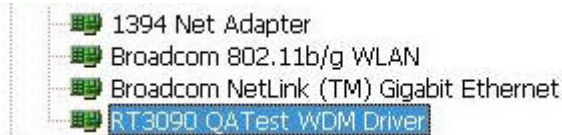


How to use RT3090PCIE QA test tool

Step1. Install MFG Drivers in the “QA_RT3x9x V1.5.4.0” folder



Step2. Check the Device in “ Device Manager ”



Step3.

- Run the test program “RT3x9x QA.exe”,
- Click the “OK” when pops up the dialog box.



Unknown AsicVersion at 0x00 in EEPROM

PCI Config | TX/RX | EEPROM | MAC | BBP Page1/2 | BBP Page2/2 | RF | Sniffer | About

MAC Address: RF Type: RT2720 :: 1 T 2 R

Channel: 1 2412-MHz Mode: OFDM Rate: MCS=7; 54 Mbps Bandwidth: 20 TxBandSel: Lower

TX

Frame Type: [20] User4(Data+CRC) Auto ALC STBC 2.4G Side Band Option
 SGI A-MPDU

TX frame setting

| | | | | | | |
|--------|---------|--------------|--------------|--------------|---------|---------------------------------------|
| FC (2) | Dur (2) | Address1 (6) | Address2 (6) | Address3 (6) | Seq (2) | <input type="checkbox"/> Wait for ACK |
| 0800 | 0000 | FFFFFFFFFFFF | 0016447F5010 | 001122334455 | 0000 | |

Debug Info Inc
 Payload Repeat Pattern SW CRC Check SW CRC Total Bytes: 1058

Repeat: 1000 LoopBack IPG: 200
 Transmitted: 0 Conti. Tx Carrier test Carrier Suppression
 TX Power0: 06 TX Power1: 00 Freq. Offset: 2E

Both DACs
 DAC 0
 DAC 1

RX

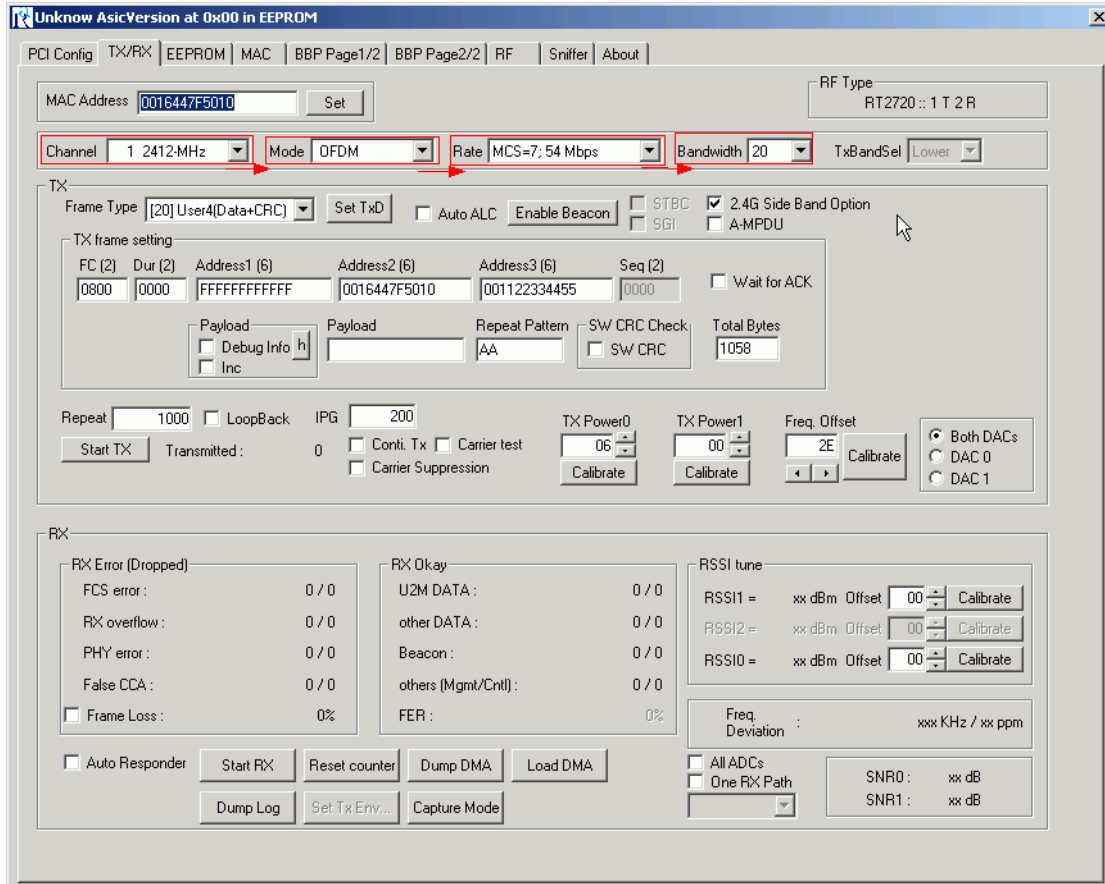
| | | |
|--|---|---|
| RX Error (Dropped) FCS error: 0 / 0 RX overflow: 0 / 0 PHY error: 0 / 0 False CCA: 0 / 0 <input type="checkbox"/> Frame Loss: 0% | RX Okay U2M DATA: 0 / 0 other DATA: 0 / 0 Beacon: 0 / 0 others (Mgmt/Cntl): 0 / 0 FER: 0% | RSSI tune RSSI1 = xx dBm Offset: 00 <input type="button" value="Calibrate"/> RSSI2 = xx dBm Offset: 00 <input type="button" value="Calibrate"/> RSSI0 = xx dBm Offset: 00 <input type="button" value="Calibrate"/> Freq. Deviation: xxx KHz / xx ppm |
|--|---|---|

Auto Responder

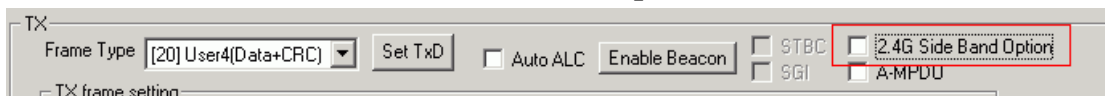
All ADCs One RX Path
 SNR0: xx dB
 SNR1: xx dB

Step4. Configuration-Steps

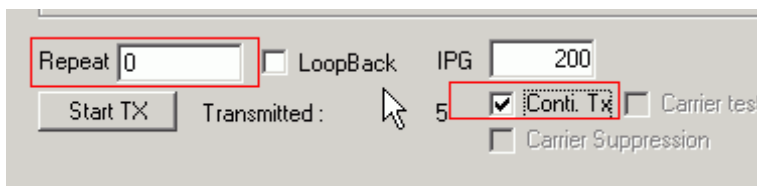
A. Channel, Mode, Rate, Bandwidth



B. Cancel the Select of “2.4G Side Band Option”



C. Set Repeat “1000” to “0” for continuous TX Power Select the “Conti. Tx”



D. Select the Antenna

TX Power0: 06
TX Power1: 00
Freq. Offset: 2E

Calibrate buttons for TX Power0, TX Power1, and Freq. Offset.

Antenna Selection (highlighted in red):
 Both DACs
 DAC 0
 DAC 1

E. Run the "Start TX"

Repeat: 0
LoopBack:
IPG: 200

TX Power0: 06
TX Power1: 00
Freq. Offset: 2E

Buttons: Stop TX (highlighted), Transmitted: 12947 (highlighted), Calibrate buttons for TX Power0, TX Power1, and Freq. Offset.

Antenna Selection:
 Both DACs
 DAC 0
 DAC 1

Options:
 Conti. Tx
 Carrier test
 Carrier Suppression

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.

Country Code Statement

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

USERS MANUAL OF THE END PRODUCT:

In the users manual of the end product, the end user has to be informed to keep at least 20cm separation with the antenna while this end product is installed and operated. The end user has to be informed that the FCC radio-frequency exposure guidelines for an uncontrolled environment can be satisfied. The end user has to also be informed that any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this equipment.

The FCC part 15.19 statement below has to also be available in the manual:

This device complies with Part 15 of 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.

IC Statement

This Class B digital apparatus complies with Canadian ICES-003.

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.

Cet appareil numérique de la classe B conforme à la norme NMB-003 du Canada.

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.

Country Code Statement

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p) is not more than that permitted for successful communication.

This device has been designed to operate with the antennas listed below, and having a maximum gain of 2.93dB. Antennas not included in this list or having a gain greater than 2.93dB are strictly prohibited for use with this device. The required antenna impedance is 50ohms.