

DR5322 USER MANUAL

- 1.IPQ5322 UI settings
- 2.DR5322 UART configuration
- 3.How to set up the card slot

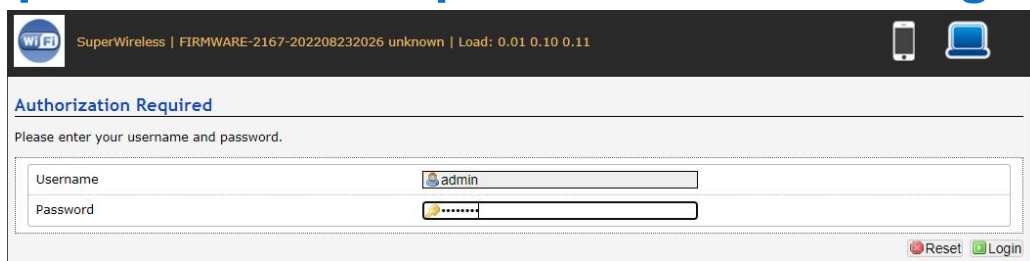
DR5322



IPQ5322 UI setting

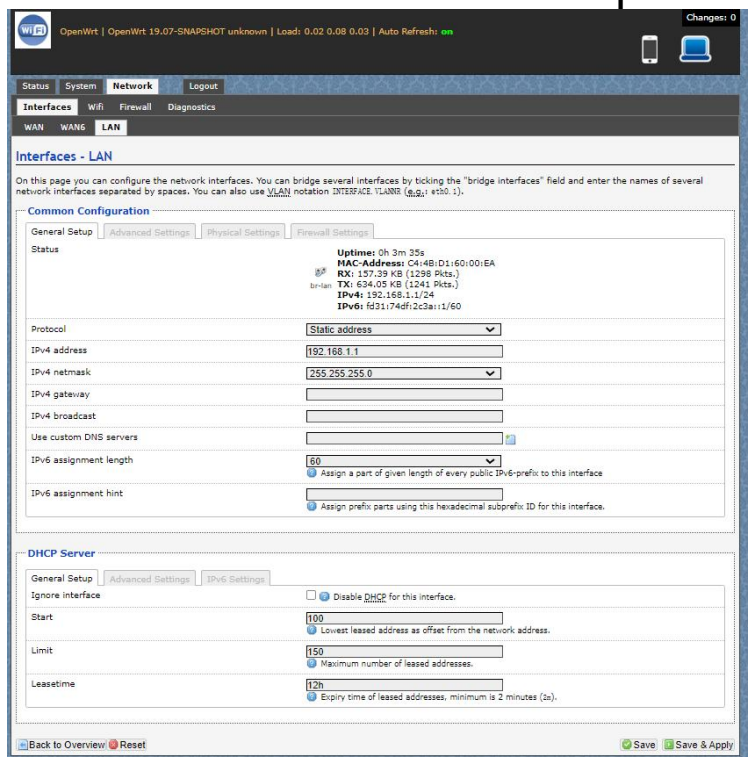
1. Input the IP 192.168.1.1 and login

2. Input the username “admin” password “password” then press the button “Login”



3. Network setting

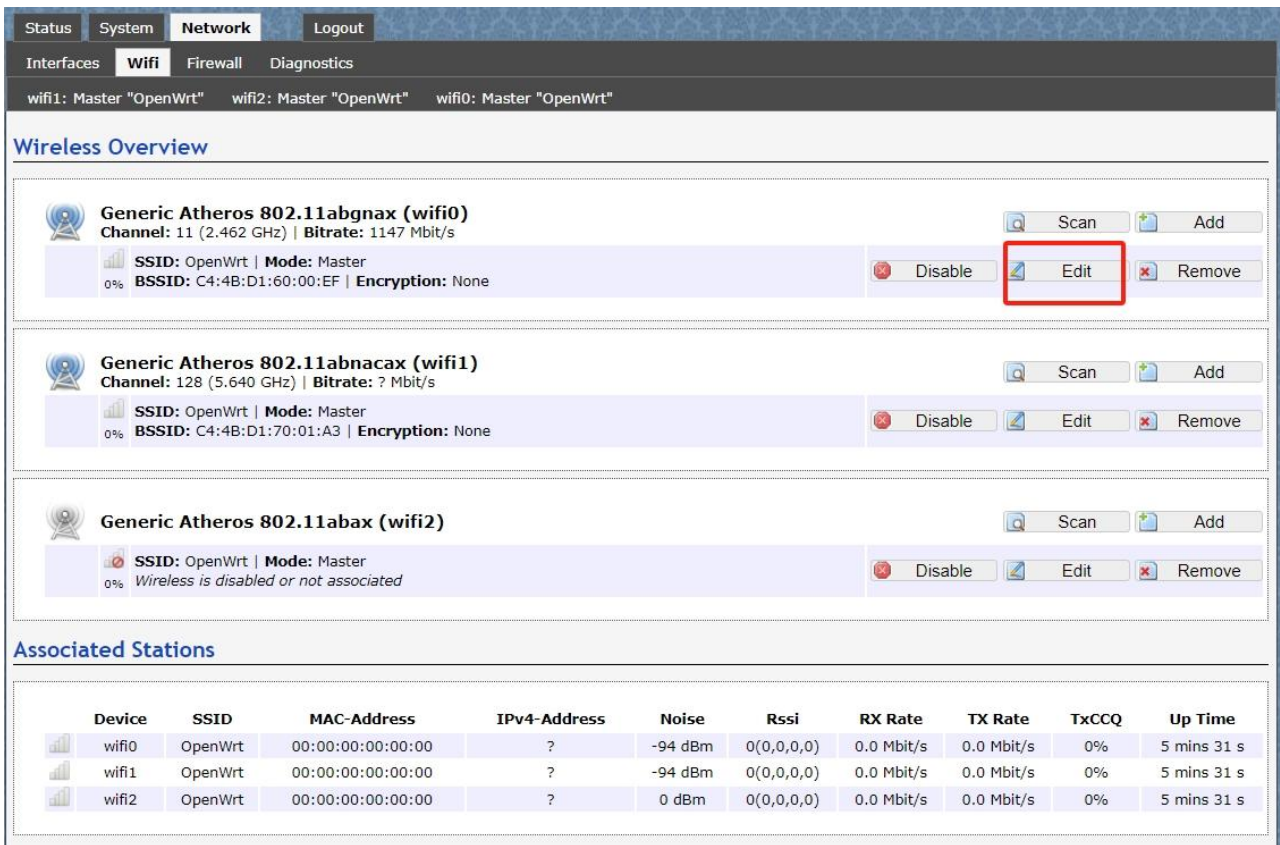
- IP Setting: setting IP in the path "network->Interfaces->LAN->IPV4 address"
- DHCP setting: DHCP and other protocol setting in the path network-> Interfaces-> LAN->protocol"



IPQ5322 UI setting

4. Wireless setting

Login the path network->Interfaces->WIFI,
Then choose wifi 1,we select the red marked as example,click
the button “ Edit ”



The screenshot shows the OpenWrt Network configuration page. The 'Network' tab is selected, and the 'Wifi' sub-tab is active. The page displays three wireless interfaces: wifi0, wifi1, and wifi2. Each interface has a status bar showing signal strength, SSID, Mode, and BSSID. Below the status bar are buttons for Scan, Add, Disable, Edit, and Remove. The 'Edit' button for wifi0 is highlighted with a red box.

Wireless Overview

- Generic Atheros 802.11abgnax (wifi0)**
Channel: 11 (2.462 GHz) | Bitrate: 1147 Mbit/s
SSID: OpenWrt | Mode: Master
BSSID: C4:4B:D1:60:00:EF | Encryption: None
Buttons: Scan, Add, Disable, Edit, Remove
- Generic Atheros 802.11abnacax (wifi1)**
Channel: 128 (5.640 GHz) | Bitrate: ? Mbit/s
SSID: OpenWrt | Mode: Master
BSSID: C4:4B:D1:70:01:A3 | Encryption: None
Buttons: Scan, Add, Disable, Edit, Remove
- Generic Atheros 802.11abax (wifi2)**
SSID: OpenWrt | Mode: Master
0% Wireless is disabled or not associated
Buttons: Scan, Add, Disable, Edit, Remove

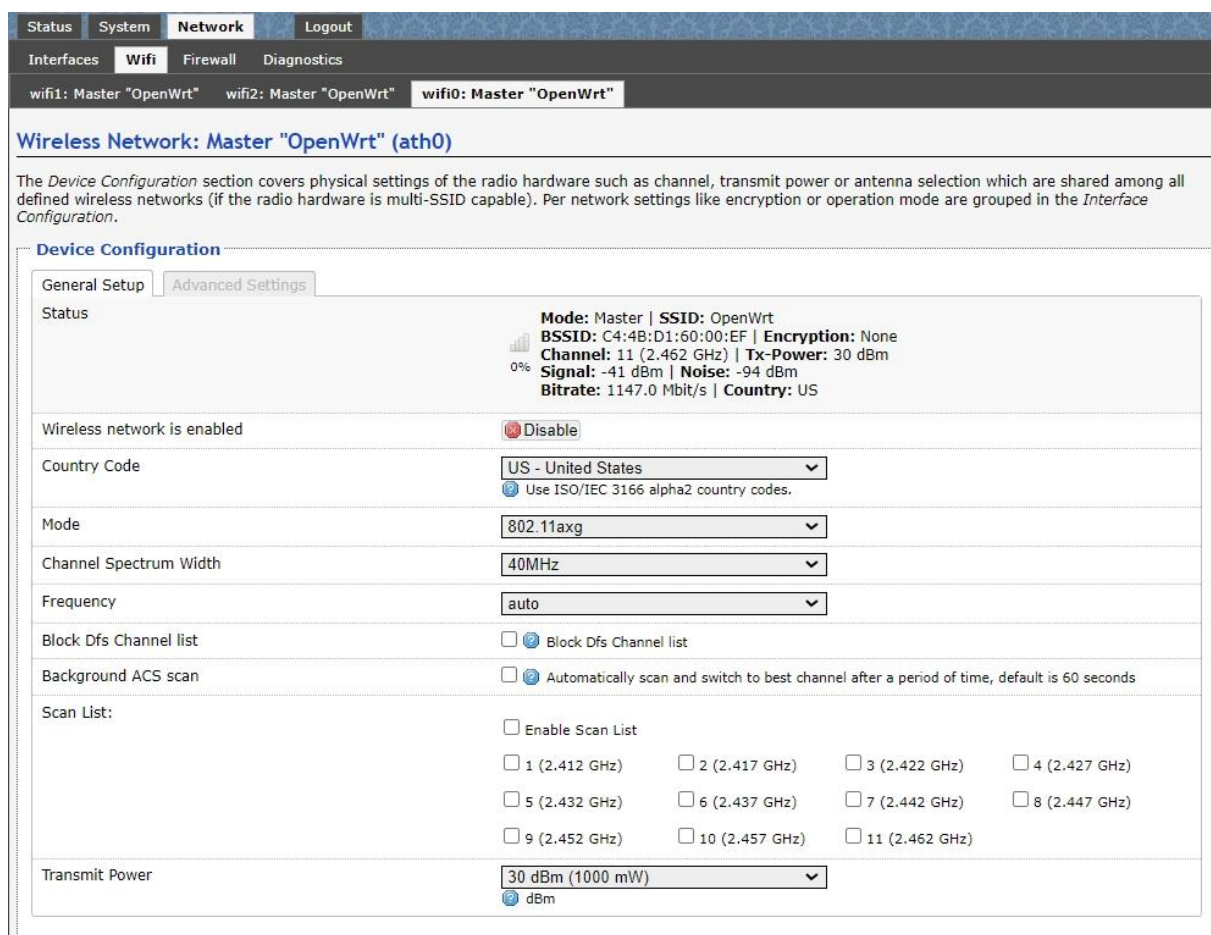
Associated Stations

Device	SSID	MAC-Address	IPv4-Address	Noise	Rssi	RX Rate	TX Rate	TxCCQ	Up Time
wifi0	OpenWrt	00:00:00:00:00:00	?	-94 dBm	0(0,0,0,0)	0.0 Mbit/s	0.0 Mbit/s	0%	5 mins 31 s
wifi1	OpenWrt	00:00:00:00:00:00	?	-94 dBm	0(0,0,0,0)	0.0 Mbit/s	0.0 Mbit/s	0%	5 mins 31 s
wifi2	OpenWrt	00:00:00:00:00:00	?	0 dBm	0(0,0,0,0)	0.0 Mbit/s	0.0 Mbit/s	0%	5 mins 31 s

IPQ5322 UI setting

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



Wireless Network: Master "OpenWrt" (ath0)

The *Device Configuration* section covers physical settings of the radio hardware such as channel, transmit power or antenna selection which are shared among all defined wireless networks (if the radio hardware is multi-SSID capable). Per network settings like encryption or operation mode are grouped in the *Interface Configuration*.

Device Configuration

General Setup | **Advanced Settings**

Status

Mode: Master | **SSID:** OpenWrt
BSSID: C4:4B:D1:60:00:EF | **Encryption:** None
Channel: 11 (2.462 GHz) | **Tx-Power:** 30 dBm
Signal: -41 dBm | **Noise:** -94 dBm
Bitrate: 1147.0 Mbit/s | **Country:** US

Wireless network is enabled Disable

Country Code: US - United States (Use ISO/IEC 3166 alpha2 country codes.)

Mode: 802.11axg

Channel Spectrum Width: 40MHz

Frequency: auto

Block Dfs Channel list: Block Dfs Channel list

Background ACS scan: Automatically scan and switch to best channel after a period of time, default is 60 seconds

Scan List:

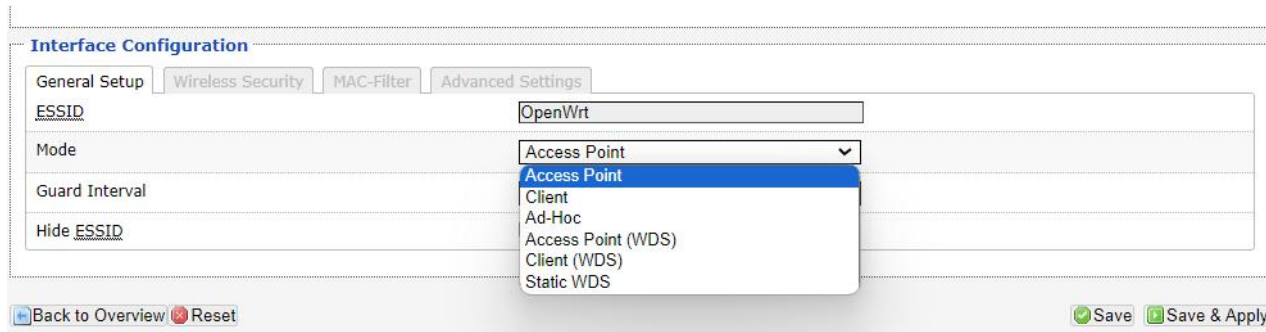
Enable Scan List

1 (2.412 GHz) 2 (2.417 GHz) 3 (2.422 GHz) 4 (2.427 GHz)
 5 (2.432 GHz) 6 (2.437 GHz) 7 (2.442 GHz) 8 (2.447 GHz)
 9 (2.452 GHz) 10 (2.457 GHz) 11 (2.462 GHz)

Transmit Power: 30 dBm (1000 mW) dBm

IPQ5322 UI setting

In advance setting you can select which chain do you need, which BW do you need and so on

A screenshot of the "Interface Configuration" page in the Wallys UI. The page has a tabbed interface with "General Setup", "Wireless Security", "MAC-Filter", and "Advanced Settings". The "General Setup" tab is active. The "ESSID" field contains "OpenWrt". The "Mode" dropdown menu is open, showing options: "Access Point", "Client", "Ad-Hoc", "Access Point (WDS)", "Client (WDS)", and "Static WDS". The "Access Point" option is highlighted. At the bottom, there are buttons for "Back to Overview", "Reset", "Save", and "Save & Apply".

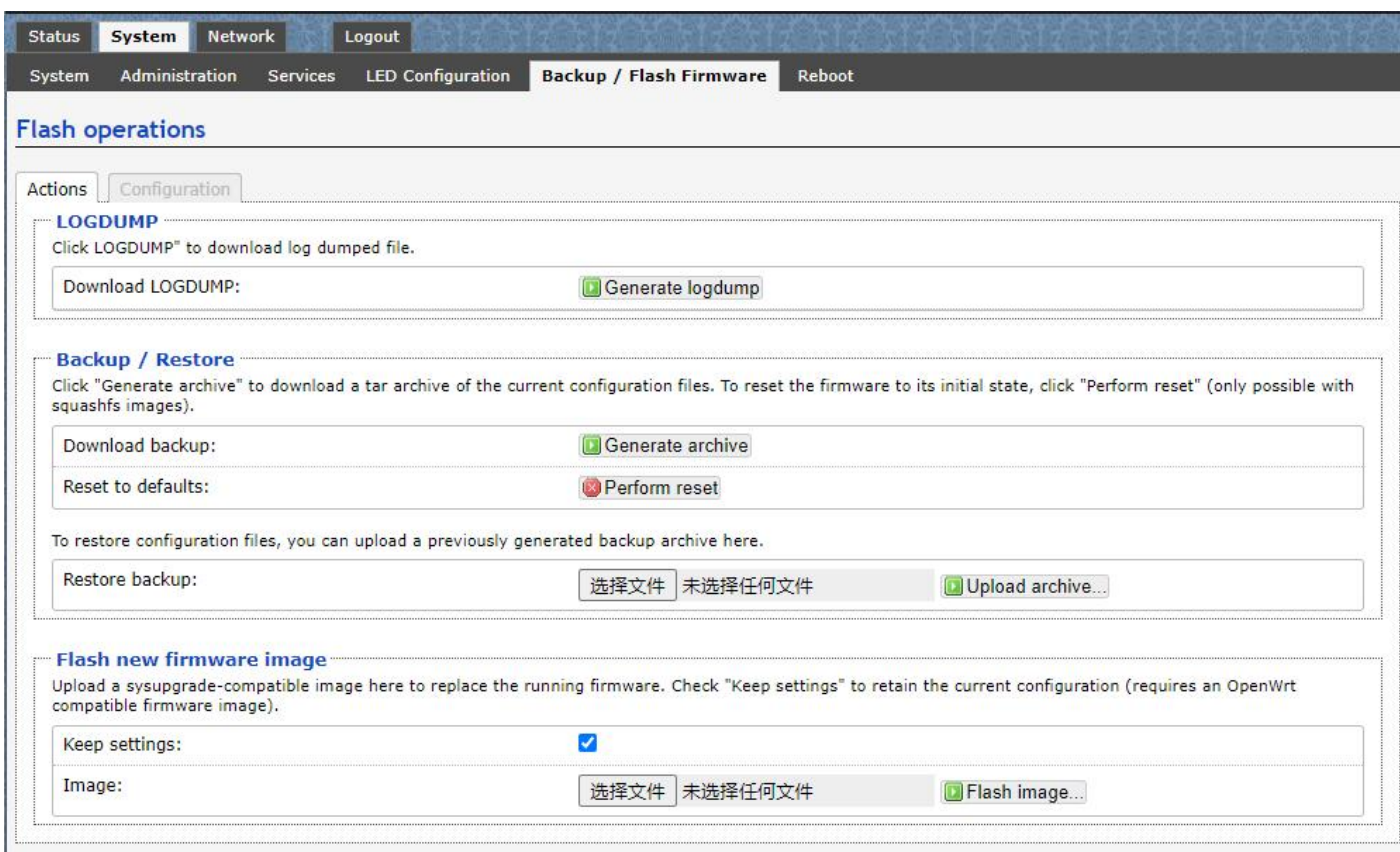
Interface Configuration	
General Setup	Wireless Security
MAC-Filter	Advanced Settings
ESSID	OpenWrt
Mode	Access Point
Guard Interval	
Hide ESSID	
Back to Overview Reset Save Save & Apply	

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

IPQ5322 UI setting

5. Backup archive

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



The screenshot displays the 'Backup / Flash Firmware' section of the Wallys IPQ5322 web interface. The navigation bar at the top includes 'Status', 'System', 'Network', and 'Logout'. Below this, a secondary menu shows 'System', 'Administration', 'Services', 'LED Configuration', 'Backup / Flash Firmware', and 'Reboot'. The main content area is titled 'Flash operations' and contains three sections: 'LOGDUMP', 'Backup / Restore', and 'Flash new firmware image'. Each section includes a description, a form with a file input field, and a button to perform the action.

Flash operations

Actions Configuration

LOGDUMP
Click LOGDUMP to download log dumped file.

Download LOGDUMP:

Backup / Restore
Click "Generate archive" to download a tar archive of the current configuration files. To reset the firmware to its initial state, click "Perform reset" (only possible with squashfs images).

Download backup:

Reset to defaults:

To restore configuration files, you can upload a previously generated backup archive here.

Restore backup: 未选择任何文件

Flash new firmware image
Upload a sysupgrade-compatible image here to replace the running firmware. Check "Keep settings" to retain the current configuration (requires an OpenWrt compatible firmware image).

Keep settings:

Image: 未选择任何文件

IPQ5322 UI setting

6.Update new image

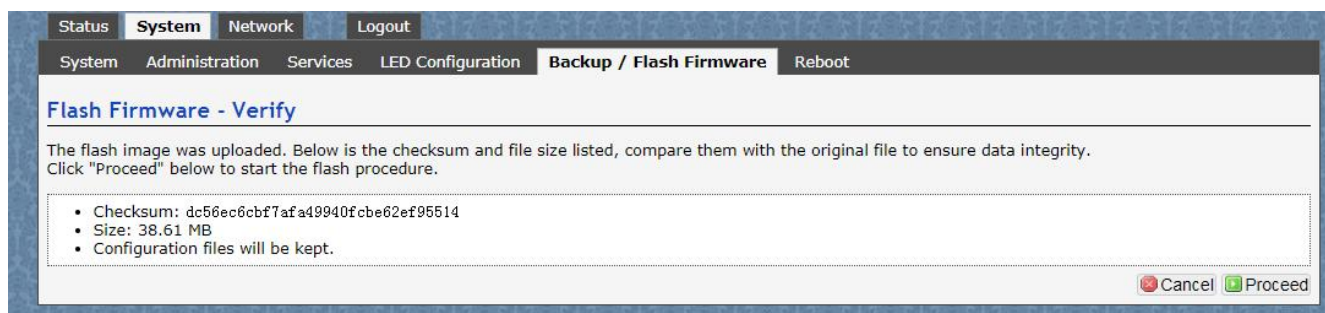
Login System->Backup/Flash Firmware;

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.



IPQ5322 UI setting

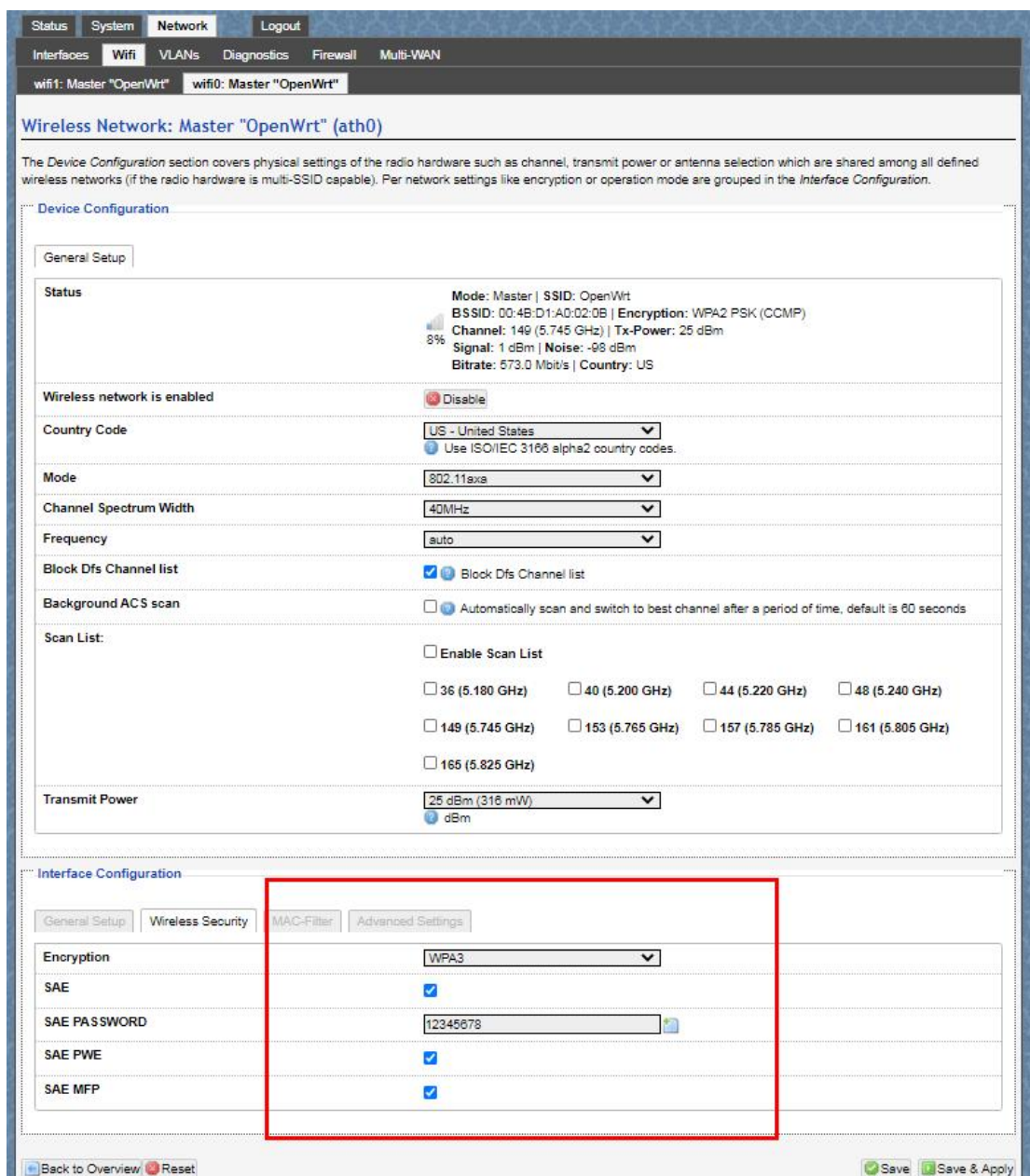
7. wireless encryption

Login System->Network/wifi/Edit->Choose 5G radio

Country Code choose " US " click the button "Wireless Security"

Then choose "WPA3" and set password

Notice:SAE/SAE PWE/SAE MFP click " ✓ "



The screenshot displays the 'Wireless Network: Master "OpenWrt" (ath0)' configuration page. The 'Interface Configuration' section is active, with the 'Wireless Security' tab selected. The security settings are as follows:

Setting	Value
Encryption	WPA3
SAE	<input checked="" type="checkbox"/>
SAE PASSWORD	12345678
SAE PWE	<input checked="" type="checkbox"/>
SAE MFP	<input checked="" type="checkbox"/>

At the bottom of the page, there are buttons for 'Back to Overview', 'Reset', 'Save', and 'Save & Apply'.

IPQ5322 UI setting


7. wireless encryption

Status System **Network** Logout


Interfaces **Wifi** Firewall Diagnostics

wifi1: Master "OpenWrt6666" wifi2: Master "OpenWrt" wifi0: Master "OpenWrt6666"


Wireless Overview

 **Generic Atheros 802.11abgnax (wifi0)**
 Channel: 7 (2.442 GHz) | Bitrate: 1147 Mbit/s 🔍 Scan ➕ Add




📶 **SSID: OpenWrt66666** | **Mode: Master**
 0% **BSSID: C4:4B:D1:60:00:EF** | **Encryption: None** 🛑 Disable 📄 Edit 🗑️ Remove

 **Generic Atheros 802.11abnacax (wifi1)**
 Channel: 124 (5.620 GHz) | Bitrate: ? Mbit/s 🔍 Scan ➕ Add

📶 **SSID: OpenWrt66666** | **Mode: Master**
 0% **BSSID: C4:4B:D1:70:01:A3** | **Encryption: None** 🛑 Disable 📄 Edit 🗑️ Remove

 **Generic Atheros 802.11abax (wifi2)**
🛑 **SSID: OpenWrt** | **Mode: Master**
 0% *Wireless is disabled or not associated* 🛑 Disable 📄 Edit 🗑️ Remove

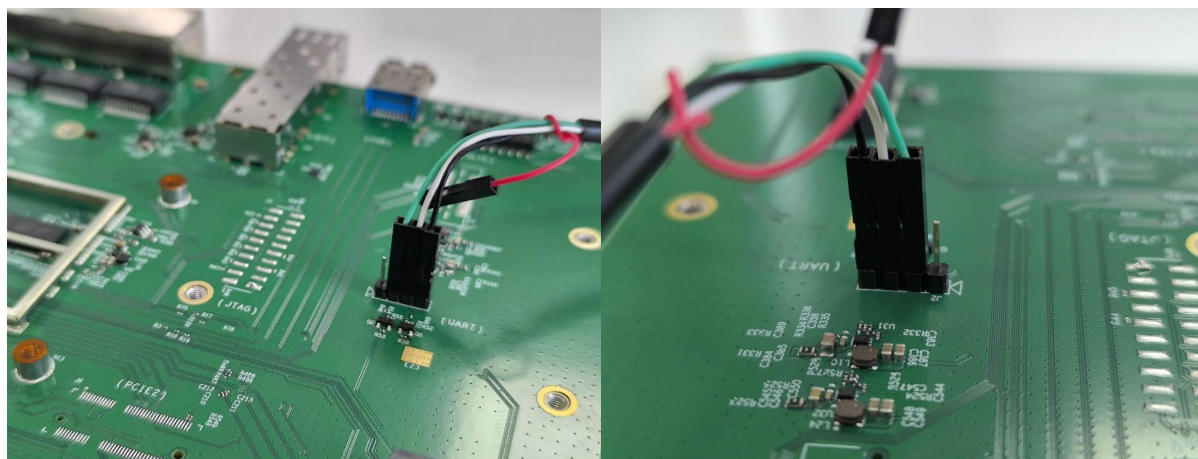
Associated Stations

Device	SSID	MAC-Address	IPv4-Address	Noise	Rssi	RX Rate	TX Rate	TxCCQ	Up Time
 wifi0	OpenWrt66666	62:6B:4B:89:8E:8A	?	-94 dBm	26(0,0,0,0)	275.3 Mbit/s	154.9 Mbit/s	0%	9 s
 wifi1	OpenWrt66666	62:6B:4B:89:8E:8A	?	-94 dBm	26(0,0,0,0)	275.3 Mbit/s	154.9 Mbit/s	0%	9 s
 wifi2	OpenWrt	62:6B:4B:89:8E:8A	?	0 dBm	26(0,0,0,0)	275.3 Mbit/s	154.9 Mbit/s	0%	9 s

DR5322 UART configuration

1. Introduction

The photo below shows how to use the Uart for DR5332



DR5332 UART configuration

2. Device connect

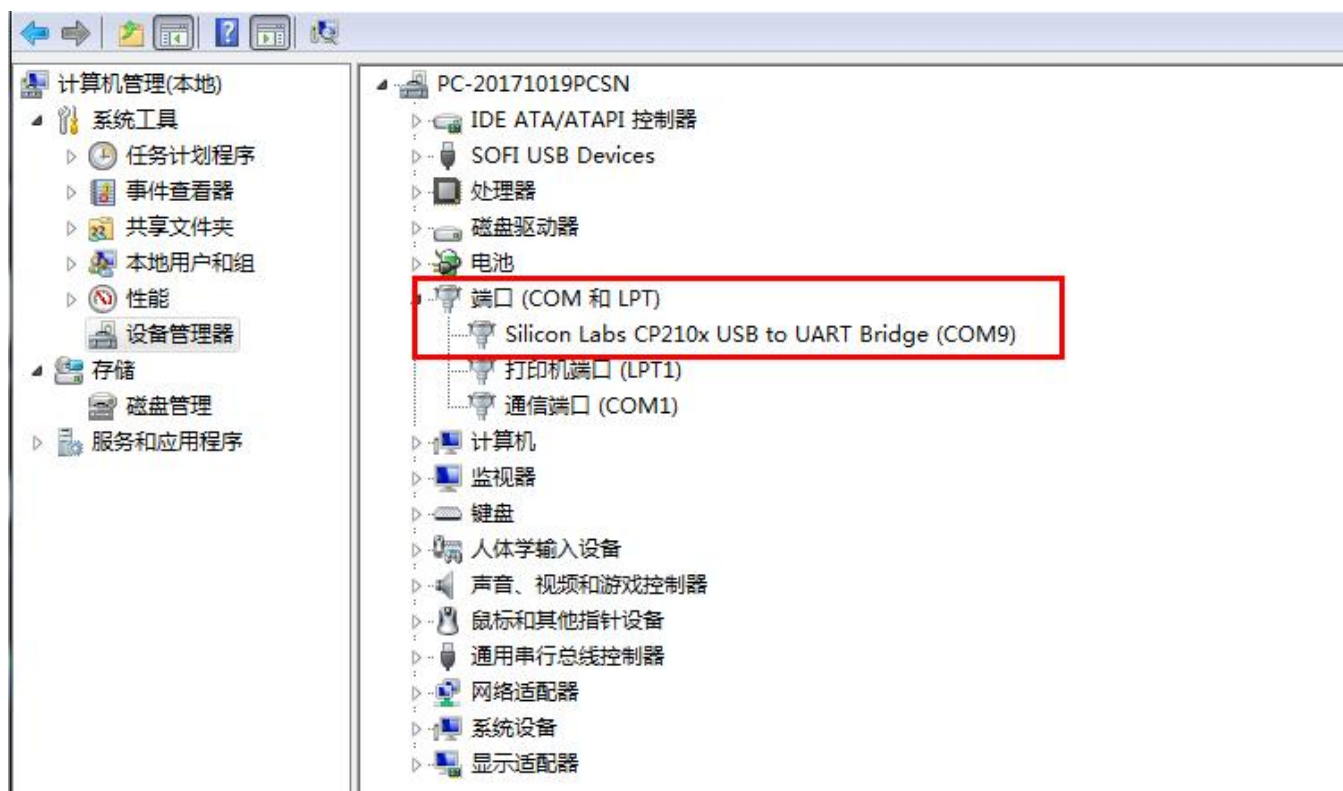
Step 1: Connect the cable to the DR5332

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 COM9



DR5322 UART configuration

2. Device connect

Step 3 Login with the software

You can use putty,Xshell or some others,enjoy it.

```
BusyBox v1.35.0 (2023-12-15 03:59:36 UTC) built-in shell (ash)

      MM          NM          MMMMMMMM          M          M
      $MMMMM      MMMMM      MMMMMMMMMMMM      MMM      MMM
      MMMMMMMMM      MM MMMMM .      MMMMM:MMMMMM:      MMMM      MMMMM
MMMM= MMMMMMM      MMM      MMMM      MMMMM      MMMM      MMMMMMM      MMMM      MMMMM '
MMMM= MMMMM      MMMM      MM      MMMMM      MMMM      MMMM      MMMMMNMMMMM
MMMM= MMMM      MMMMM      MMMMM      MMMMM      MMMM      MMMM      MMMMMMMMM
MMMM= MMMM      MMMMM      MMMMM      MMMMM      MMMM      MMMM      MMMMMMMMM
MMMM= MMMM      MMMMM,      NMMMMMMMMM      MMMM      MMMM      MMMMMMMMMMMM
MMMM= MMMM      MMMMM      MMMMMMMM      MMMM      MMMM      MMMM      MMMMMMM
MMMM= MMMM      MM      MMMM      MMMM      MMMM      MMMM      MMMM      MMMM
MMMMM$,MMMMM      MMMMM      MMMM      MMM      MMMM      MMMMM      MMMM      MMMM
MMMMMM:      MMMMMMM      M      MMMMMMMMMMMMM      MMMMMMM      MMMMMMM
MMMMMM      MMMMN      M      MMMMMMMMM      MMMM      MMMM
MMMM      M      MMMMMMM      M      M
M

-----
For those about to rock... OpenWrt 19.07-SNAPSHOT, unknown
-----
root@OpenWrt:/# █
```

How to set up the card slot

4x4 single radio

```
setenv machid 8050e01
setenv bootargs 'console=ttyMSM0,115200n8
cnss2.enable_qcn9224_support=1 cnss2.bdf_pci2=0x0002
cnss2.bdf_pci3=0x0004 cnss2.enable_mlo_support=0'
saveenv
```

2x2 dual radio

```
setenv machid 8050e01
setenv bootargs 'console=ttyMSM0,115200n8
cnss2.enable_qcn9224_support=1 cnss2.bdf_pci2=0x1006
cnss2.bdf_pci3=0x1003 cnss2.enable_mlo_support=0'
saveenv
```

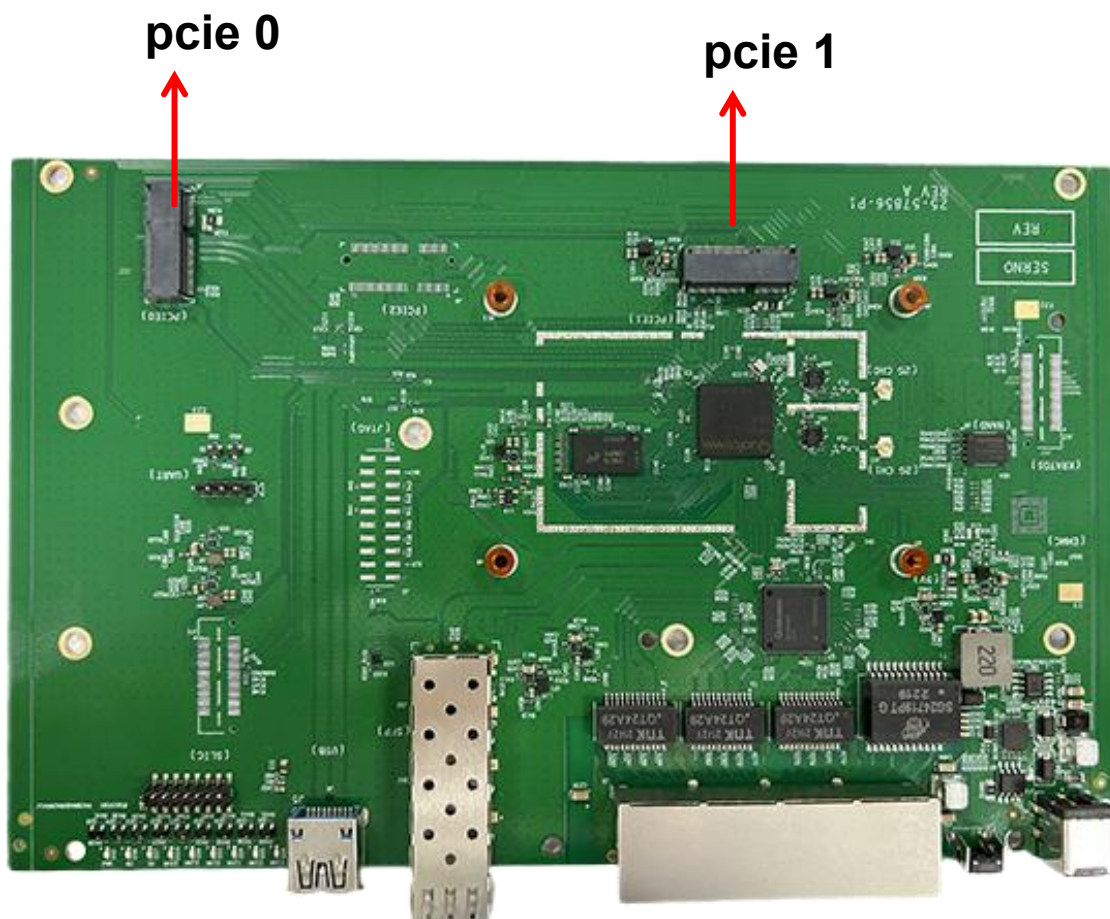
0002 represent DR9274-5G radio

0004 represent DR9274-6G radio

1006 represent DR9274-5G6G radio

1003 represent DR9274-2.4G5G radio

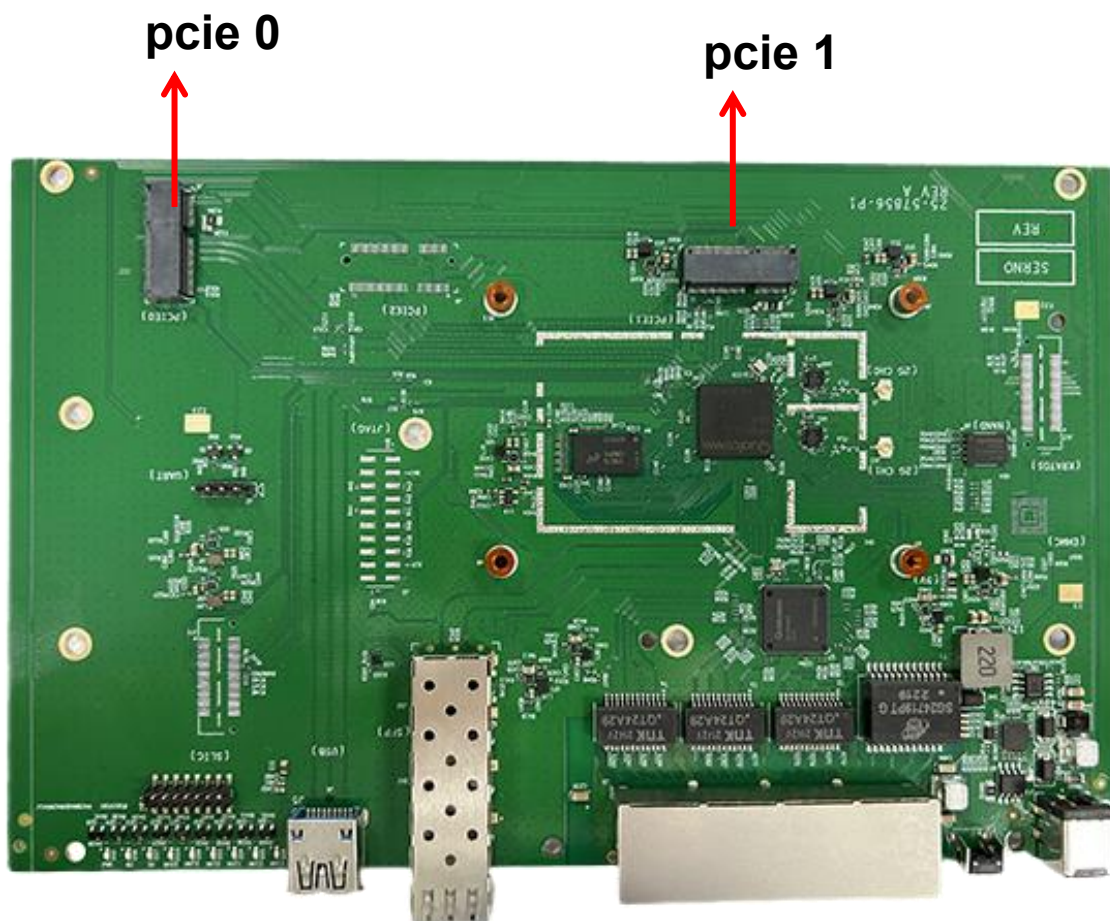
You can configure the DR9274 card slot 0-1 as desired



For example set one card

if you want **pcie 0** support DR9274-5G;
 you can under uboot
 enter `cnss2.enable_qcn9224_support=1`
`cnss2.bdf_pci0=0x0002 cnss2.enable_mlo_support=0'`
 than `saveenv`
 than `reset`.

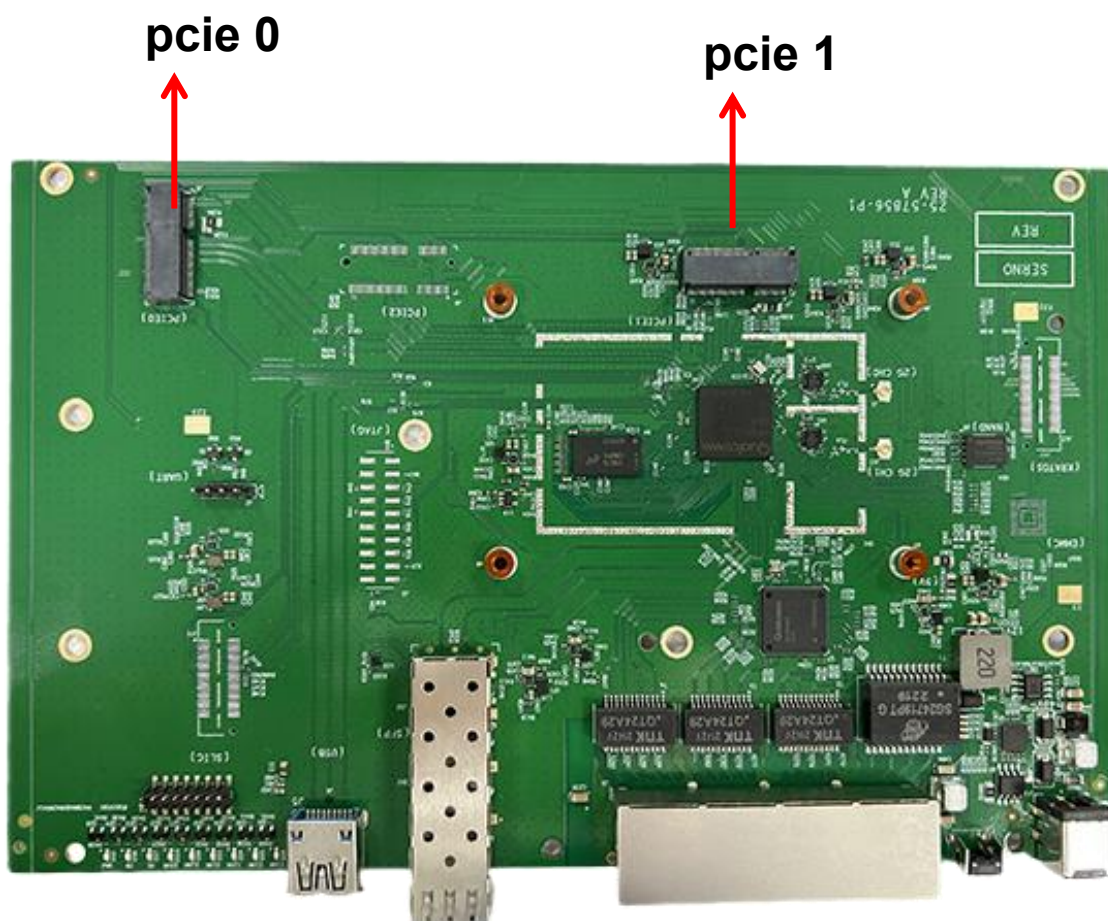
You can configure the DR9274 card slot 0-1 as desired



For example set one card

if you want **pcie 1** support DR9274-5G;
 you can under uboot
 enter `cnss2.enable_qcn9224_support=1`
`cnss2.bdf_pci1=0x0002 cnss2.enable_mlo_support=0'`
 than `saveenv`
 than `reset`.

You can configure the DR9274 card slot 0-1 as desired



For example set two card

if you want **pcie 1** support DR9274-5G;

pcie 0 support DR9274-6G;

you can under uboot

```
enter setenv bootargs 'console=ttyMSM0,115200n8
```

```
cnss2.enable_qcn9224_support=1
```

```
cnss2.bdf_pcie1=0x0002 cnss2.bdf_pcie0=0x0004
```

```
cnss2.enable_mlo_support=0'
```

than saveenv

than reset.



DR5322 USER MANUAL

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