

# DR9574 USER MANUAL

- 1.IPQ9574 UI settings
- 2.DR9574 UART configuration
- 3.How to set up the card slot

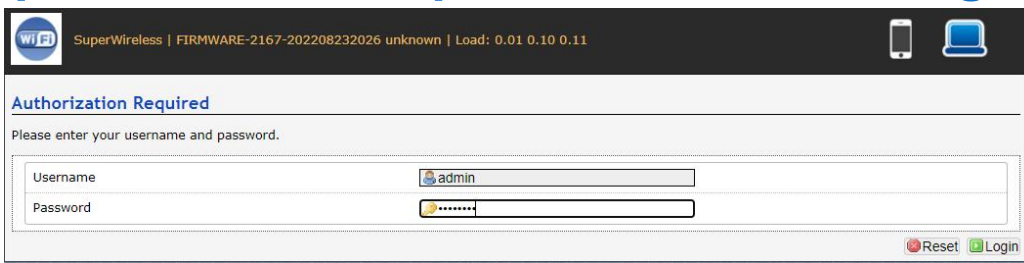
**DR9574**



## IPQ9574 UI setting

1. Input the IP 192.168.1.1 and login

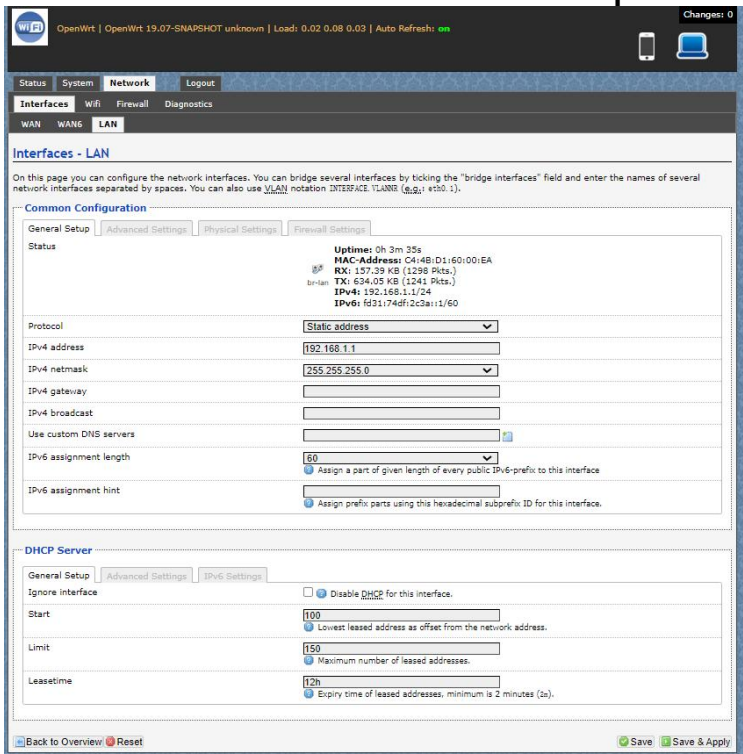
2. Input the username “admin” password “password” then press the button “Login”



The screenshot shows the login interface of the Wallys device. At the top, it displays 'SuperWireless | FIRMWARE: 2167-202208232026 unknown | Load: 0.01 0.10 0.11'. Below this, there is a section titled 'Authorization Required' with the instruction 'Please enter your username and password.' There are two input fields: 'Username' with the value 'admin' and 'Password' with masked characters. At the bottom right, there are 'Reset' and 'Login' buttons.

## 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"

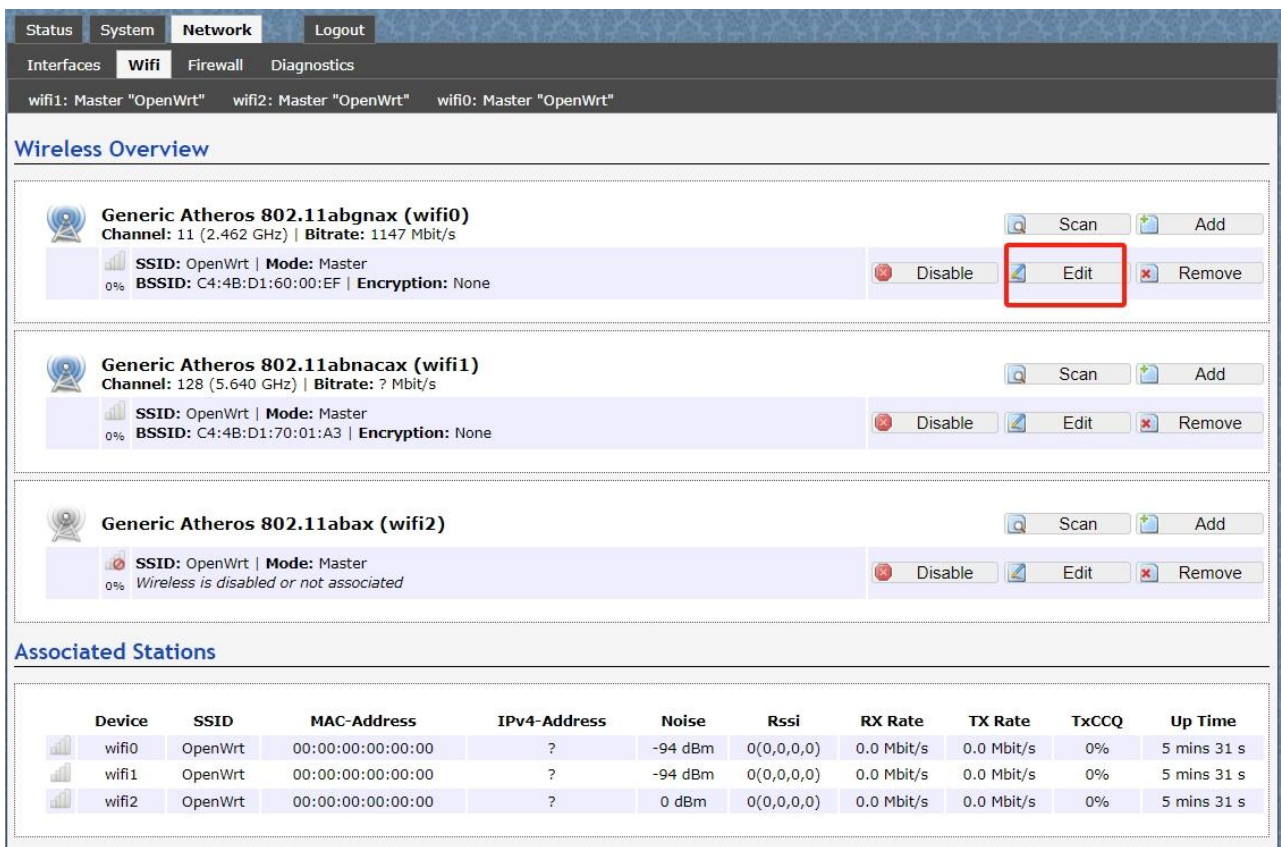


The screenshot shows the 'Interfaces - LAN' configuration page. It includes a 'Common Configuration' section with fields for 'Protocol' (set to 'Static address'), 'IPv4 address' (192.168.1.1), 'IPv4 netmask' (255.255.255.0), and 'IPv4 gateway'. There is also a 'DHCP Server' section with fields for 'Start' (100), 'Limit' (150), and 'Leasetime' (12h). The page has navigation tabs for 'Status', 'System', 'Network', and 'Logout', and sub-tabs for 'Interfaces', 'Wifi', 'Firewall', and 'Diagnostics'. At the bottom, there are 'Back to Overview', 'Reset', 'Save', and 'Save & Apply' buttons.

## IPQ9574 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. Under 'Wireless Overview', three wireless interfaces are listed:

- wifi0: 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. The 'Edit' button is highlighted with a red box.
- wifi1: 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.
- wifi2: Generic Atheros 802.11abax (wifi2)**: SSID: OpenWrt, Mode: Master. Status: Wireless is disabled or not associated.

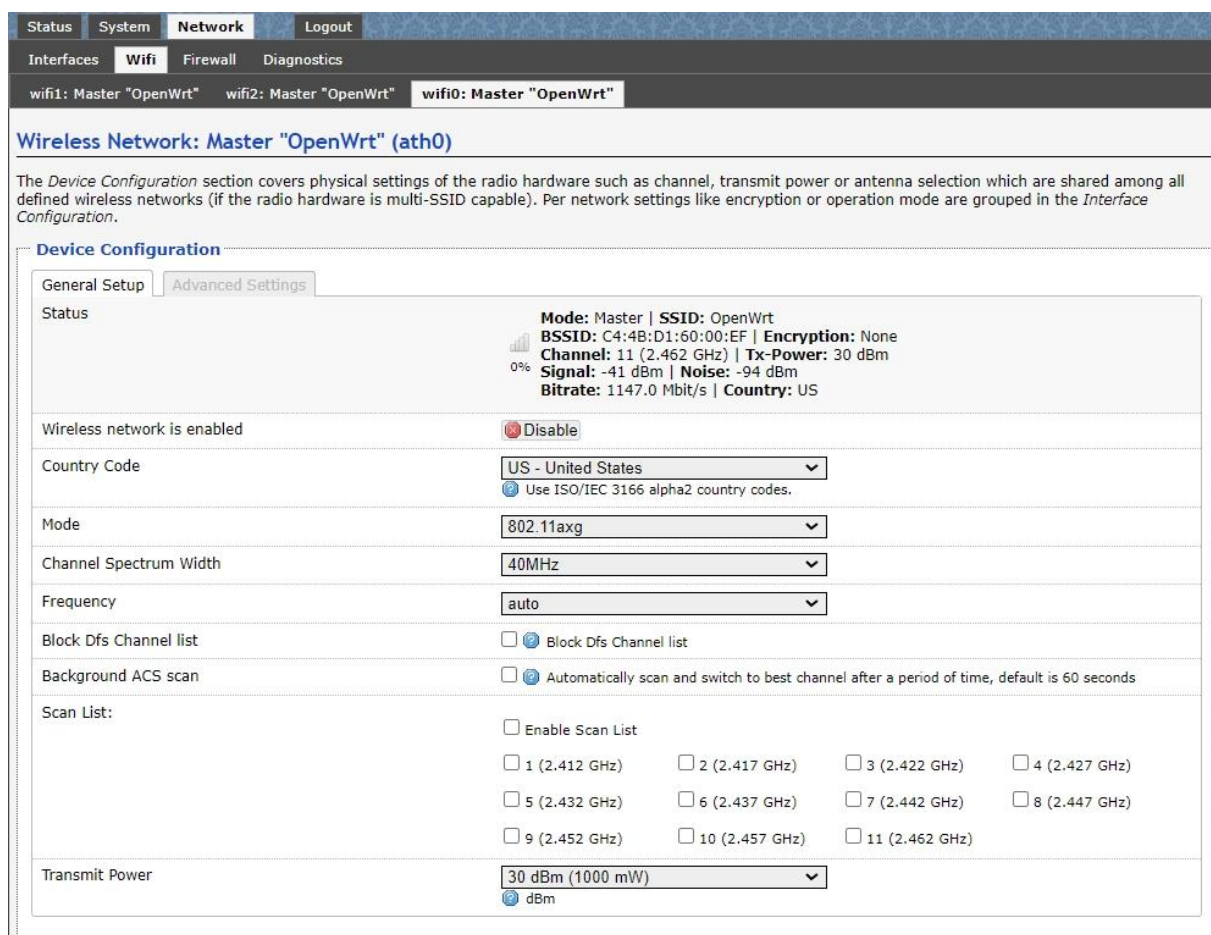
Below the wireless overview is the 'Associated Stations' section, which contains a table with the following data:

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

## IPQ9574 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:

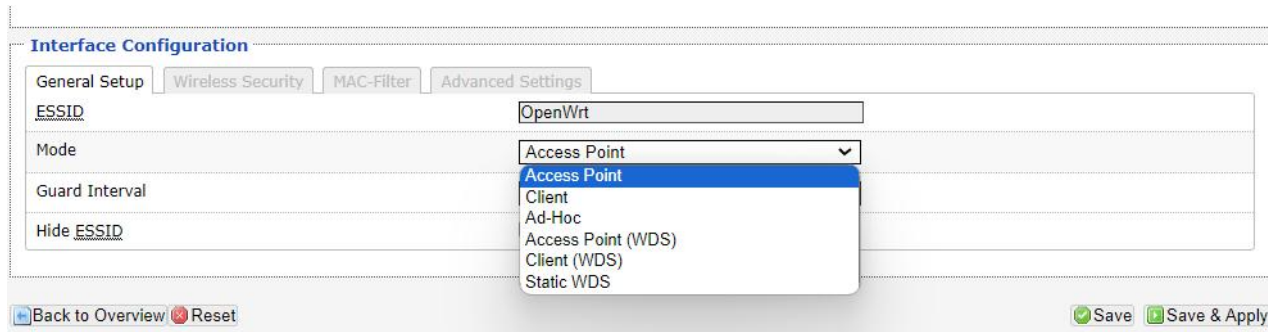
Enable Scan List

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

## IPQ9574 UI setting

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



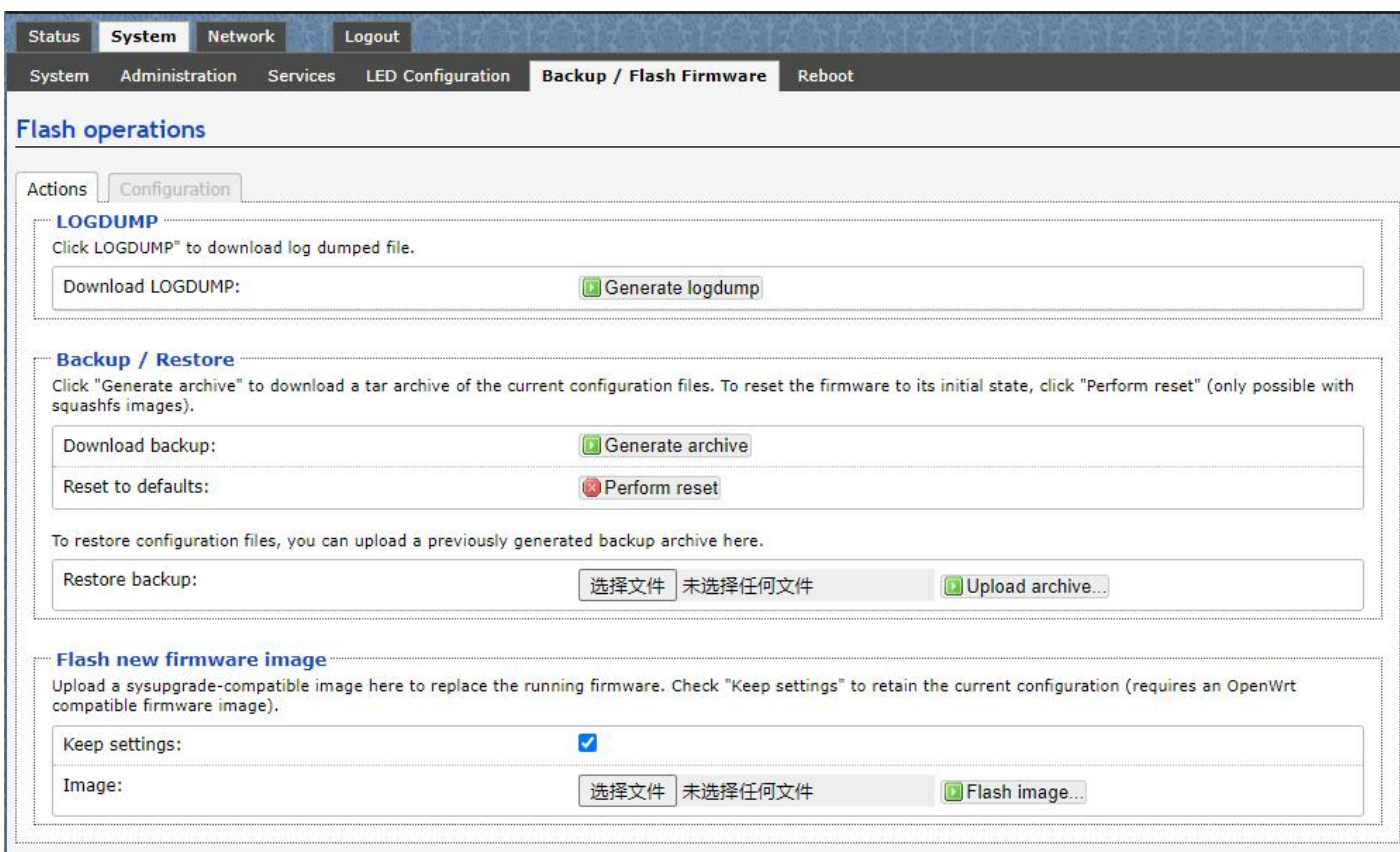
The screenshot shows the 'Interface Configuration' page in the Wallys UI. The 'General Setup' tab is selected, and the 'Wireless Security' sub-tab is active. The 'ESSID' field is set to 'OpenWrt'. The 'Mode' dropdown menu is open, showing options: 'Access Point', 'Client', 'Ad-Hoc', 'Access Point (WDS)', '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'.

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

## IPQ9574 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 IPQ9574 web interface. The navigation menu at the top includes 'Status', 'System', 'Network', and 'Logout'. The main menu below includes 'System', 'Administration', 'Services', 'LED Configuration', 'Backup / Flash Firmware', and 'Reboot'. The 'Flash operations' section is active, with sub-tabs for 'Actions' and 'Configuration'. The 'LOGDUMP' section contains a 'Download LOGDUMP:' label and a 'Generate logdump' button. The 'Backup / Restore' section includes instructions on generating a tar archive and performing a reset, with 'Download backup:' and 'Reset to defaults:' labels, and 'Generate archive' and 'Perform reset' buttons. Below this is an 'Upload archive...' button. The 'Flash new firmware image' section provides instructions on replacing the running firmware, with a 'Keep settings' checkbox checked and an 'Image:' label, and a 'Flash image...' button.



## IPQ9574 UI setting

### 6.Update new image

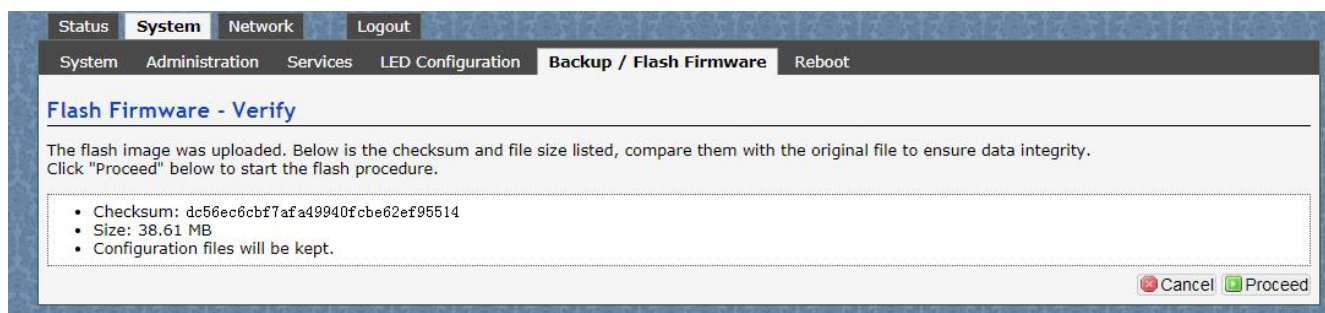
Login System->Backup/Flash Firmware;

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.

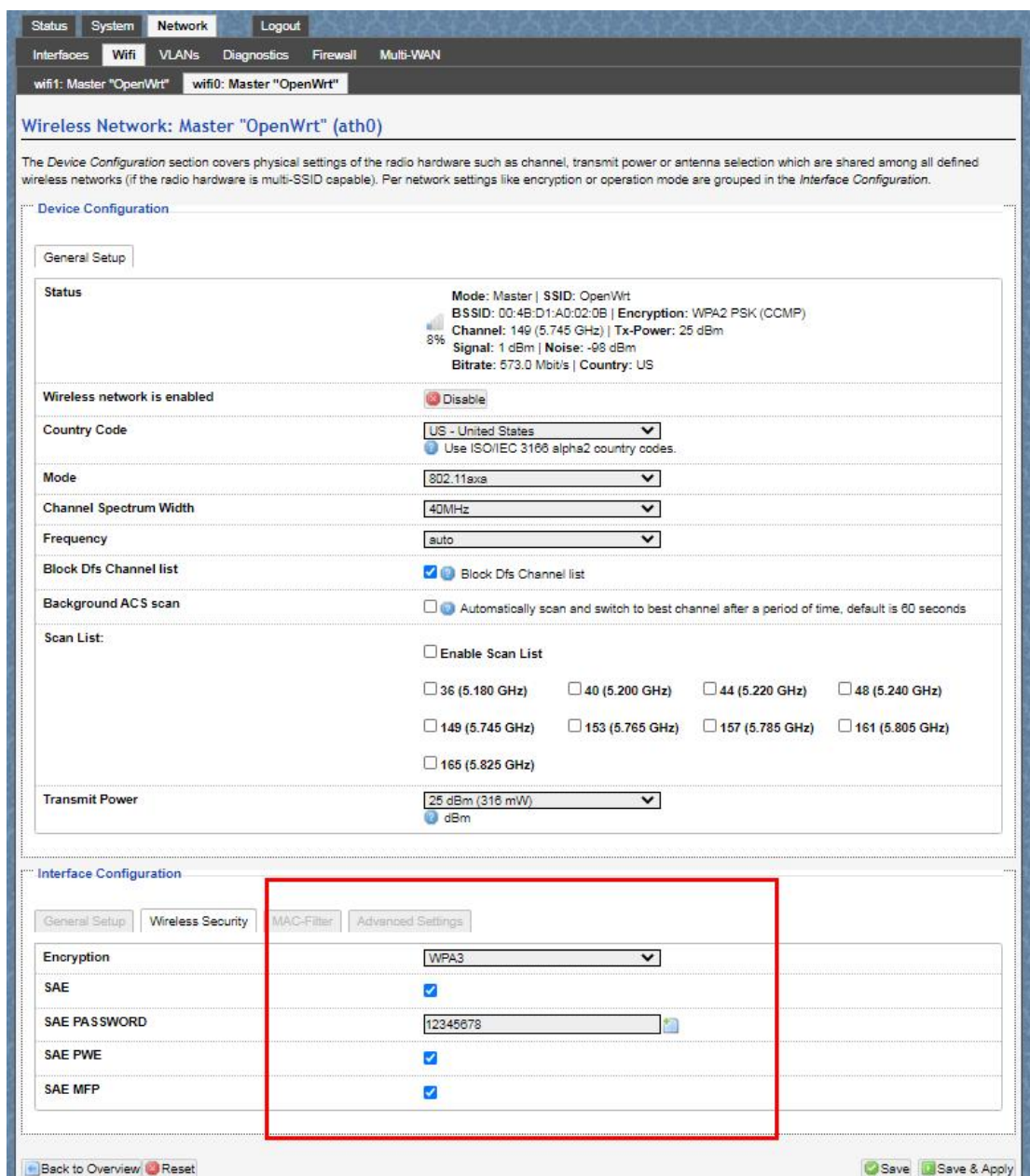
Then login again,you can enjoy it.



## IPQ9574 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 configuration is 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'.



## IPQ9574 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

0% **SSID:** OpenWrt66666 | **Mode:** Master  
**BSSID:** C4:4B:D1:60:00:EF | **Encryption:** None

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

0% **SSID:** OpenWrt66666 | **Mode:** Master  
**BSSID:** C4:4B:D1:70:01:A3 | **Encryption:** None

**Generic Atheros 802.11abax (wifi2)**

0% **SSID:** OpenWrt | **Mode:** Master  
*Wireless is disabled or not associated*

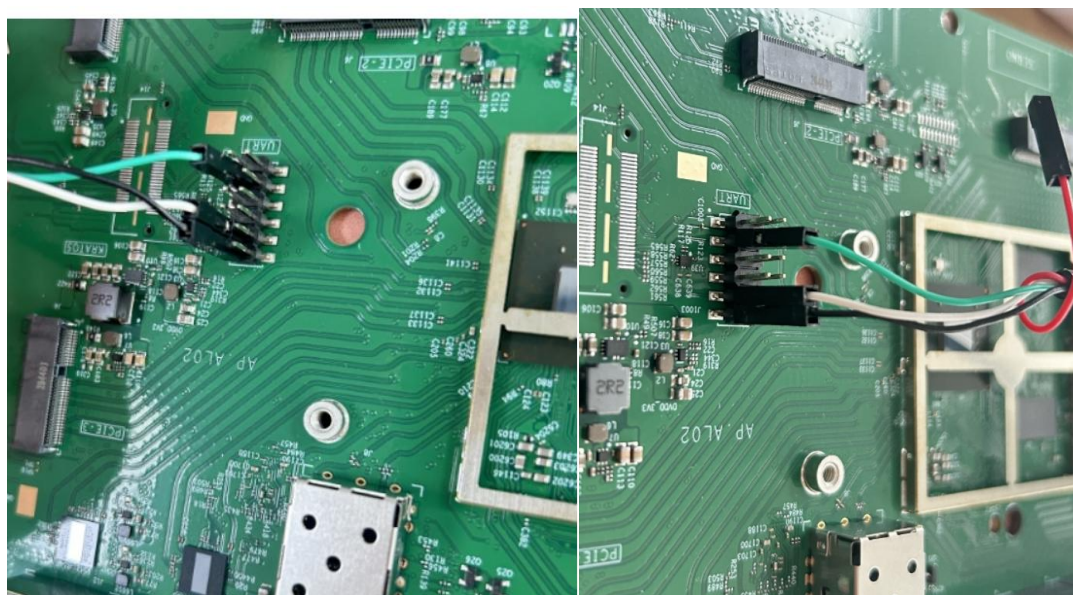
#### Associated Stations

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

# DR9574 UART configuration

## 1. Introduction

The photo below shows how to use the Uart for DR9574



## DR9574 UART configuration

### 2. Device connect

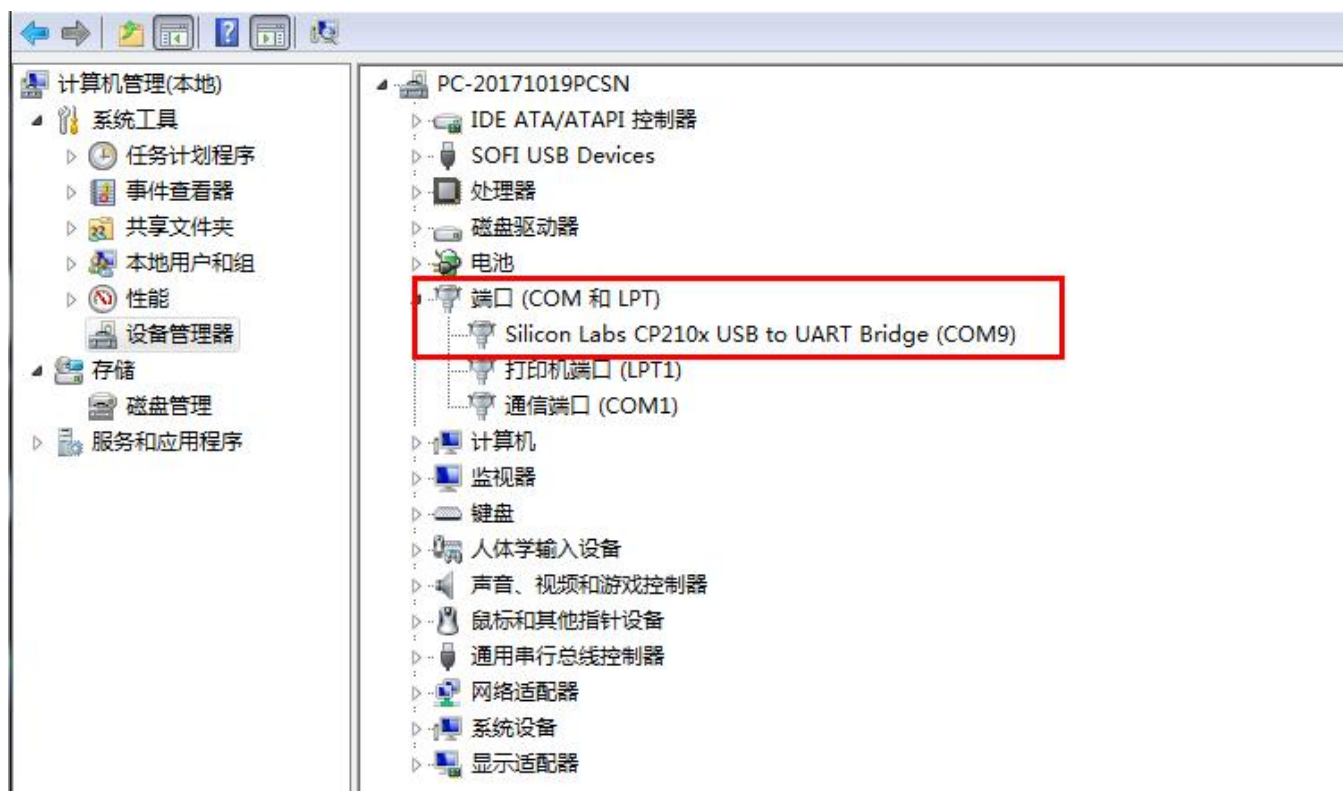
Step 1: Connect the cable to the DR9574

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



## DR9574 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
$MMMMM     MMMMM      MMMMMMMMMMMM      MMM      MMM
MMMMMMMMM  MM MMMMM.  MMMMMMMMMMMM:MMMMMM:  MMMM  MMMMM
MMMM= MMMMM  MMM  MMMM      MMMMM  MMMM  MMMMMMM  MMMM  MMMMM '
MMMM= MMMMM  MMMM  MM      MMMMM  MMMM  MMMM  MMMMMNMMMMM
MMMM= MMMM  MMMMM      MMMMM  MMMM  MMMM  MMMMMMMMM
MMMM= MMMM  MMMMMMM      MMMMM  MMMM  MMMM  MMMMMMMMM
MMMM= MMMM  MMMMM,  NMMMMMMMMM  MMMM  MMMM  MMMMMMMMMMMM
MMMM= MMMM  MMMMMMM  MMMMMMMMM  MMMM  MMMM  MMMM  MMMMMMM
MMMM= MMMM  MM  MMMM  MMMM  MMMM  MMMM  MMMM  MMMM
MMMMM$, ,MMMMM  MMMMM  MMMM  MMM  MMMM  MMMMM  MMMM  MMMM
MMMMMMMM:  MMMMMMM  M  MMMMMMMMMMMMM  MMMMMMM  MMMMMMMM
MMMMMM     MMMMN  M  MMMMMMMMM      MMMM  MMMM
MMMMM      M      MMMMMMMM      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

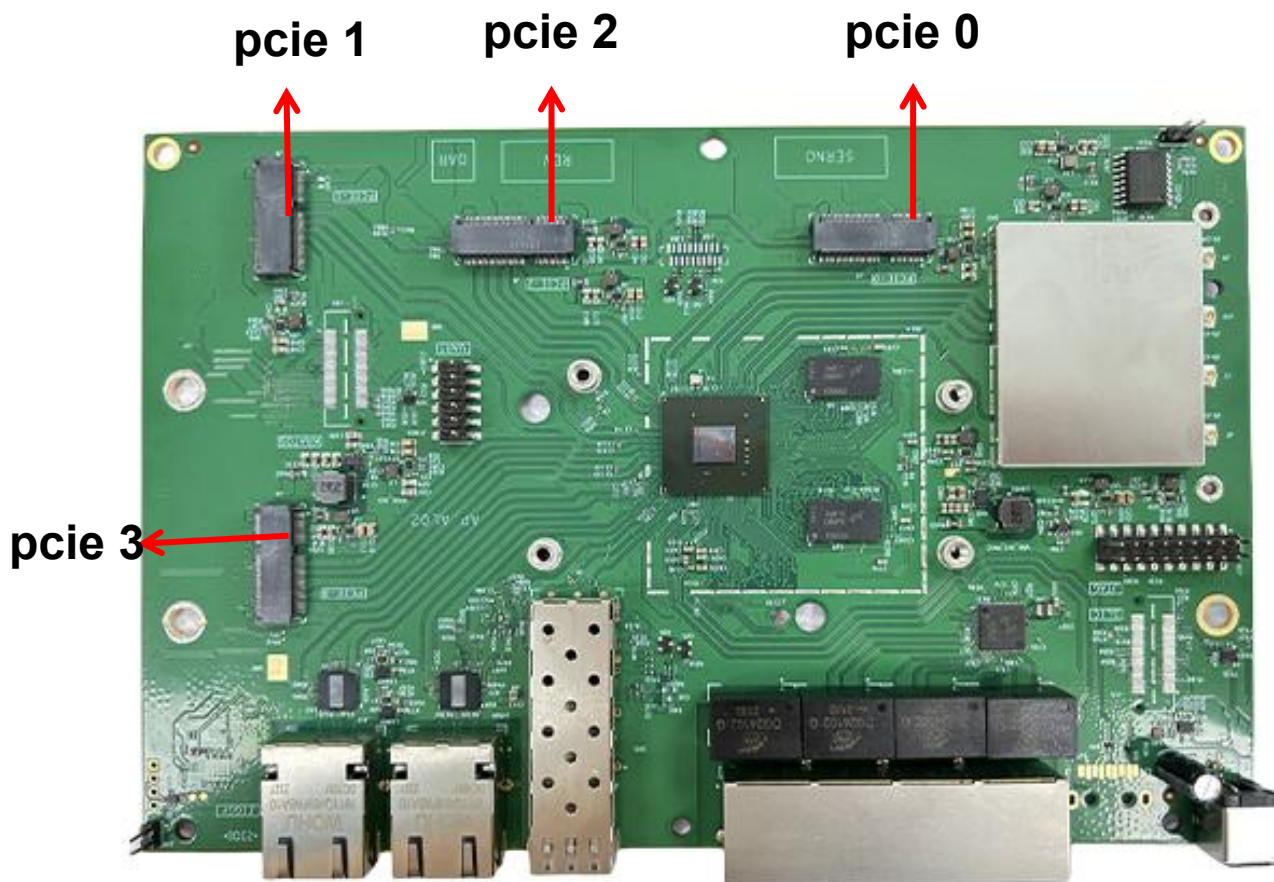
0004 represent DR9274-6G radio

1006 represent DR9274-5G6G radio

1003 represent DR9274-2.4G5G radio



## You can configure the DR9274 card slot 0-3 as desired

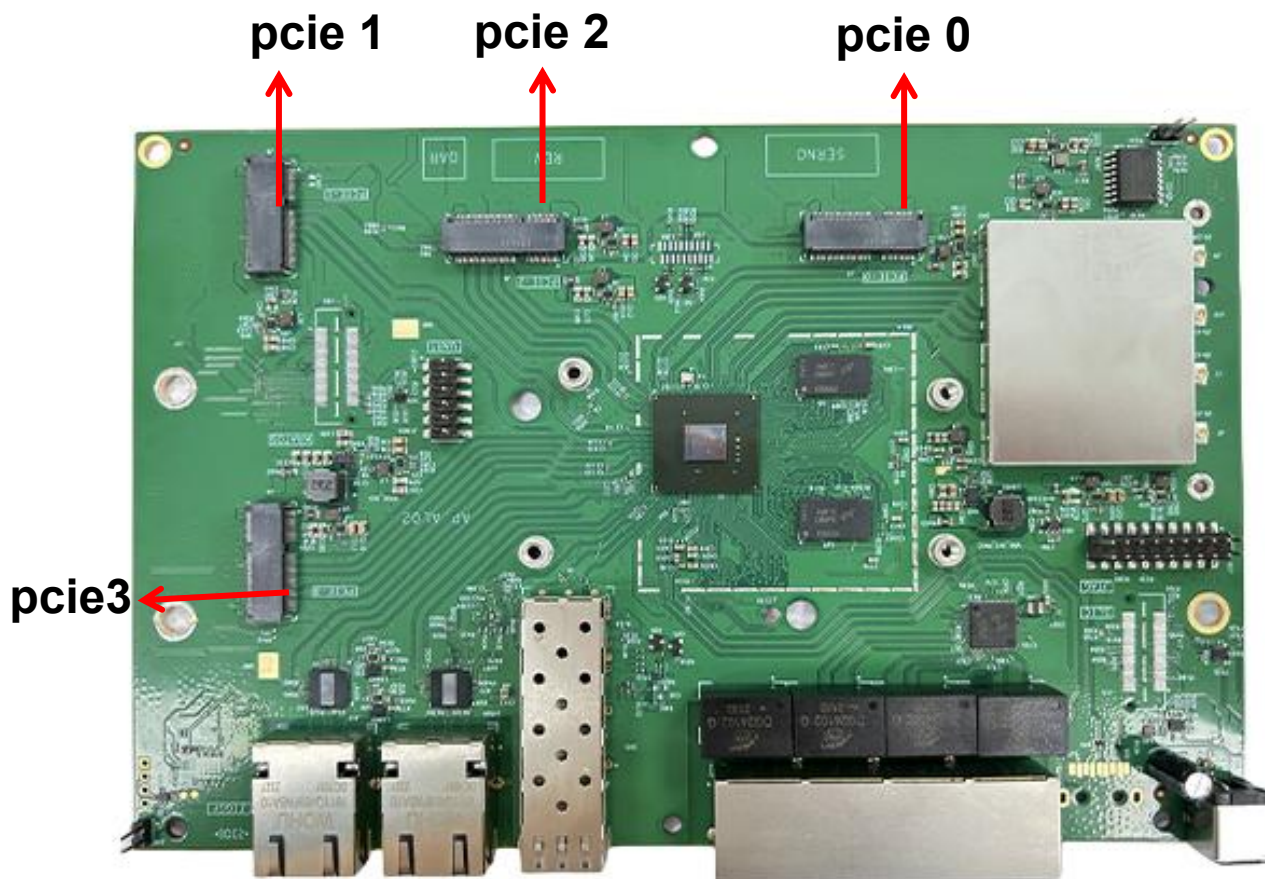


### For example set one card

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`.



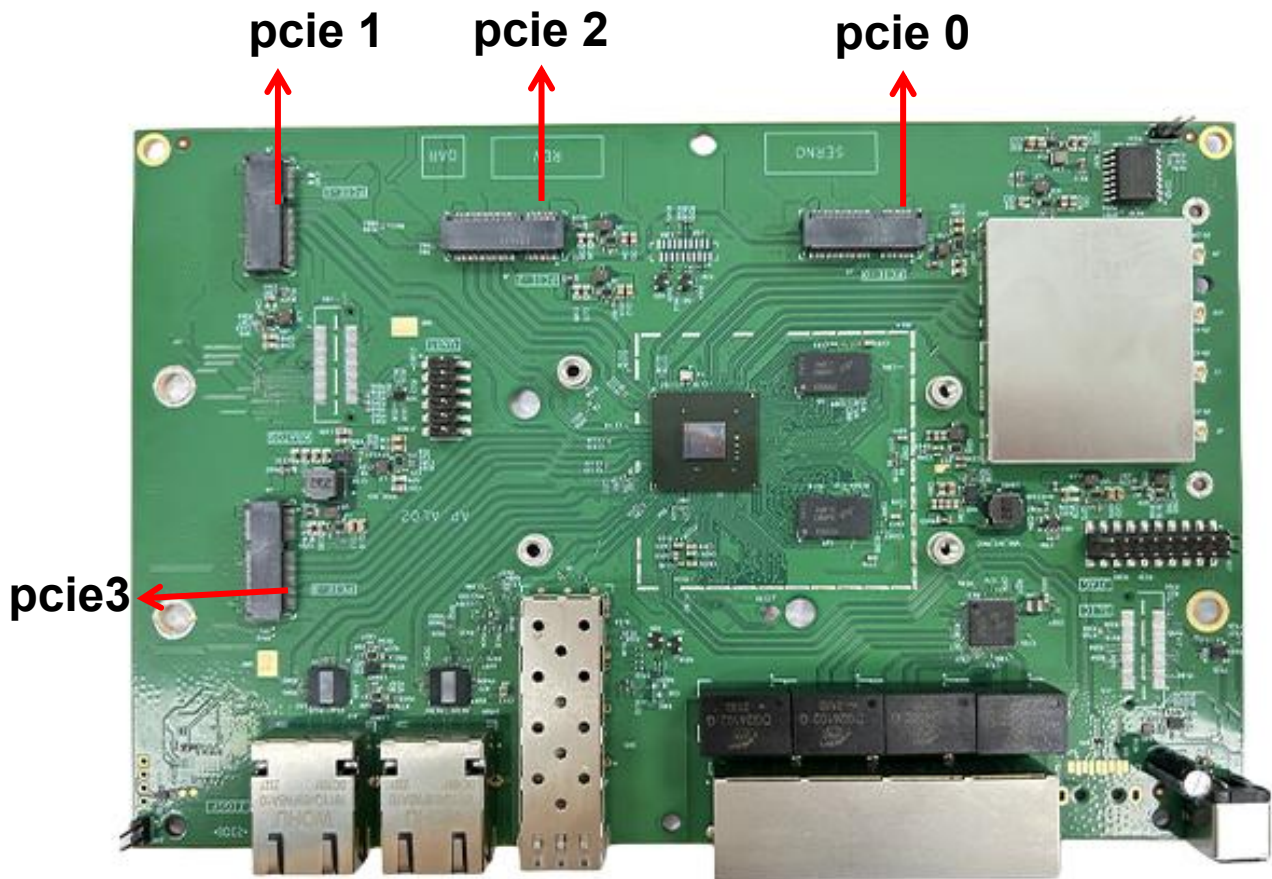
You can configure the DR9274 card slot 0-3 as desired



**For example set one card**

if you want **pcie 2** support DR9274-5G;  
 you can under uboot  
 enter `cnss2.enable_qcn9224_support=1`  
`cnss2.bdf_pcie2=0x0002` `cnss2.enable_mlo_support=0'`  
 than `saveenv`  
 than `reset`.

## You can configure the DR9274 card slot 0-3 as desired



### For example set two card

if you want **pcie 3** support DR9274-5G;

**pcie 2** support DR9274-6G;

you can under uboot

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

```
cnss2.enable_qcn9224_support=1
```

```
cnss2.bdf_pci3=0x0002 cnss2.bdf_pci2=0x0004
```

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

```
than saveenv
```

```
than reset.
```



# DR9574 USER MANUAL

**DR9574**

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