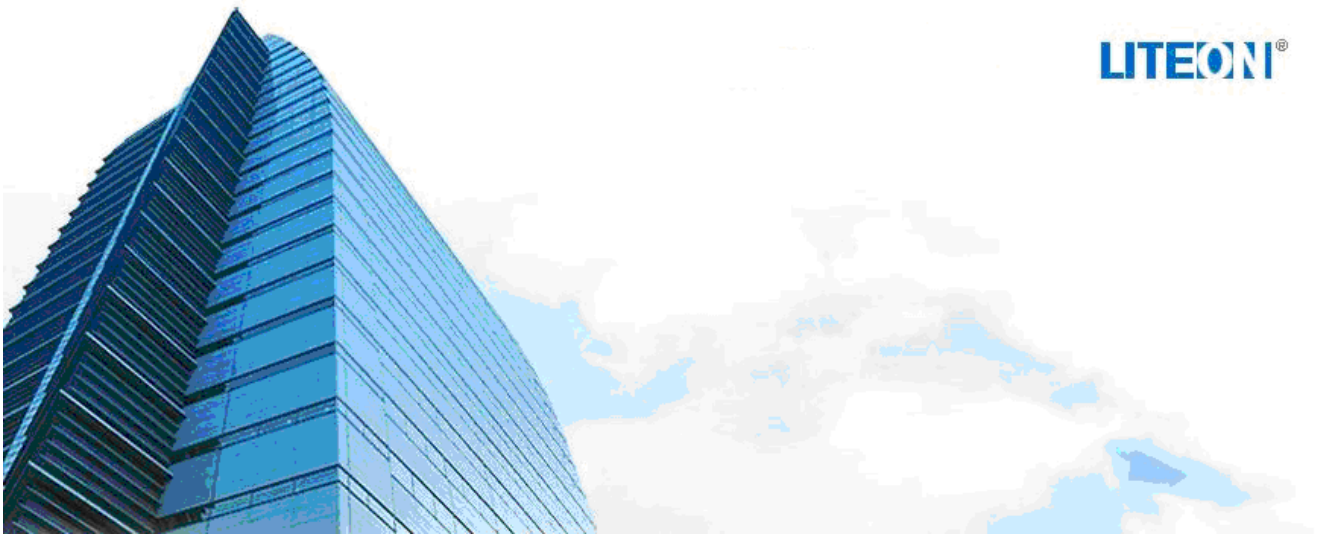


WPX8988 QCA9886

Model: WM6321

User Guide

Wifi Normal mode setting

1.1.1. Radio3(wifi3 or ath3) 5g(11ac 2x2) for QCA9886

```
root@OpenWrt:/# uci set wireless.wifi3.disabled='0'
root@OpenWrt:/# uci set wireless.wifi3.channel='36'
root@OpenWrt:/# uci set wireless.wifi3.htmode=HT20
root@OpenWrt:/# uci set wireless.wifi3.hwmode='11ac'
root@OpenWrt:/# uci set wireless.wifi3.country=FR
root@OpenWrt:/# uci set wireless.@wifi-iface[3].ssid=MFG_TEST_5G_2
root@OpenWrt:/# uci commit wireless
root@OpenWrt:/# wifi
```

1.1.2. Radio enable/disable

Enable wifiX:

```
root@OpenWrt:/# uci set wireless.wifi3.disabled='0'
```

Disable wifiX:

```
root@OpenWrt:/# uci set wireless.wifi3.disabled='1'
```

1.1.3. Radio mode settings

Set mode to 11ac for 2x2 radio:

```
root@OpenWrt:/# uci set wireless.wifi3.hwmode='11ac'
```

1.1.4. Band setting

Set band to HT20 for wifiX:

```
root@OpenWrt:/# uci set wireless.wifi3.htmode='HT20'
```

Set band to HT40:

```
root@OpenWrt:/# uci set wireless.wifi3.htmode='HT40'
```

Set band to HT80 for wifiX:

```
root@OpenWrt:/# uci set wireless.wifi3.htmode='HT80'
```

1.1.5. Channel setting

Set wifiX channel to CH149:

```
root@OpenWrt:/# uci set wireless.wifi3.channel='149'
```

1.1.6. Country settingn

```
root@OpenWrt:/# uci set wireless.wifi3.country=US
```

1.1.7. Save settinigs

```
root@OpenWrt:/# uci commit wireless
```

1.1.8. Apply

```
root@OpenWrt:/# wifi
```

1.1.9. Set to Factory default

```
root@OpenWrt:/# firstboot -y && reboot
```

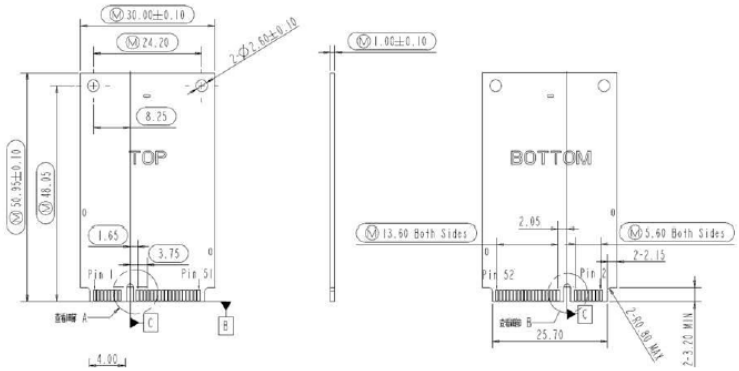
1.6. Pin Definition

RF CARD pin definition				
PCIe Signal Name	Pin #	Description	I/O	NOTE
WAKE_L	1	wake event system	O	
CLKREQ_L	7	Reference clock request signal	O	
REFCLK-	11	PCI Express differential reference clock	I	
REFCLK+	13	PCI Express differential reference clock	I	
GPIO0	20	WLAN_DISABLE_L	I	
RESET_L	22	Functional reset to the card	I	
PER0N	23	PCI Express x1 data interface	I	
PER0P	25	PCI Express x1 data interface	I	
PET0N	31	PCI Express x1 data interface	O	
PET0P	33	PCI Express x1 data interface	O	
WLAN_LED	44	provide status indicators via LED devices Active low signals	O	NOT USED
USB_DN	36	USB signal	I/O	NOT USED
USB_DP	38	USB signal	I/O	NOT USED

3.3V	2,24,41,52	power source		
GND	4,9,15,18,21,26,27,29 34,35,40,43,50	GND		

1.7. PCB Dimension

- Standard mPCIe form factor: 30 × 50.95 mm (width × length)



1.8. Operation Temperature & Humidity

- Temperature：32℉ to 113℉ (0 ℃ to 45 ℃)
- Humidity：10% ~ 90% R.H.\

1.9. Storage Temperature& Humidity

- Temperature：-4℉ to 158℉ (-20 ℃ to 70 ℃)
- Humidity：10% ~ 95% R.H.

[End File]

FCC 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 or more 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.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This module is intended for OEM integrators under the following conditions:

1. This module is certified pursuant to Part 15 rule section 15.407.

2. This module has been approved to operate with the antenna types listed below, with the maximum permissible gain indicated.

Frequency Band	Model	Antenna Type	Gain(dBi)
5150-5850MHz	MLX20X-126AA0-B	PIFA	5.3
	MLX20X-126AA0-B		5.6

3. Label and compliance information

Label of the end product:

The host product must be labeled in a visible area with the following " Contains FCC ID: **PPQ-WM6321**".

The end product shall bear the following 15.19 statement: 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.

If the labelling area is considered too small and therefore it is impractical (smaller than the palm of the hand) to display the compliance statement, then the statement may be placed in the user manual or product packaging.

4. Information on test modes and additional testing requirements

This module has been approved under stand-alone configuration.

The separate approval is required for all other operating configurations, including portable configurations with respect to Part 2.1093 and different antenna configurations

The information on how to configure test modes for host product evaluation for different operational conditions for a stand-alone modular transmitter in a host, versus with multiple, simultaneously transmitting modules or other transmitters in a host can be found at KDB Publication 996369 D04.

5. Additional testing, Part 15 Subpart B disclaimer

Appropriate measurements (e.g. FCC 15 B compliance) and if applicable additional equipment authorizations (e.g. SDoC) of the host product to be addressed by the integrator/manufacturer.

This module is only FCC authorized for the specific rule part 15.407 listed on the grant, and the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host product as being Part 15 Subpart B compliant.

6. The user manual of the end product should include:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons.

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.