\Wireless Tools\RTTT\Clients\TrioScope\18xx\INI Files\WL8_INI_2ANT.ini
TS DLL : C:\Program Files (x86)\Texas Instruments\Wireless Tools\RTTT\Clients\TrioScope\18xx\ts18x.dll



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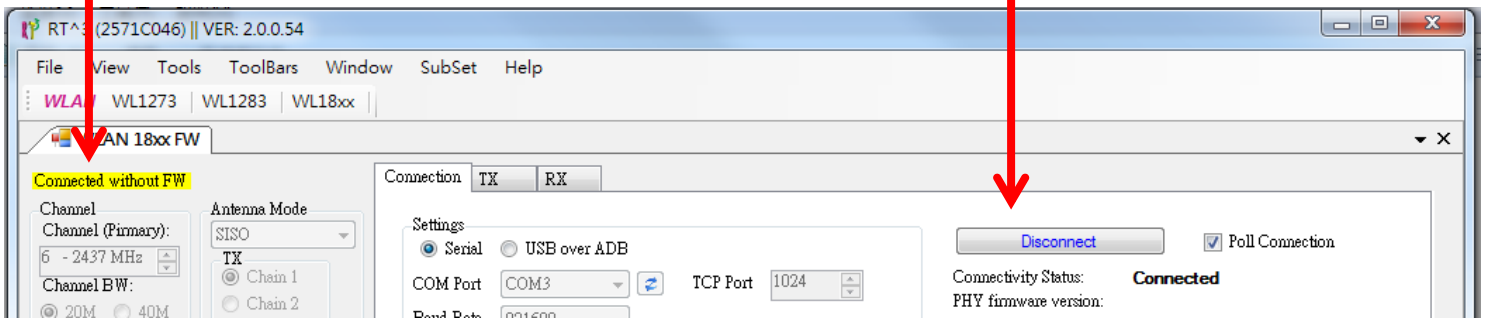
WIFI RTTT SET – 3

Press Connect

PC Will change of connect



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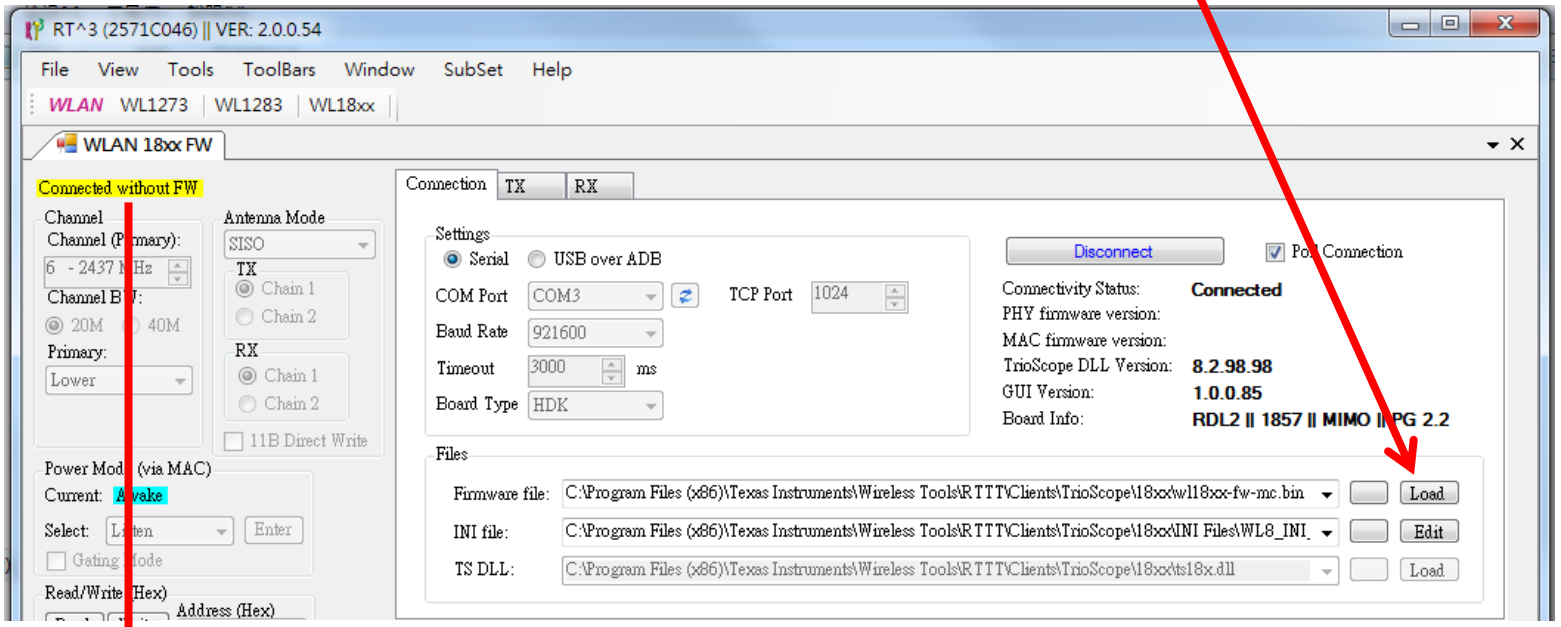
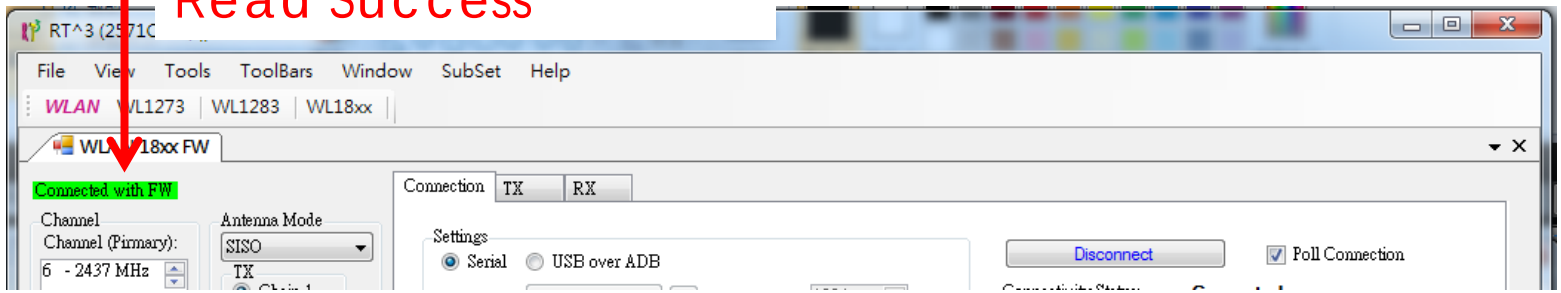
WIFI RTTT SET – 4

Press “Load” Read Firmware



Read Success



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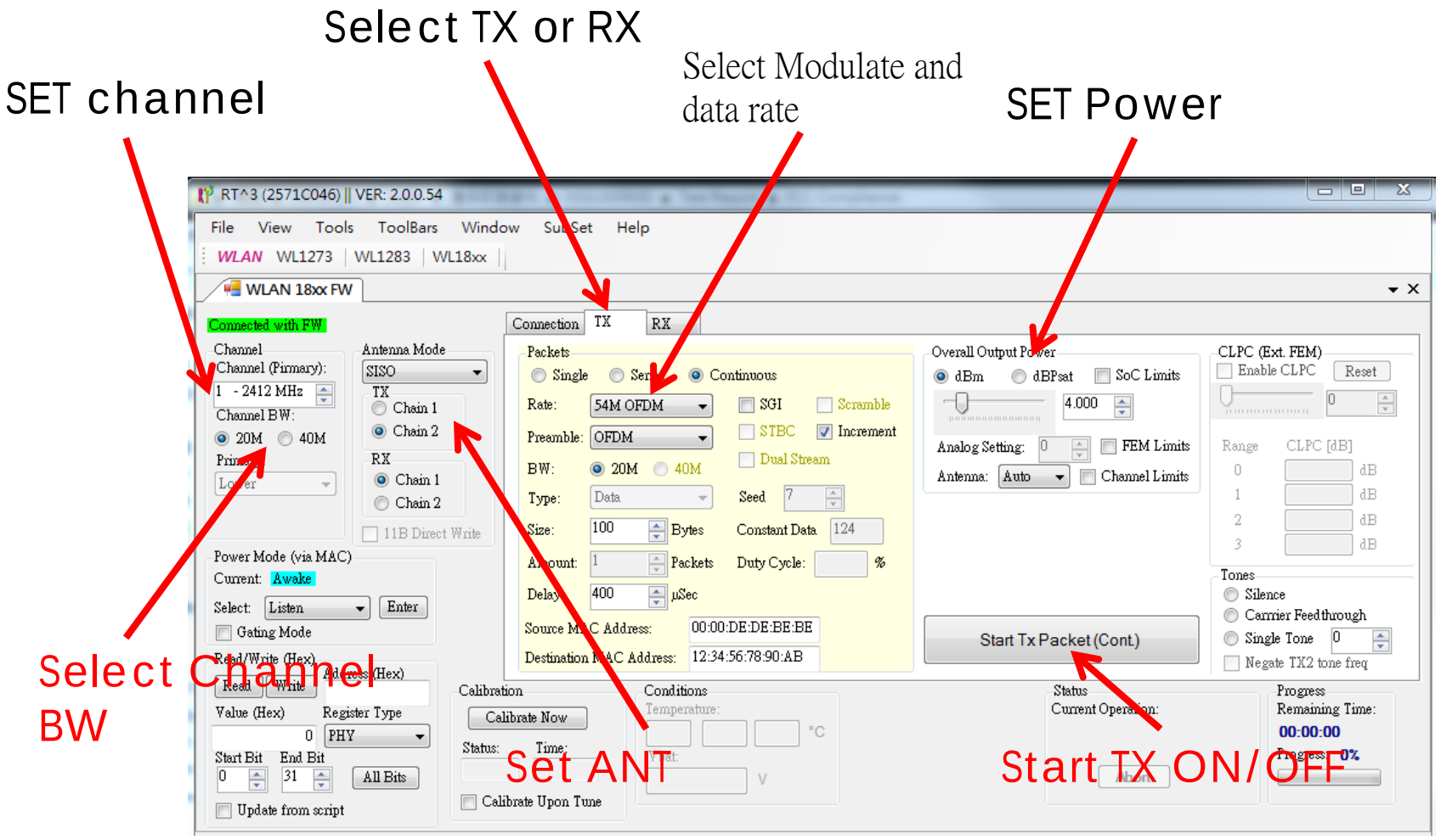
WIFI RTTT SET – 5



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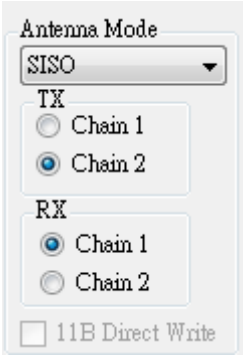
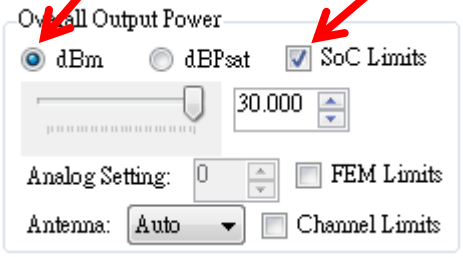
WIFI RTTT SET – 6



NOTE: Chain 1 Express DUT ANT2,
Chain 2 EXpressDUT ANT1

Select dBm, Do not select dBPsat

Click SoC Limits, Power Limit Will be locked the Dut settings. Power set 30dBm



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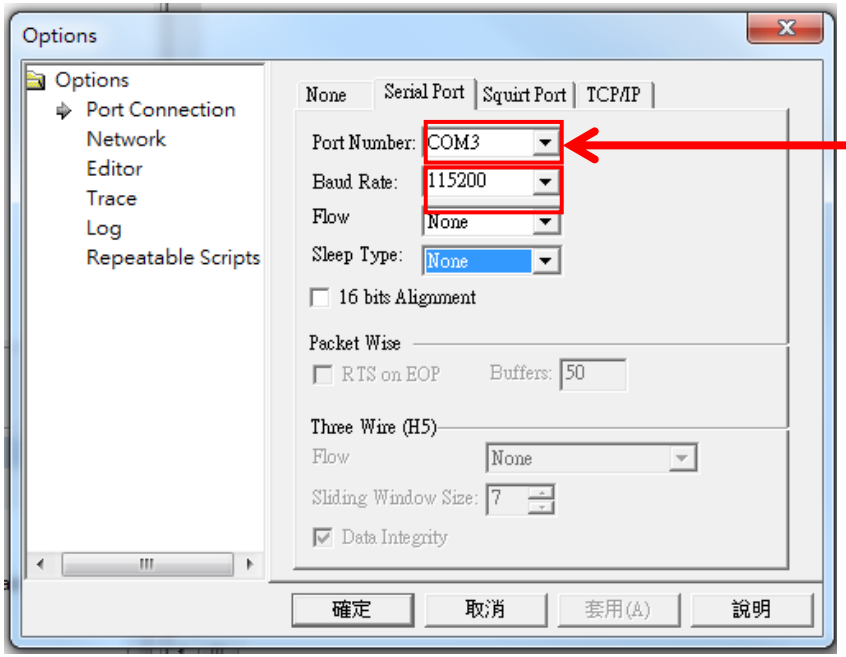
BT HCI Set – 1 *(Set time the first operation)*

(1) Execution HCI_Tester

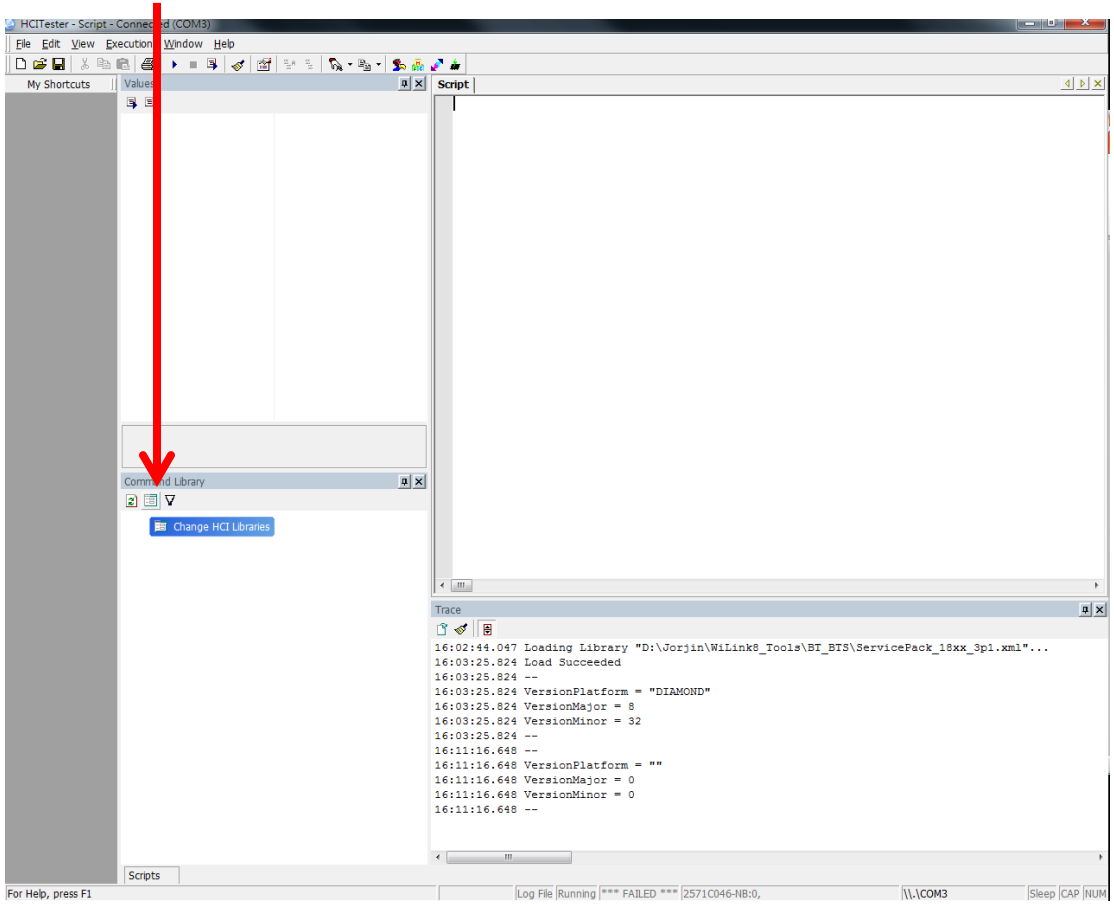
(2) Select View → Options



(3) SET COM PORT and Baud Rate

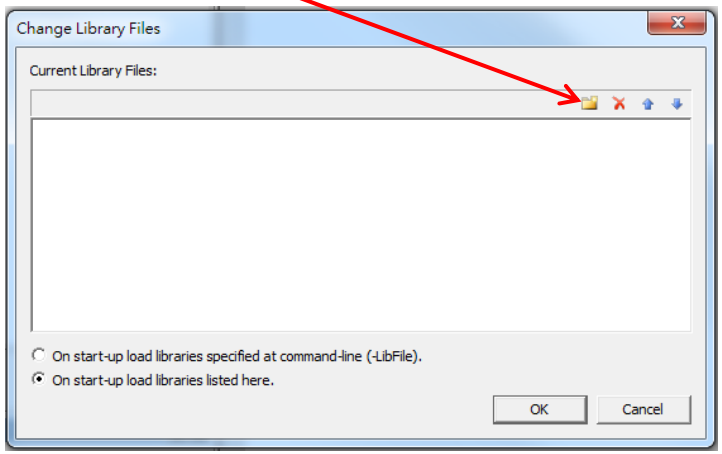
BT HCI Set – 2 *(Set time the first operation)*

(1) Add NEW XML檔

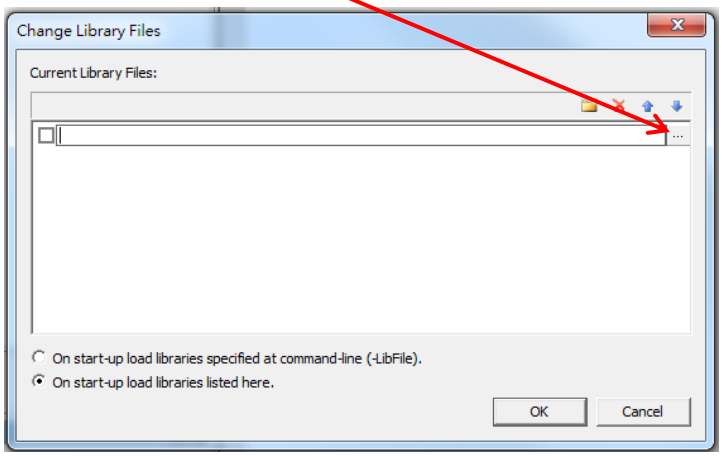


BT HCI Set – 3 *(Set time the first operation)*

(1) Select NEW



(2) Select directory



(3) Select “ServicePack_18xx_3P1.xml”

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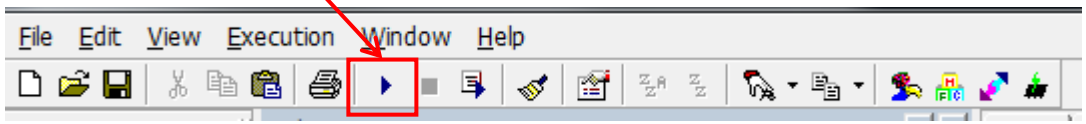
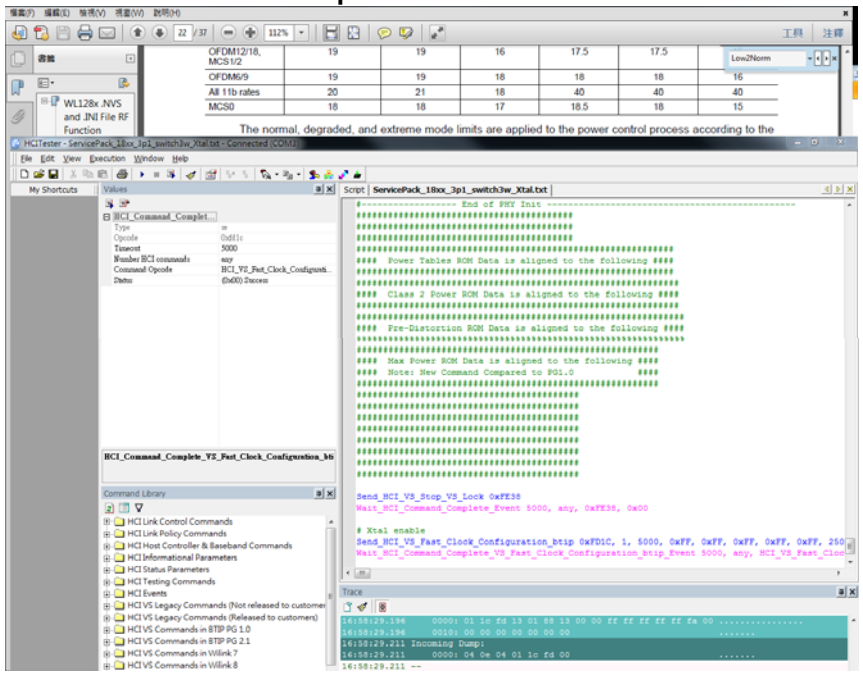
BT HCI Set – 4

(1) File → Open, Select “ServicePack_18xx_3p1_switch3w_Xtal.txt”
(2) Select Execute Scripts



(3) All instructions execute in sequence automatically



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BT HCI Set – 5

(1) Select File → New, CON_TX_TESTER.TXT copy to Script
(2) Select Execute Scripts
(3) All instructions execute in sequence automatically
(4) BT continuous output signal
(5) Perform different signals, must first turn off HCI,repeat BT Software 1 & 2 in steps

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CON_TX_TESTER.TXT-1 *parameter modification*

Modify different channel ,Power level or modulation,make the following changes to the parameters

```
# Set frequency 2402M to 2480M #
freq = 2441
# Set power_level 0 to 7#
power_level = 7
# Set modulation type - 0-CW 1-GFSK 2-EDR2 3-EDR3 4-BLE 5-ANT #
modulation = 3
# Set Package type -0x00 DM1
#                                                    0x01 DH1
#                                                    0x02 DM3
#                                                    0x03 DH3
#                                                    0x04 DM5
#                                                    0x05 DH5
#                                                    0x06 2-DH1
#                                                    0x07 2-DH3
#                                                    0x08 2-DH5
#                                                    0x09 3-DH1
#                                                    0x0A 3-DH3
#                                                    0x0B 3-DH5
package_type = 0x09
```

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CON_TX_TESTER.TXT-2 parameter modification

Different data rate modulation and package_type parameter indicates

Data Rate	modulation	package_type
DH1	1	0x01
DH3	1	0x03
DH5	1	0x05
2DH1	2	0x06
2DH3	2	0x07
2DH5	2	0x08
3DH1	3	0x09
3DH3	3	0x0A
3DH5	3	0x0B

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The transmitter module certification label

「本產品內含射頻模組:

TTTTccccczzzzAl

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WARNINGS, RESTRICTIONS AND DISCLAIMERS

Your Sole Responsibility and Risk. You acknowledge, represent and agree that:

1.You have unique knowledge concerning Federal, State and local regulatory requirements (including but not limited to Food and Drug Administration regulations, if applicable) which relate to your products and which relate to your use (and/or that of your employees, affiliates, contractors or designees) of the EVM for evaluation, testing and other purposes.

2.You have full and exclusive responsibility to assure the safety and compliance of your products with all such laws and other applicable regulatory requirements, and also to assure the safety of any activities to be conducted by you and/or your employees, affiliates, contractors or designees, using the EVM. Further, you are responsible to assure that any interfaces (electronic and/or mechanical) between the EVM and any human body are designed with suitable I solation and means to safely limit accessible leakage currents to minimize the risk of electrical shock hazard.

3.Since the EVM is not a completed product, it may not meet all applicable regulatory and safety compliance standards (such as UL, CSA, VDE, CE, RoHS and WEEE) which may normally be associated with similar items. You assume full responsibility to determine and/or assure compliance with any such standards and related certifications as may be applicable. You will employ reasonable safeguards to ensure that your use of the EVM will not result in any property damage, injury or death, even if the EVM should fail to perform as described or expected

4. You will take care of proper disposal and recycling of the EVM's electronic components and packing materials.

5. 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.

WARNINGS, RESTRICTIONS AND DISCLAIMERS

6. Federal Communication Commission Interference Statement

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.

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.

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

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

7. Industry Canada Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device may not cause interference, and
(2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."

CAN ICES-3(B)/ NMB-3(B)

8. Radiation Exposure Statement

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator & your body.

WARNINGS, RESTRICTIONS AND DISCLAIMERS

9. End Product Labeling

When the module is installed in the host device, the FCC/IC ID label must be visible through a window on the final device or it must be visible when an access panel, door or cover is easily re-moved. If not, a second label must be placed on the outside of the final device that contains the following text: “Contains FCC ID: QDX31511” “Contains IC: 4810A-31511 “
The grantee's FCC ID/IC ID can be used only when all FCC/IC compliance requirements are met.

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

(1) The antenna must be installed such that 20 cm is maintained between the antenna and users,
(2) The transmitter module may not be co-located with any other transmitter or antenna.
(3) The chip antenna with -2.46 dBi gain was verified in the conformity testing. Radiated transmit power must be equal to or lower than that specified in the FCC/IC Grant of Equipment Authorization for FCC ID: QDX31511 and IC: 4810A-31511. A separate approval is required for all other antenna type, or higher gain antenna.

In the event that these conditions cannot be met (for example certain laptop configurations or co-location with another transmitter), then the FCC/IC authorization is no longer considered valid and the FCC ID/IC ID cannot 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/IC authorization.