



DR4029

Access Point Wireless Module
Dual band AC Module

Features

- Featuring with industrial-grade IPQ4029 chipset
- Integrated with 2x 2 5G high power Radio module and 2x2 2.4G high power Radio module
- Support 5150~5250MHz and 5725~5850MHz Frequency Range;
- Support 2412~2462MHz
- Support 2 x 5G MMCX Connectors and 2x2.4G MMCX
- 5G WiFi support 20MHz/40MHz/80MHz Bandwidth
- Support 802.11b/g/n/a/ac
- RoHS compliance ensure a high level protection of human health and the environment from risks that can be posed by chemicals



Applications

- Security Surveillance
- Commercial radio coverage
- Hotel Wireless application
- Country coverage
- Forest fire protection engineering
- Some special scene application

Product Description

DR4029 based on IPQ4029 chipset is an enterprise wireless module integrated with 2x2 5G high power Radio module and 2x2 2.4G high power Radio module designed specifically to provide users with mobile access to high-bandwidth video streaming, voice, and data transmission for office and challenging RF environment in factories, warehouses establishment.

Absolute Maximum Rating

Parameter	Rating	Unit
Supply Voltage	24~48	V
Operating Temperature Range	-40 to +70	°C
Storage Temperature Range	-45 to +105	°C
Operating Humidity Range	5 to +95 (non-condensing)	%
Storage Humidity Range	0 to +90 (non-condensing)	%

Hardware Specifications

Symbol	Parameter
CPU	IPQ4029 (Quad core ARM Cortex A7 at 716.8 MHz)
Antenna Connector	2 x 5G MMCX connectors; 2x2.4G MMCX
10/100/1000Mbps Gigabit Ethernet	2xRJ45
SFP connector	1xSFP fiber module connector (optional)
3G/4G connector	1xmini PCIe 3G/4G connector support with two sim card
USB connector	1xUSB 3.0 connector
POE	24V passive POE
DC Jack	24V power supply
ROHS Compliance	YES
Dimension	115mm x 105mm x 16mm
Max Power	48.1V x 0.180A= 8.658W
Nor Flash	2MB~32MB
Nand Flash	128MB
DDR	256MB~512MB

Radio TX Specifications(5180MHz-5825MHz)

Operating Mode	Frequency Range (MHz)	Tune-up Output Power
802.11a	5150~5250	17 dBm
	5725~5850	17.dBm
802.11ac20	5150~5250	17dBm
	5725~5850	16.5dBm
802.11n20	5150~5250	17dBm
	5725~5850	17dBm
802.11ac40	5150~5250	17dBm
	5725~5850	17dBm
802.11n40	5150~5250	17dBm
	5725~5850	17dBm
802.11ac80	5210	17dBm
	5775	17dBm

Radio RX Specifications(5180MHz-5825MHz)

Operating Mode	Data Rate	Sensitivity
802.11a	6 Mbps	-96dBm
	54 Mbps	-78dBm
802.11n HT20	MCS0, MCS8	-92dBm
	MCS7, MCS15	-73dBm
802.11n HT40	MCS0, MCS8	-90dBm
	MCS7, MCS15	-70dBm
802.11AC HT40	MCS0, MCS10,MCS20	-90dBm
	MCS9,MCS19,MCS29	-67dBm
802.11AC HT80	MCS0, MCS10,MCS20	-88dBm
	MCS9,MCS19,MCS29	-62dBm

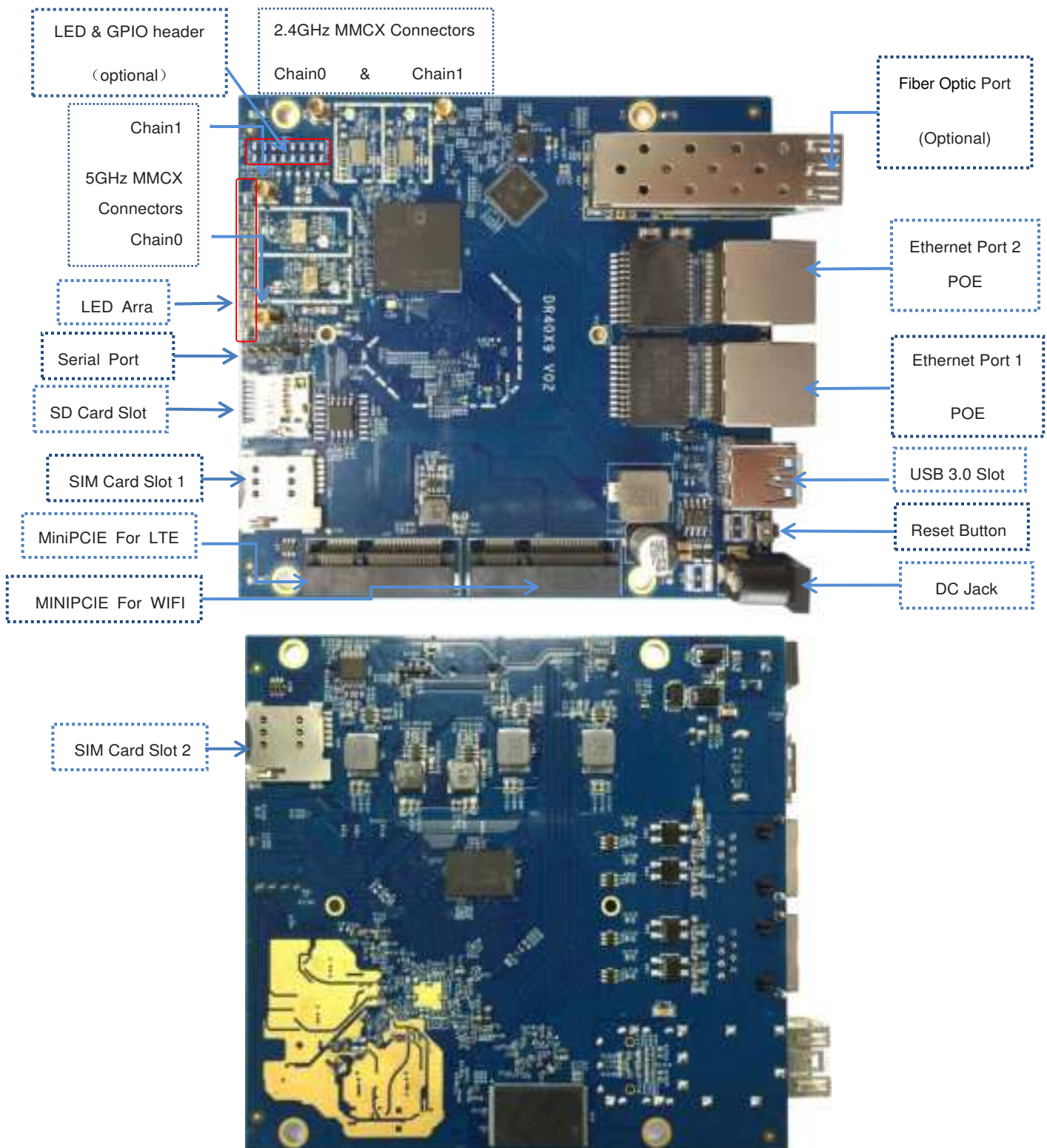
Radio TX Specifications(2412MHz-2462MHz)

Operating Mode	Frequency Range (MHz)	Tolerance
802.11b	2412~2462	26.5dBm
802.11g		26dBm
802.11n-HT20		27dBm
802.11n-HT40	2422~2452	26dBm

Radio RX Specifications(2412MHz-2462MHz)

Operating Mode	Data Rate	Sensitivity
802.11g	6 Mbps	-96dBm
	54 Mbps	-78dBm
802.11n HT20	MCS0, MCS8	-92dBm
	MCS7, MCS15	-73dBm
802.11n HT40	MCS0, MCS8	-90dBm
	MCS7, MCS15	-70dBm

Interface MAP



Version

Item	Information
DR40X9-1	CPU is IPQ4019
DR40X9-2	CPU is IPQ4029

LED & GPIO header

Item	Information	Note
1	PWR LED	
2	Eth1 LED	
3	Eth2 LED	
4	2.4G LED	GPIO32
5	5G LED	GPIO50
6	Strength LED	GPIO36
7	Strength LED	GPIO39
8	NC	
9	GND	
10	Uart1_TX	GPIO8
11	Uart1_RX	GPIO9
12	NC	
13	NC	
14	NC	
15	GND	
16	PWR	

Serial Port

Item	Information	Note
1	PWR	
2	Uart0 TX	
3	Uart0 RX	
4	GND	

GPIO

Item	Information	Note
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FCC Statement:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the 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 30cm between the radiator& your body.