

Product System

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## DR6018 User manual

**CONFIDENTIAL**

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## IPQ60xx UI setting

1. input the IP: 192.168.1.1 and login;
2. Input the username: admin; password: password, then press the button “Login”,

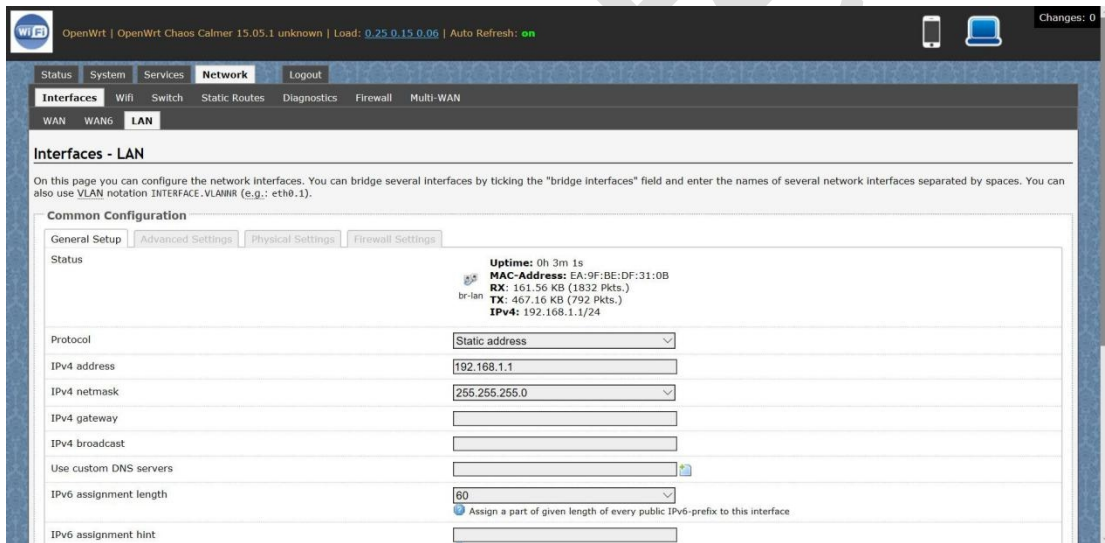
**Authorization Required**

Please enter your username and password.

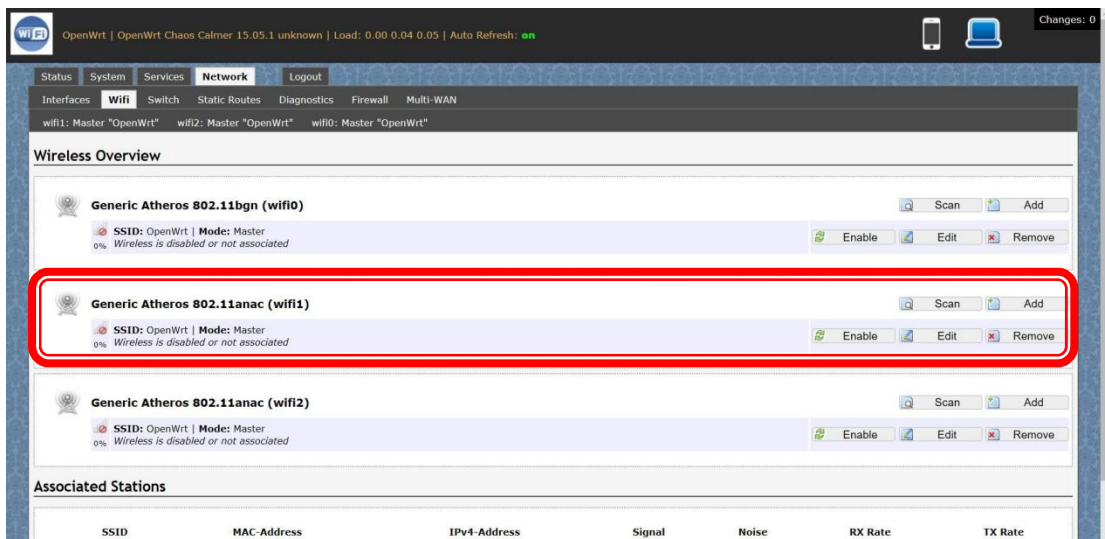
Username	<input type="text" value="admin"/>
Password	<input type="password" value="password"/>

[Reset](#) [Login](#)

3. network setting
  - IP Setting: setting IP in the path “network->Interfaces->LAN->IPv4 address”
  - DHCP setting:DHCP and other protocol setting in the path network->Interfaces->LAN->protocol”

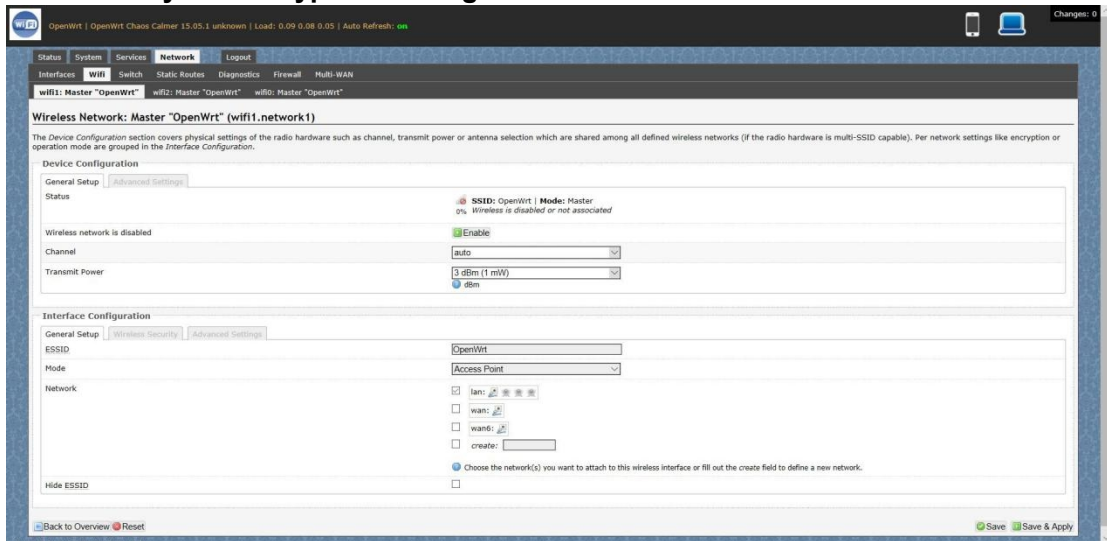


4. wireless setting
  - login the path network->Interfaces->WIFI, then choose one wifi,we select the red marked as example,click the button ‘Edit’

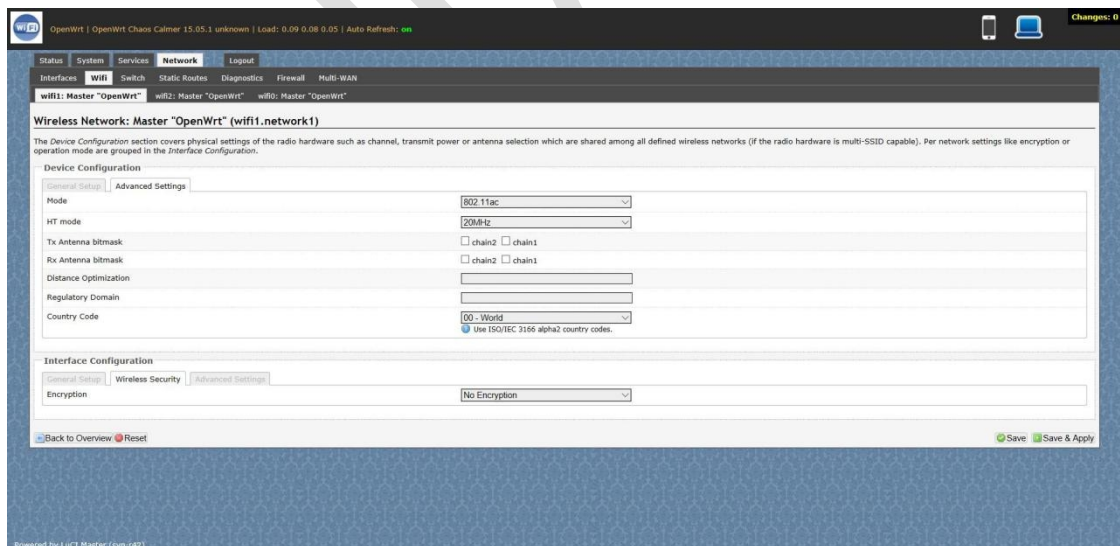


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- The detail information show in the picture as below: Channel:for channel select;
- Transmit Power:signal chain power setting; ESSID:for ID
- Mode:it support 4 mode AP,AP(WDS),client,client(WDS) Wireless Security:for Encryption setting



**IN Advance setting you can select which chain do you need,which BW do you need and so on**



**In the end ,you need click the button “Save & Apply”, and wait for 2 minutes, then you can enjoy it.**

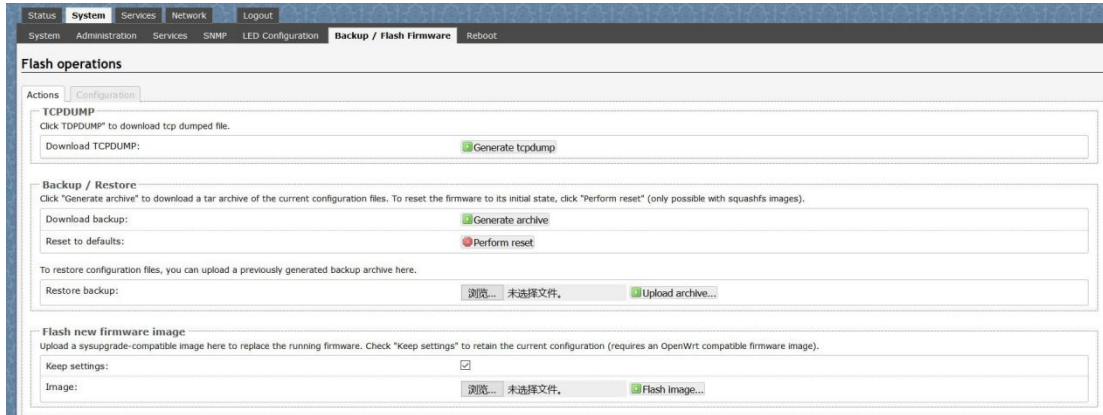
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## 5. Backup archive

Login System->Backup/Flash Firmware; Then click the button "Generate archive"; Then download the archive



## 6. update new image

Login System->Backup/Flash Firmware;

Then click the button “浏览”, choose your image,  
Then click the button “flash image”  
Then click the button “Proceed”, warning don't power off, wait for about three minutes, then the system will reboot automatic.then login again,you can enjoy it.



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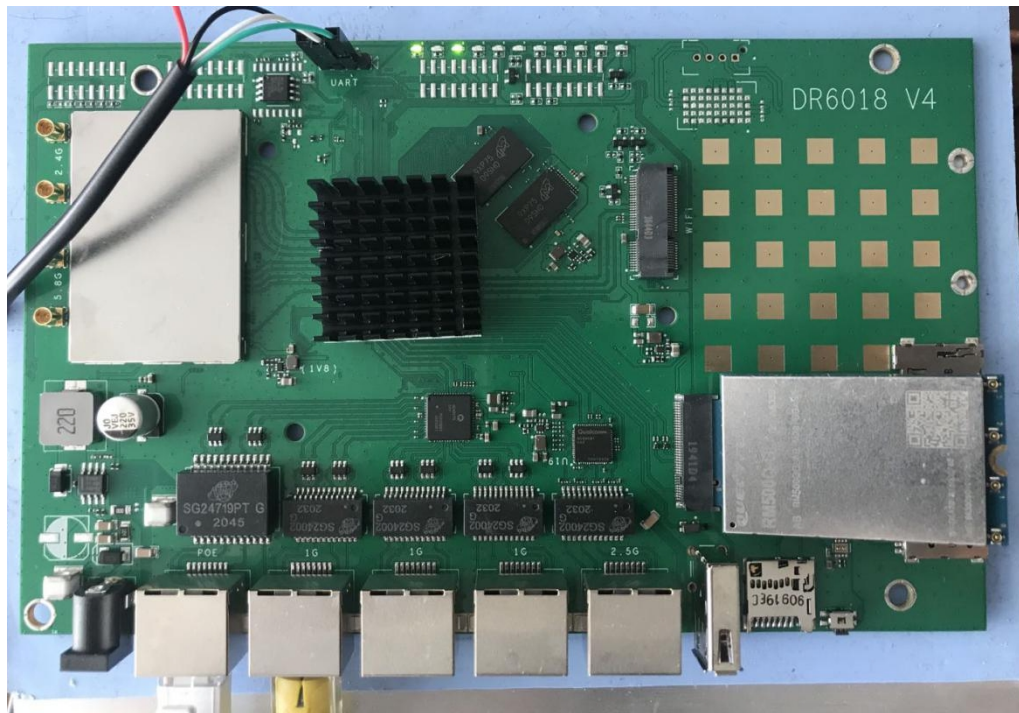
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## DR6010 V04 UART configuration

### 1. Induction

That is show how to use the Uart for DR6018 V4



### 2. Device connect

**Step 1: connect the cable to the DR6018 V4**

As the picture as above, the sequence of the signal in the UART connector: GND, TX, RX, VCC,

And we need use GND connect black cable, TX connect to white cable, RX connect to Green cable, VCC don't use.

**Step 2: Check the Com number on the PC**

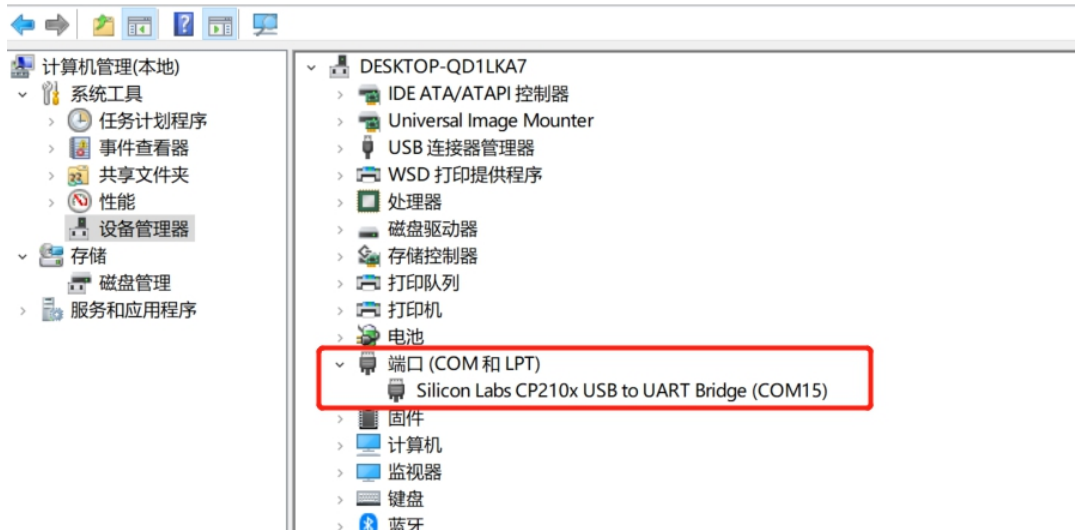
Connect the console board to the PC with USB connector,

Then check the com number on the PC, the com number on the test pc is Com15

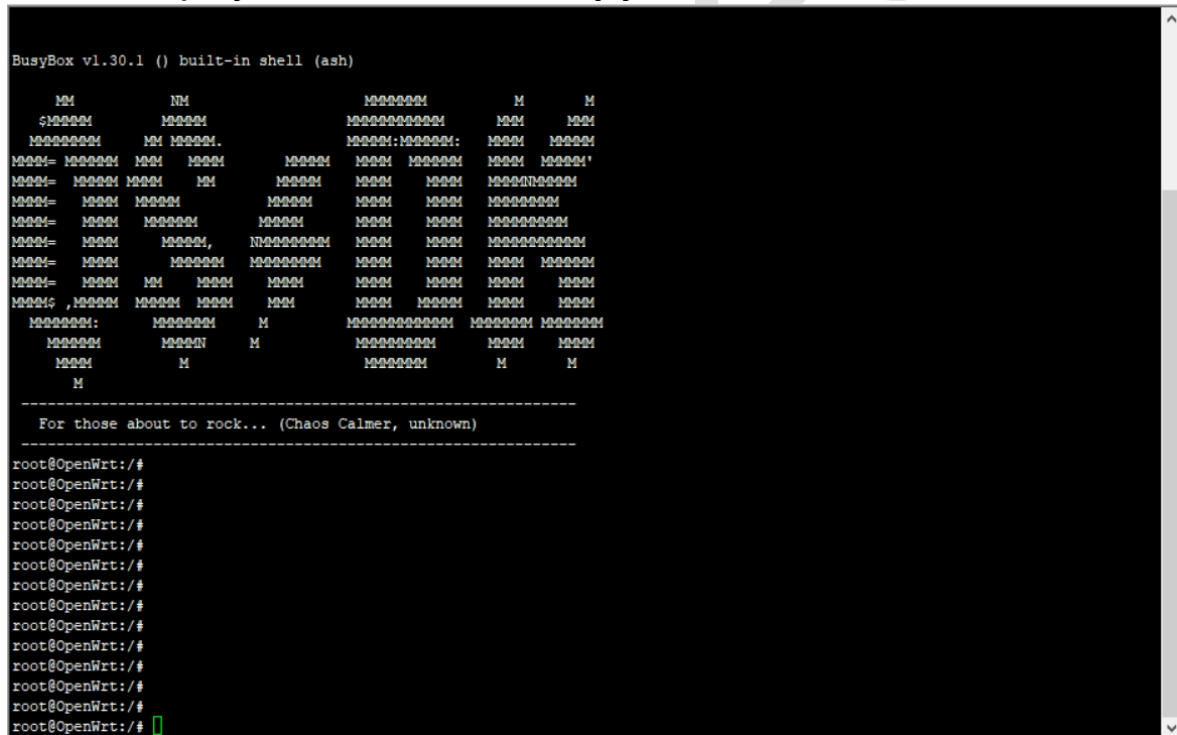
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**Step 3 login with the software**  
You can use putty ,Xshell or some others,enjoy it



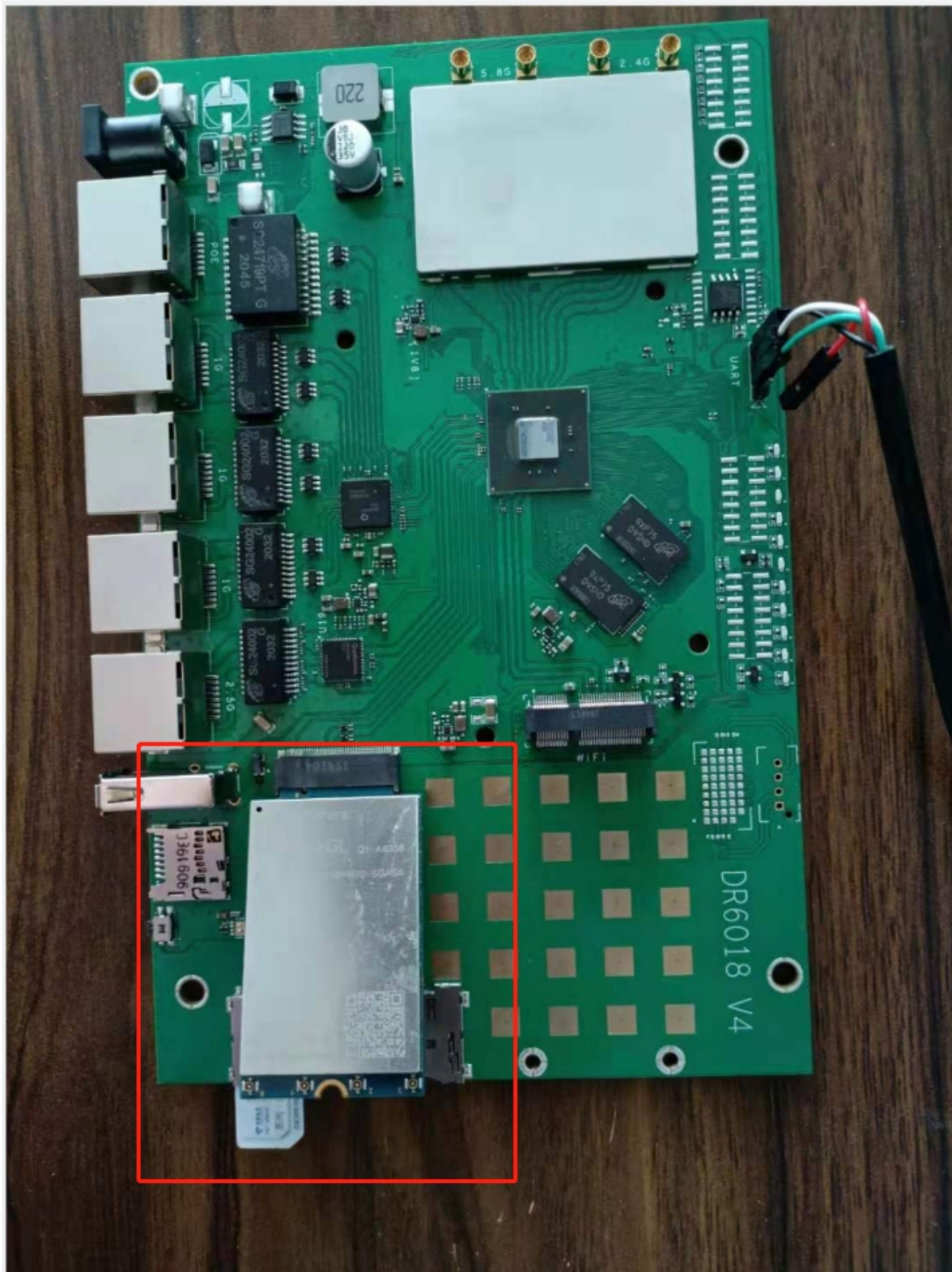
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## IPQ60xx 5G card setting

1. Place the quectel 5G module and SIM card correctly in the board as below picture.





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## 2. Connect the board by UART localhost and login : root , Password: asdf1234

```
[ 50.011700]
[ 50.020086] wlan: [3555:I:ANY] ol_ath_vap_set_param: 1556: Setting SGI value: 1
[ 50.031559] wlan: [3555:I:ANY] ol_ath_vap_set_param: 2609: VDEV params:HE su_bfee:1|su_bfer:1|mu_bfee:0|mu_bfer:1|di_muofdma:1|ul_muofdma:1|ul_mumimo:0|di_muofdma_bfer:0
[ 50.038595] wlan: [3555:I:ANY] ol_ath_vap_set_param: 2622: he_bf_cap=0x3b
[ 50.044636] br-lan: port 5(ath0) entered forwarding state
[ 50.060950] wlan: [3555:I:ANY] ol_ath_vap_set_param: 2637: VDEV params: AC/VHT sounding mode:HE|SU/MU sounding mode:SU|Trig/Non-Trig sounding mode:Non-Triggered
[ 50.066086] wlan: [3555:I:ANY] MBO Initialized
[ 50.080031] wlan: [3555:I:ANY] OCE Initialized
[ 50.084719] wlan: [3555:I:ANY] osif_create_vap_complete: 10120: TX Checksum:1|SG:1|TSO:1|LRO:0
[ 50.090782] wlan: [3555:I:ANY] VAP device ath1 created osifp: (bidab500) os_if: (bid14000)
[ 50.714083] 8021q: adding VLAN 0 to HW filter on device ath1
[ 50.715817] device ath1 entered promiscuous mode
[ 50.718958] br-lan: port 6(ath1) entered forwarding state
[ 50.723463] br-lan: port 6(ath1) entered forwarding state
[ 50.765563] wlan: [1753:I:ANY] wlan_cfg80211_do_acs: 4440: vap-1(ath1):ACS Params
[ 50.765616] wlan: [1753:I:ANY] wlan_cfg80211_do_acs: 4443: ht_enabled:1|ht40_enabled:0|vht_enabled:1|hw_mode:23|chwidth:20|
[ 50.772023] wlan: [1753:I:ANY] ieee80211_autoselect_infra_bss_channel: 4136: ACS started: vap:0xbfd14000
[ 51.138923] coresight-funnel 6130000.funnel: FUNNEL inport 5 enabled
[ 51.139122] coresight-funnel 6041000.funnel: FUNNEL inport 6 enabled
[ 51.145557] coresight-tmc 6048000.tmc: TMC enabled
[ 51.150683] coresight-replicator-qcom 6046000.replicator: REPLICATOR enabled
[ 51.155426] coresight-tmc 6047000.tmc: TMC enabled
[ 51.162486] coresight-funnel 6041000.funnel: FUNNEL inport 7 enabled
[ 51.167259] coresight-stm 6002000.stm: STM tracing enabled
***** QDSS Tracing Configuration completed *****
***** Starting QDSS for Integrated *****
[ 52.714639] br-lan: port 6(ath1) entered forwarding state

OpenWrt login: [ 54.162425] wlan: [1092:I:ANY] vap-1(ath1): ACS result PCH 11 freq 2462, SCH 0 freq 0, hw_mode 1 chwidth 20, vht_seg0 11 freq 2462, vht_seg1 0 freq 0
[ 54.164123] wlan: [1753:I:ANY] DES SSID SET=OpenWrt
[ 54.164137] wlan: [1753:I:ANY] desired hw mode: 23
[ 54.164235] wlan: [1753:I:ANY] ieee80211_ucfg_set_freq_internal: 575:
[ 54.164235] Channel is configured already!!
[ 54.175162] wlan: [0:I:CMN_NLME] vdev[1] ieee chan:11 freq:2462
[ 54.175507] wlan: [0:I:ANY] vdev[1]: Mgt Rate:1000(kbps)
[ 54.175549] wlan: [0:I:ANY] vdev[1]: Mgt Rate:1000(kbps)

OpenWrt login: [ 55.803954] wlan: [1092:I:ANY] vap-0(ath0): ACS result PCH 44 freq 5220, SCH 36 freq 5180, hw_mode 2 chwidth 80, vht_seg0 42 freq 5210, vht_seg1 0 freq 0
[ 55.804034] wlan: [1092:I:ANY] ieee80211_acs_scan_evhandler: 3870: lock held duration: 1(ms)
[ 55.805649] wlan: [1753:I:ANY] DES SSID SET=OpenWrt
[ 55.805662] wlan: [1753:I:ANY] desired hw mode: 30
[ 55.805677] wlan: [1753:I:ANY] ieee80211_ucfg_set_freq_internal: 575:
[ 55.805677] Channel is configured already!!
[ 55.817782] wlan: [0:I:CMN_NLME] vdev[0] ieee chan:44 freq:5220
[ 55.818157] wlan: [0:I:ANY] vdev[0]: Mgt Rate:6000(kbps)
[ 55.818200] wlan: [0:I:ANY] vdev[0]: Mgt Rate:6000(kbps)

OpenWrt login:
OpenWrt login:
OpenWrt login:
OpenWrt login:
OpenWrt login: root
Password:
```

3. check whether find the 5G module,  
Print the command :ifconfig -a  
if we can see usb0 which is indicate that the new 5G/LTE module is detected.

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```
UP LOOPBACK RUNNING MTU:65536 Metric:1
RX packets:247 errors:0 dropped:0 overruns:0 frame:0
TX packets:247 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1
RX bytes:19676 (19.2 KiB) TX bytes:19676 (19.2 KiB)

miireg Link encap:UNSPEC HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
[NO FLAGS] MTU:0 Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1
RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)

sit0 Link encap:IPv6-in-IPv4
NOARP MTU:1480 Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1
RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)

soc0 Link encap:UNSPEC HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
[NO FLAGS] MTU:0 Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1
RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)

teq10 Link encap:UNSPEC HWaddr 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00
NOARP MTU:1500 Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:100
RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)

usb0 Link encap:Ethernet HWaddr 02:50:F4:00:00:00
NOARP MTU:1500 Metric:1
RX packets:2 errors:0 dropped:0 overruns:0 frame:0
TX packets:2 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:612 (612.0 B) TX bytes:672 (672.0 B)

wifi0 Link encap:UNSPEC HWaddr 00-03-7F-12-B9-63-00-37-00-00-00-00-00-00-00-00
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:636 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:2699
RX bytes:0 (0.0 B) TX bytes:397032 (387.7 KiB)

wifi1 Link encap:UNSPEC HWaddr 00-03-7F-12-FD-47-00-37-00-00-00-00-00-00-00-00
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:636 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:2699
RX bytes:0 (0.0 B) TX bytes:397032 (387.7 KiB)
```

**4. Check whether the SIM card can work.**

Print the command: `quectel-CM` , if it shows as below and we also can see that `SIMstatus: SIM-Ready`, it is ok.

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```
root@OpenWrt:~# quectel-CM
[03-02_09:31:36:686] Quectel_QConnectManager_Linux_V1.6.0.15
[03-02_09:31:36:687] Find /sys/bus/usb/devices/1-1 idVendor=0x2c7c idProduct=0x800, bus=0x001, dev=0x002
[03-02_09:31:36:691] Auto find qmichannel = /dev/qcqmio
[03-02_09:31:36:691] Auto find usbnet_adapter = usb0
[03-02_09:31:36:691] netcard driver = GobiNet, driver version = V1.6.2.9
[03-02_09:31:36:691] qmap_mode = 1, qmap_version = 9, qmap_size = 31744, muxid = 0x81, qmap_netcard = usb0
[03-02_09:31:36:691] Modem works in QMI mode
[03-02_09:31:36:703] Get clientWDS = 7
[03-02_09:31:36:735] Get clientDMS = 8
[03-02_09:31:36:767] Get clientNAS = 9
[03-02_09:31:36:798] Get clientUIM = 10
[03-02_09:31:36:831] requestBaseBandVersion RM500QGLABR01A01M4G
[03-02_09:31:36:959] requestGetSIMStatus SIMStatus: SIM_READY
[03-02_09:31:36:991] requestGetProfile[1] ctnet///0
[03-02_09:31:37:022] requestRegistrationState2 MCC: 460, MNC: 11, PS: Attached, DataCap: UNKNOW
[03-02_09:31:37:054] requestQueryDataCall IPv4ConnectionStatus: DISCONNECTED
[03-02_09:31:37:055] ifconfig usb0 0.0.0.0
[ 1007.039176] IPv6: ADDRCONF(NETDEV_UP): usb0: link is not ready
[03-02_09:31:37:064] ifconfig usb0 down
[03-02_09:31:37:118] requestSetupDataCall WdsConnectionIPv4Handle: 0xedf84840
[ 1007.222546] net usb0: link_state 0x0 -> 0x1
[03-02_09:31:37:247] ifconfig usb0 up
[03-02_09:31:37:259] you are use OpenWrt?
[03-02_09:31:37:260] should not calling udhcpc manually?
[03-02_09:31:37:262] should modify /etc/config/network as below?
[03-02_09:31:37:269] config interface wan
[03-02_09:31:37:269]     option ifname    usb0
[03-02_09:31:37:269]     option proto    dhcp
[03-02_09:31:37:269] should use "/sbin/ifstaus wan" to check usb0 's status?
[03-02_09:31:37:269] busybox udhcpc -f -n -q -t 5 -i usb0
udhcpc: started, v1.30.1
udhcpc: sending discover
udhcpc: sending select for 10.101.194.39
udhcpc: lease of 10.101.194.39 obtained, lease time 7200
[03-02_09:31:37:432] udhcpc: ifconfig usb0 10.101.194.39 netmask 255.255.255.240 broadcast +
[03-02_09:31:37:444] udhcpc: setting default routers: 10.101.194.40
[03-02_09:31:41:087] requestRegistrationState2 MCC: 460, MNC: 11, PS: Attached, DataCap: UNKNOW
[03-02_09:31:41:119] requestRegistrationState2 MCC: 460, MNC: 11, PS: Attached, DataCap: UNKNOW
[03-02_09:31:41:151] requestRegistrationState2 MCC: 460, MNC: 11, PS: Attached, DataCap: UNKNOW
[03-02_09:31:41:182] requestRegistrationState2 MCC: 460, MNC: 11, PS: Attached, DataCap: UNKNOW
[03-02_09:31:47:007] requestRegistrationState2 MCC: 460, MNC: 11, PS: Attached, DataCap: UNKNOW
[03-02_09:31:47:039] requestRegistrationState2 MCC: 460, MNC: 11, PS: Attached, DataCap: UNKNOW
```