BT-Wifi Test Test Description

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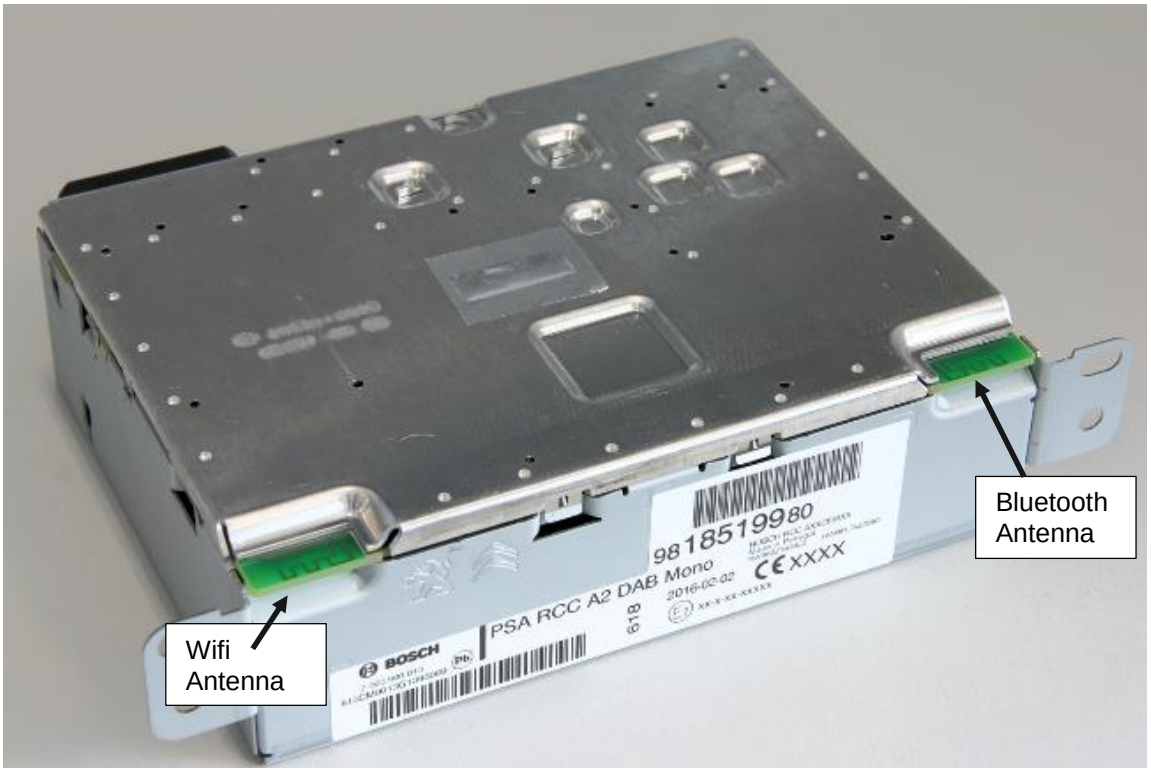
2 PSA RCC Device

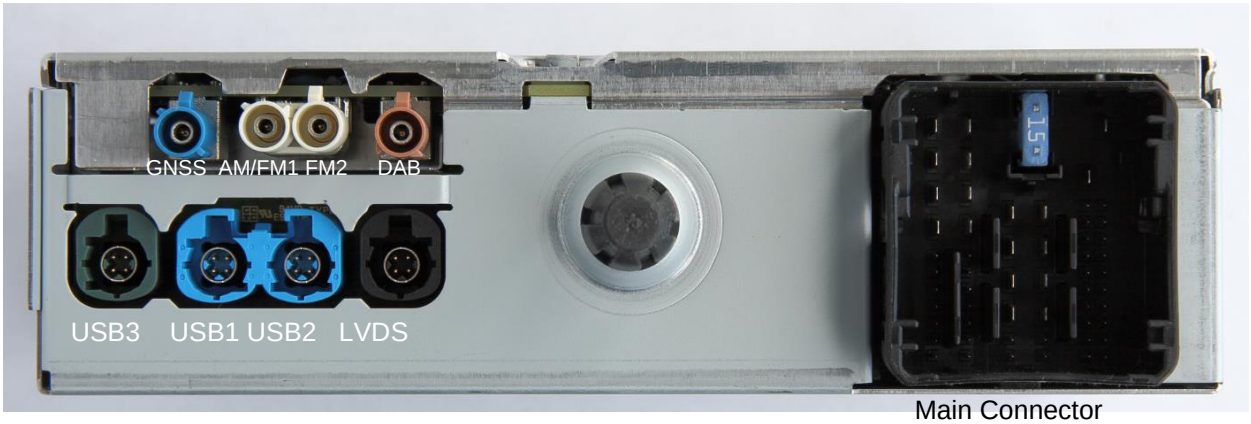
2.1 Front side



2.2 Back Side from A1 non DAB Variant

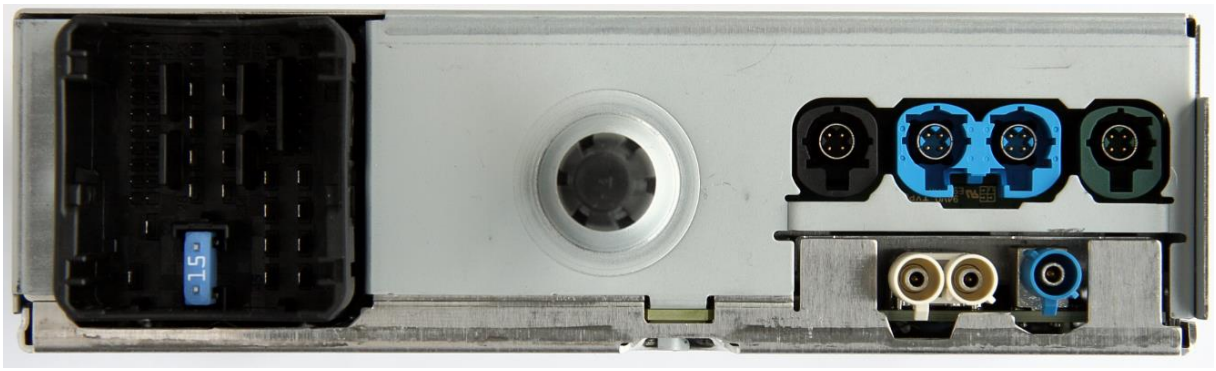
2.3 Back Side from A1 DAB Variant

2.4 Back Side from A2 DAB-Variant

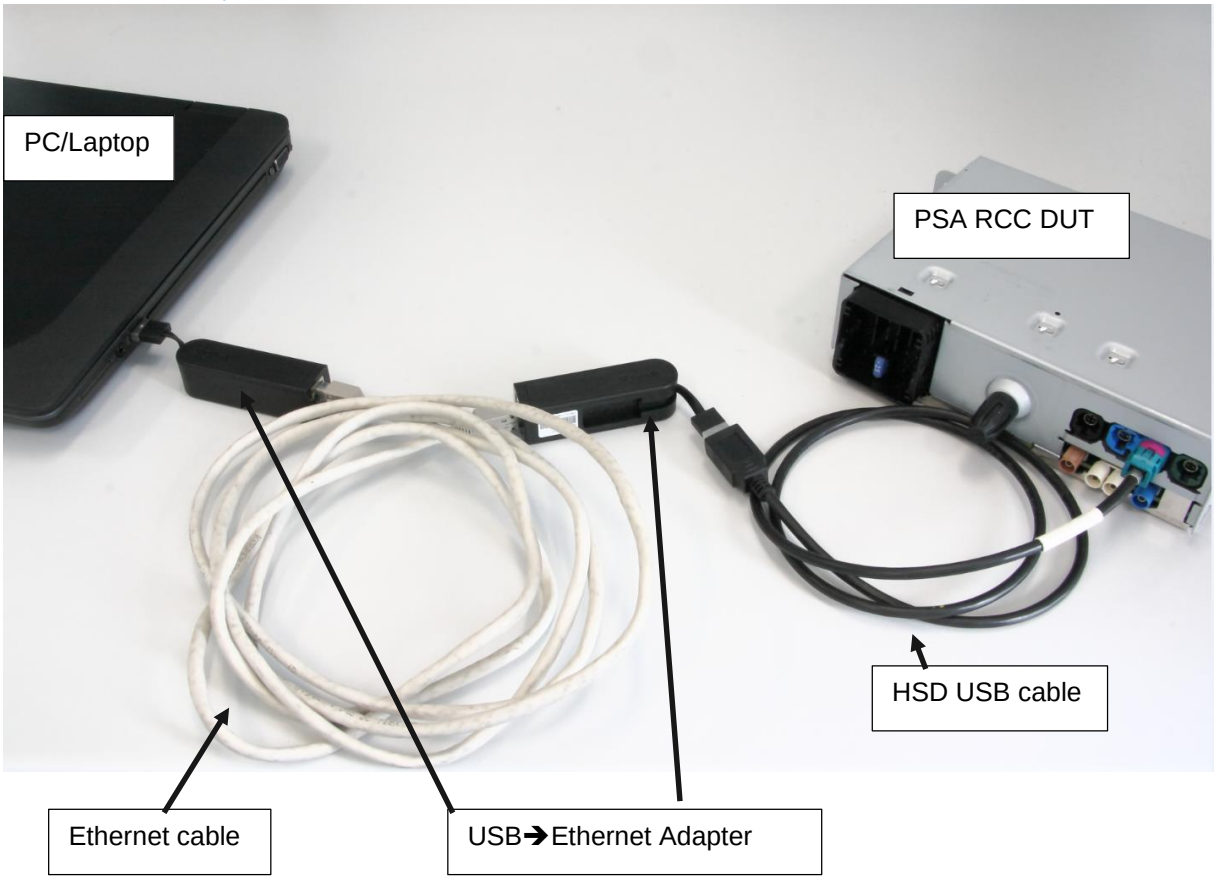


Main Connector

2.5 Back Side from A2 nonDAB-Variant



3 Test Setup

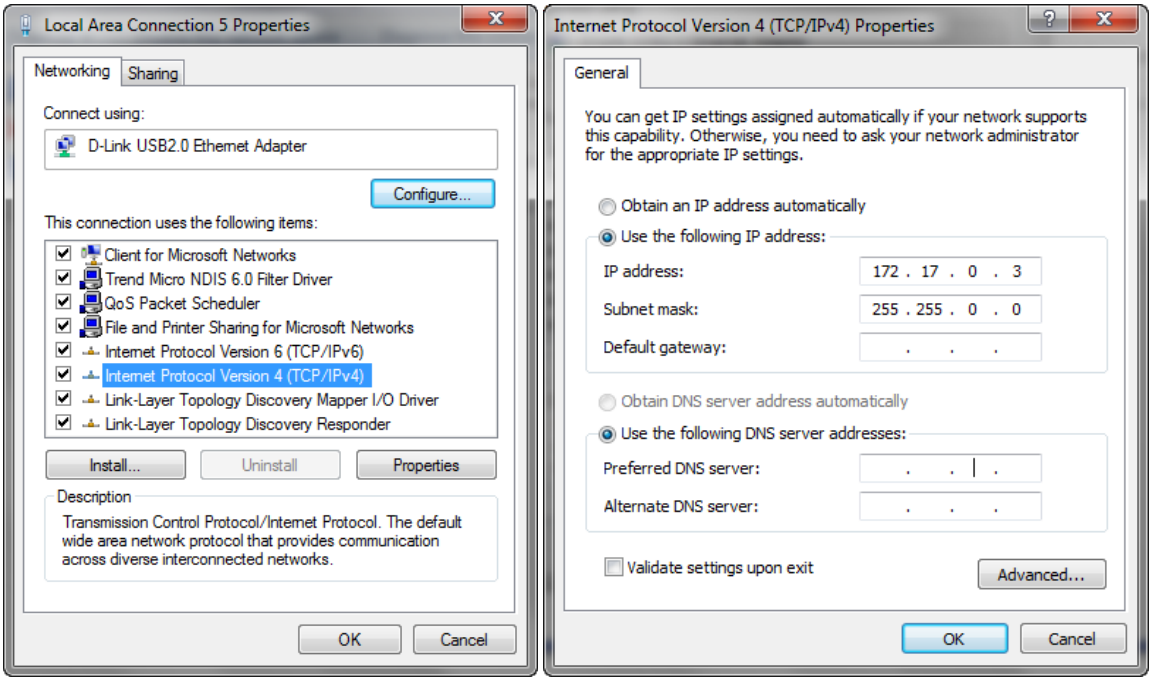

PC/Laptop
PSA RCC DUT
HSD USB cable
Ethernet cable
USB➔Ethernet Adapter

4 Network configuration

Add the IP-Adress for 172.17.0.5 for the D-Link adapter at the Microsoft network controls as shown in the next pictures.

Network connection:

With a double click on the LAN-connection with the D-Link DUB-E100 USB 2.0 Fast Ethernet Adapter you should be able to make the following setting under properties:



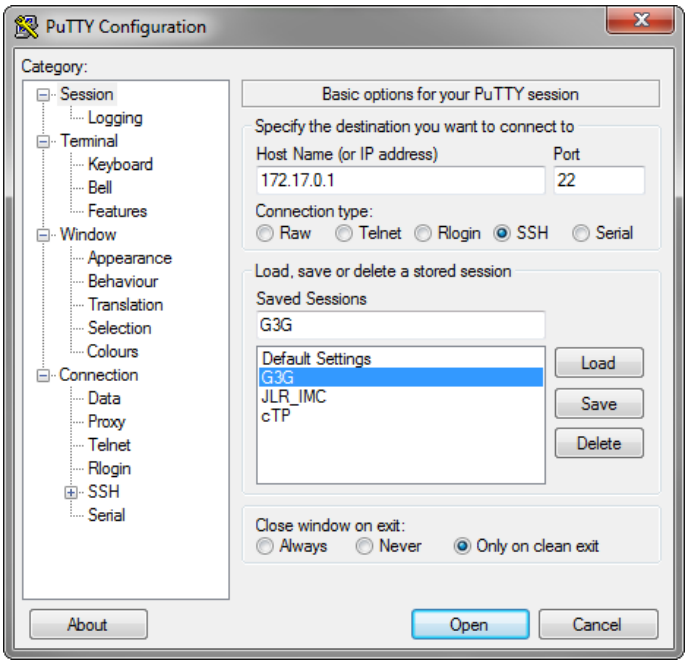
In case of problems it might be necessary to restart the computer and check all items again.

Be also aware that your computer is capable multi network connections. This is often related to your PC administration policies.

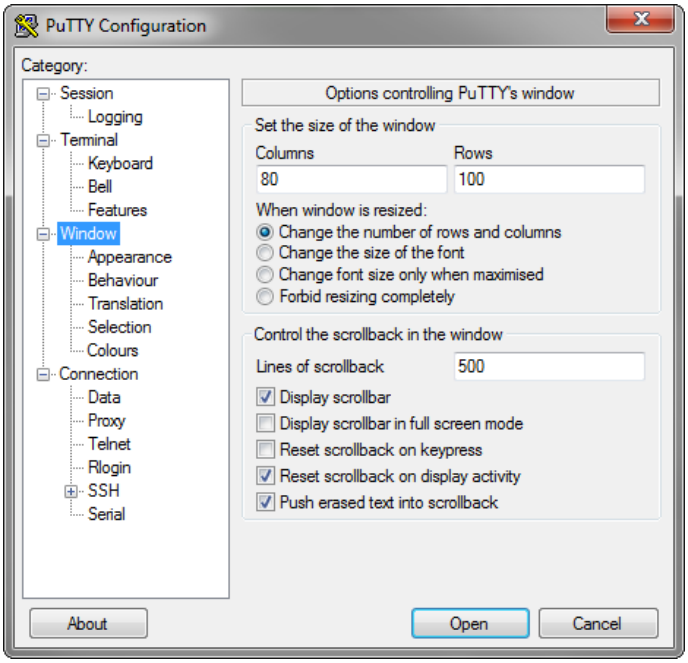
IP address “172.17.0.1” is the DUT

5 Putty Configuration and Use

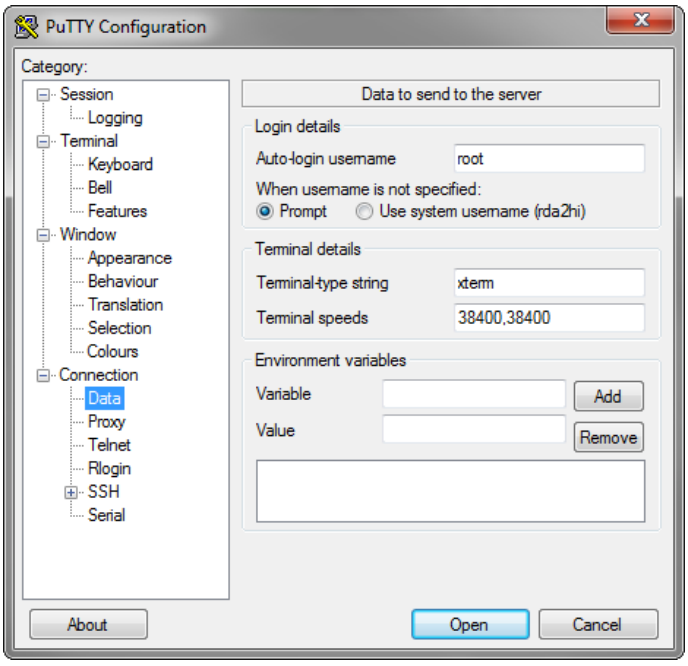
Start Putty: (Simply run Putty.EXE no installation is required.)
If not configured up to now configure Putty as shown in the next 3 pictures:



You can use your personal window settings under “Window”.



Use “root” as username for Auto-login



Afterwards use “Save-Button” in “Session”-screen.

From now on the session can be started by double-clicking the entry “G3G”.

At the first time of starting Putty a message is displayed. The text asks if you trust the connection. Click “yes” button.

After some seconds “root@mx6q:~#“ is shown

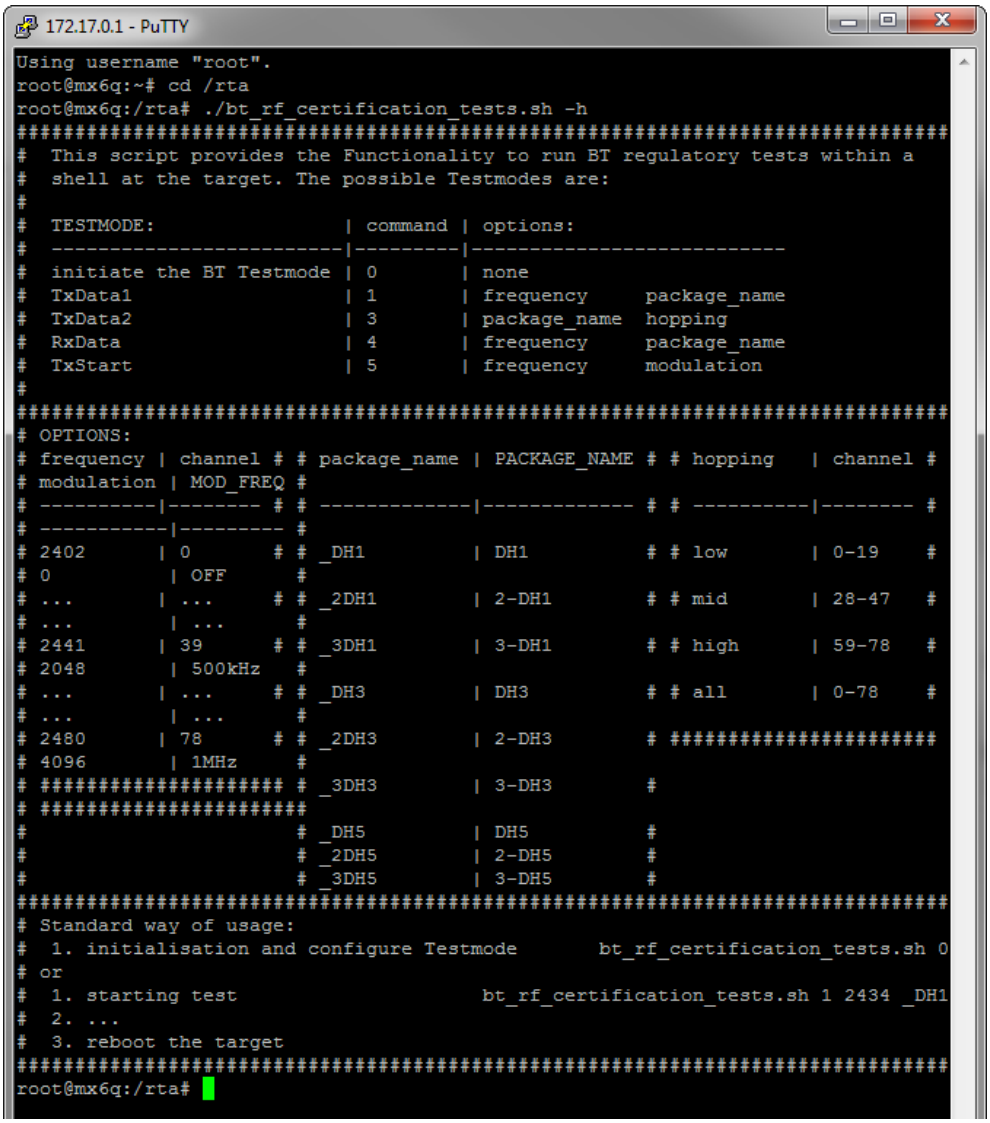
Then type in “cd /rta” to enter the required directory

Now iPerf, Bluetooth or WLAN tests can be started as described in the following chapters.

6 Bluetooth Tests

Note that the RF Power on all tests are fixed settings inside module.
They cannot be changed.

To start any test it is necessary to type in "**./bt_rf_certification_tests.sh**" added with the needed parameters which a described in the following picture:



For example:

Continuous Transmission at 2402MHz with DH5-Packets:

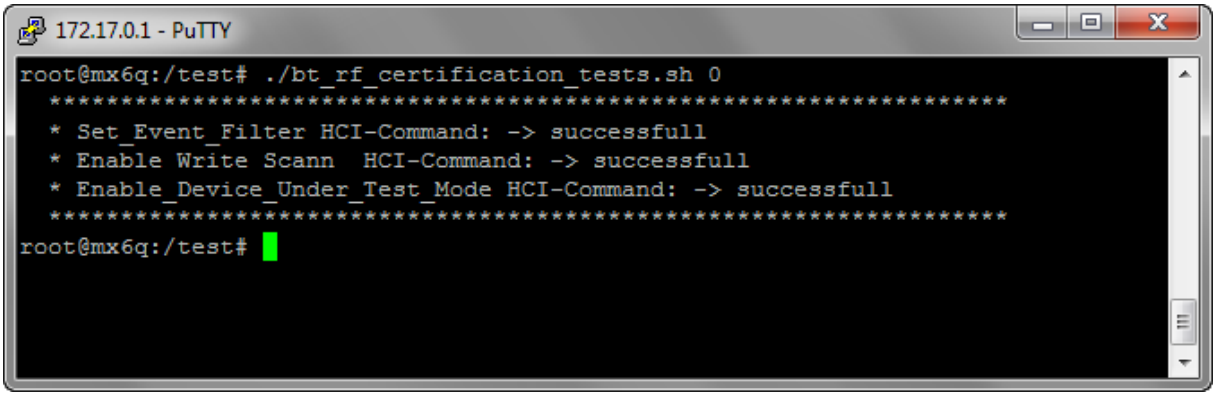
./bt_rf_certification_tests.sh 1 2402 _DH5

Continuous Hopping on all channels with 3-DH5-Packets:

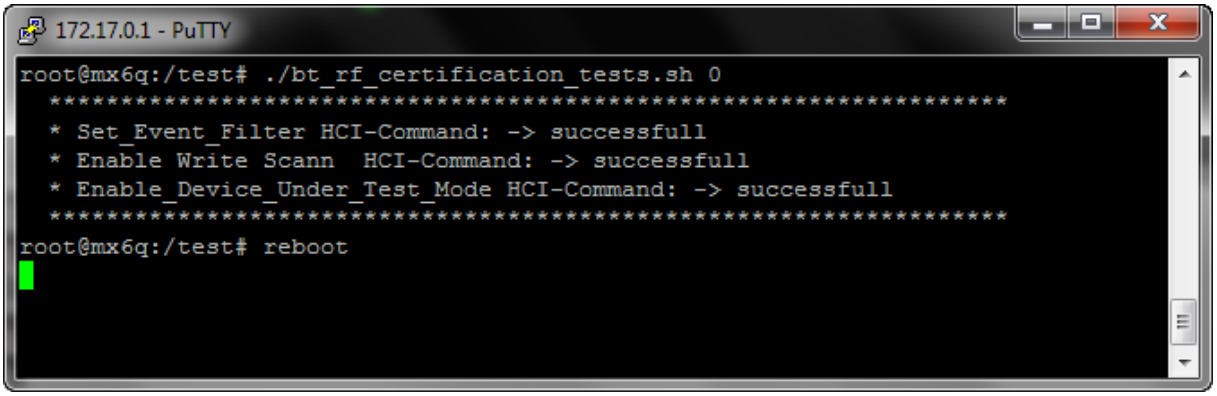
./bt_rf_certification_tests.sh 3 _3DH5 all

6.1 Bluetooth tests with Bluetooth tester

Activate Bluetooth test mode to test with a Bluetooth tester like Rohde & Schwarz CBT



In order to leave this mode, the DUT has to be rebooted with the command *reboot*:

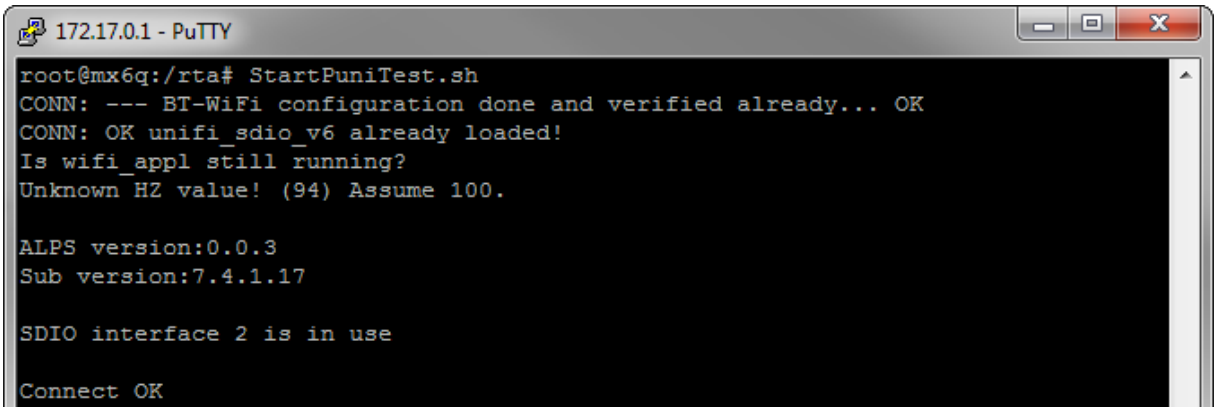


Alternative the device can be disconnected from the power supply. Connect it some seconds later and start the device again.

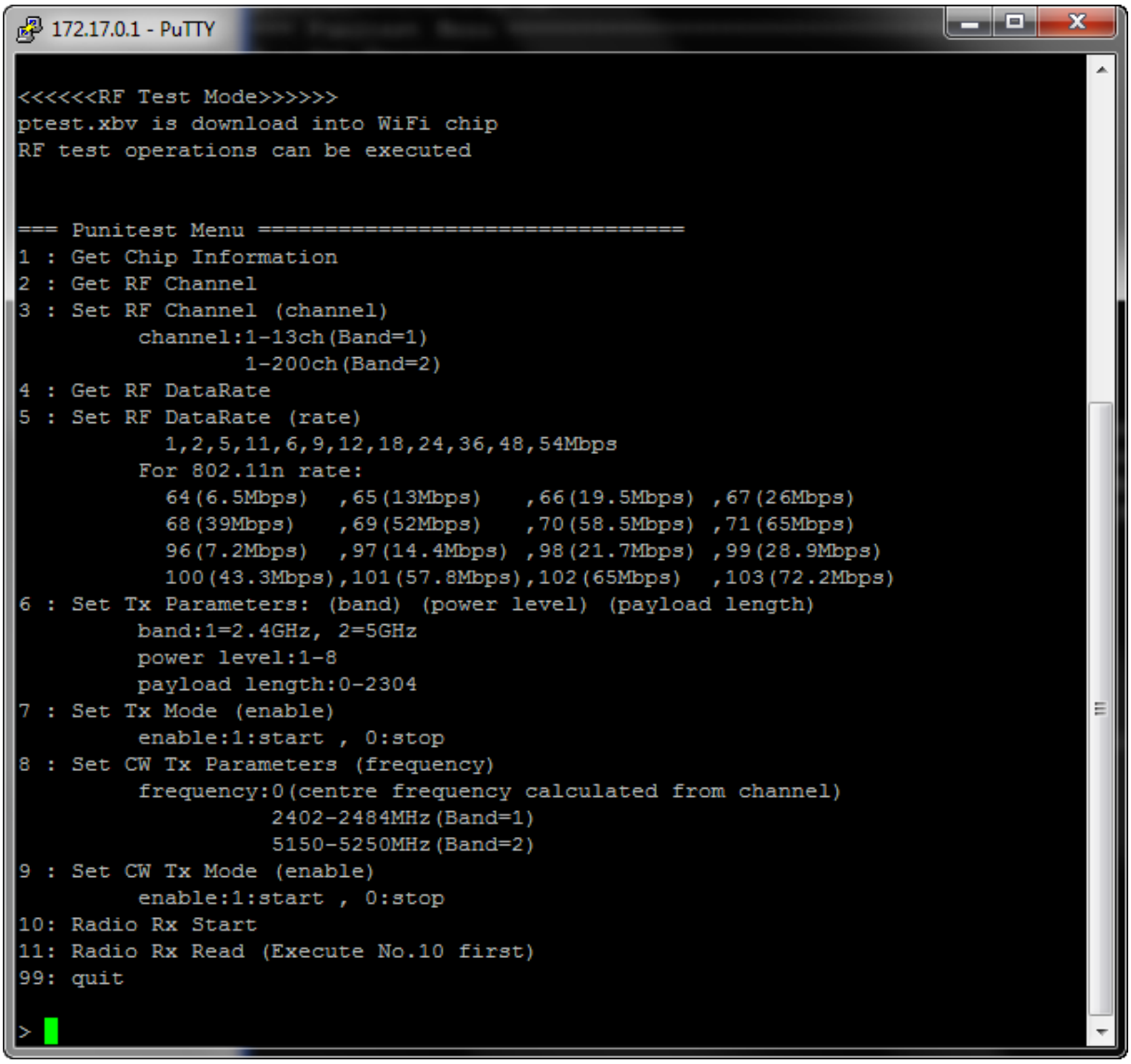
7 WLAN

Note that the RF Power on all tests are fixed settings inside module.
They can not be changed. You will get a failure from Punitest if you try to change the power value.

Start Punitest



The Punitest menue is shown:



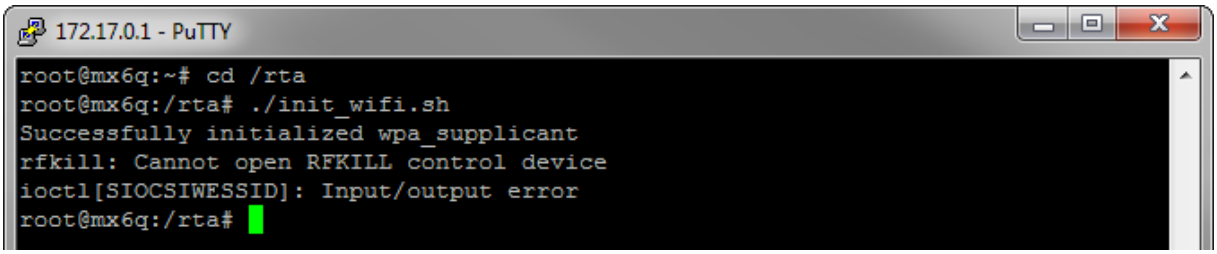
Then key in:
3 1 <Enter> (CH1)
5 1 <Enter> (1Mbit)
7 1 <Enter> (Tx Start)

A feedback is always given on the screen.
The Punitest menu is shown again.

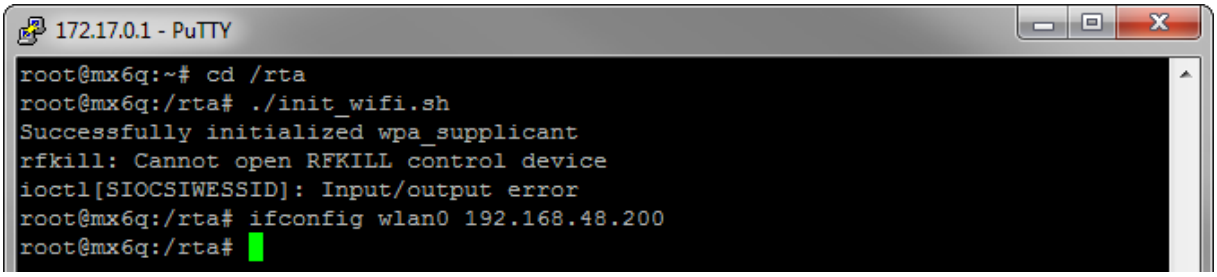
7.1 Connect to WLAN-Access Point and do iPerf

In order to connect to a WLAN Access Point an unsecured WLAN network with the SSID “PSA-WLAN” is necessary. If punitest was used directly before the device **must** be restarted before normal WLAN operation is possible.

If not already done change directory with “cd /rta”. Afterwards type “./init_wifi.sh” to connect to the WLAN network.

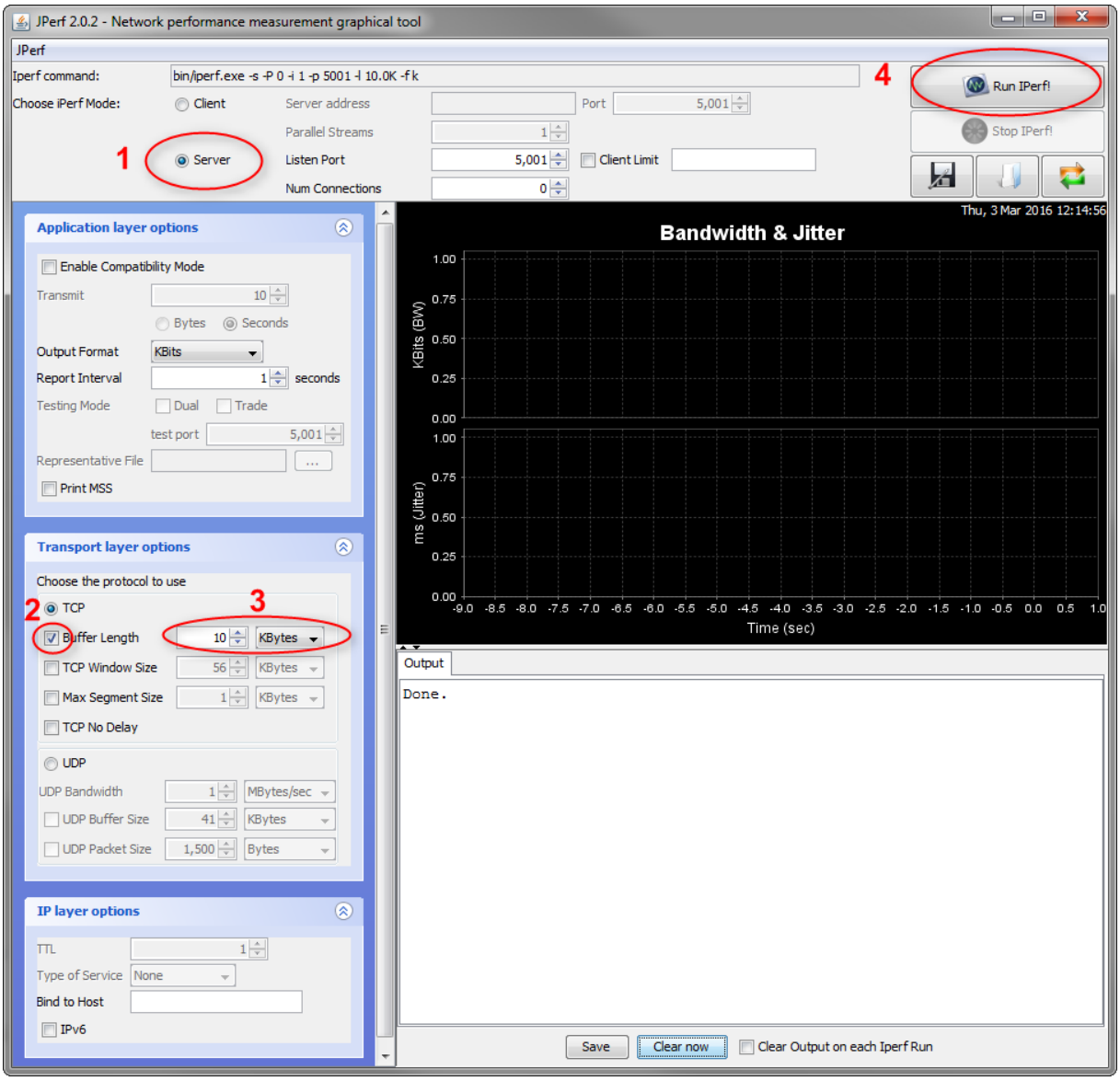


Now configure the IP of the DUT according the network settings of your Access Point with “ifconfig wlan0 *suitable IP*”

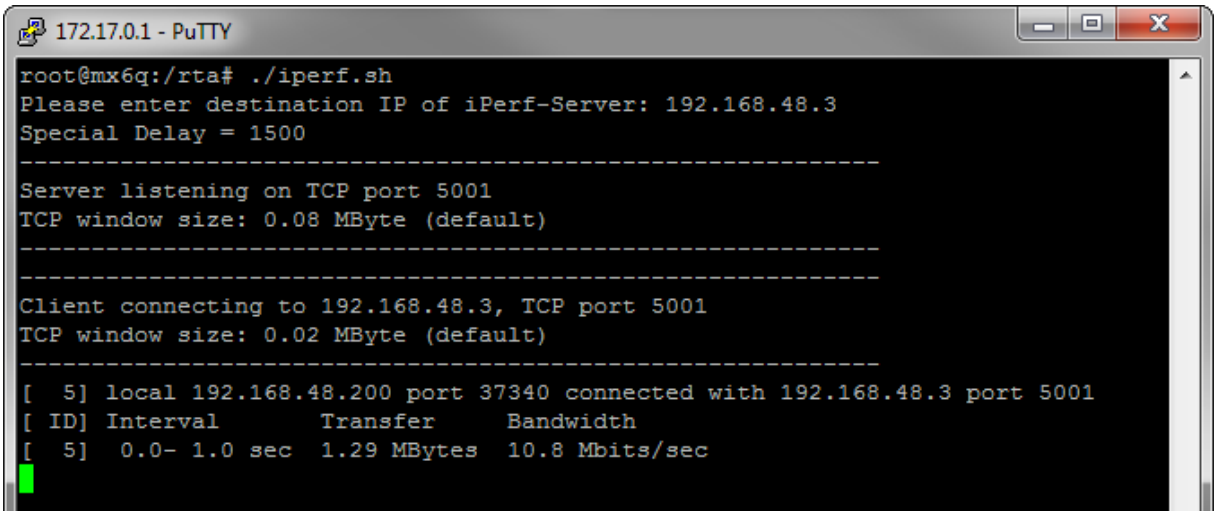


Start “jPerf” on the PC which is connected to the Access Point.

Do the following settings and start the test



Now start iperf on the DUT. The script will ask for the IP of the iPerf-Server. Type in the IP of the PC where you started “jPerf”



To stop the script use twice the key combination “STRG” + C or “CTRL” + C

If a failure appears or jPerf stops working activate in addition the Compatibility Mode and repeat the steps to start the test.