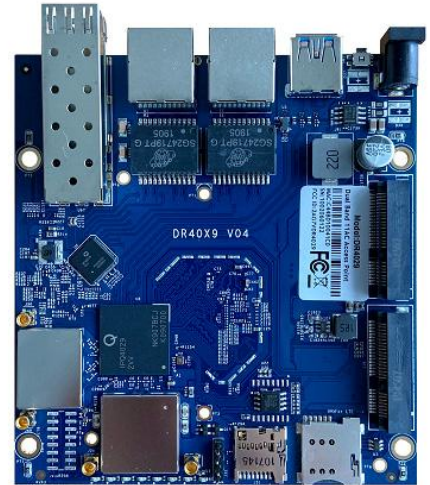


### Features

- Featuring with industrial-grade IPQ4029 chipset
- Integrated with 2x 2.5G high power (27 dbm per chain)
- 2x2.4G high power (27dbm per chain) Radio module
- Support 4.940GHz to 5.805GHz FrequencyRange;
- Support 2.412GHz to 2.482GHz
- Support 2x5G MMCX Connectors and 2x2.4G MMCX
- 5MHz/10MHz/20MHz/40MHz/80MHzBandwidth
- Support 11ABGN/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 5 Ghigh 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	24V~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	IPQ4019 (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	1 xSFP fiber module connector ( optional)
3G/4G connector	1 x minipcie 3 G/4 G connector support with two sim card
USB connector	1xUSB 3 .0 connector
POE	24V~48V passive POE
DC Jack	24V~48V 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	Data Rate	Power		Tolerance
		1 Chain	2 Chains	
802.11a	6 Mbps	27dBm	30dbm	±2dB
	54 Mbps	23dBm	26dbm	±2dB
802.11n HT20	MCS0 , MCS8	26dBm	29dbm	±2dB
	MCS7 , MCS15	22dBm	25dbm	±2dB
802.11n HT40	MCS0 , MCS8	25dBm	28dbm	±2dB
	MCS7 , MCS15	21dBm	24dbm	±2dB
802.11ac	MCS0 , MCS10 , MCS20	25dBm	28dbm	±2dB
	MCS9 , MCS19 , MCS29	19dBm	22dbm	±2dB

**Radio TX Specifications (5180MHz-5825MHz)**

Operating Mode	Data Rate	Sensitivity
802.11a	6 Mbps	-96dBm
	54 Mbps	-78dBm
802.11n HT20	MCS0 , MCS8	-93dBm
	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

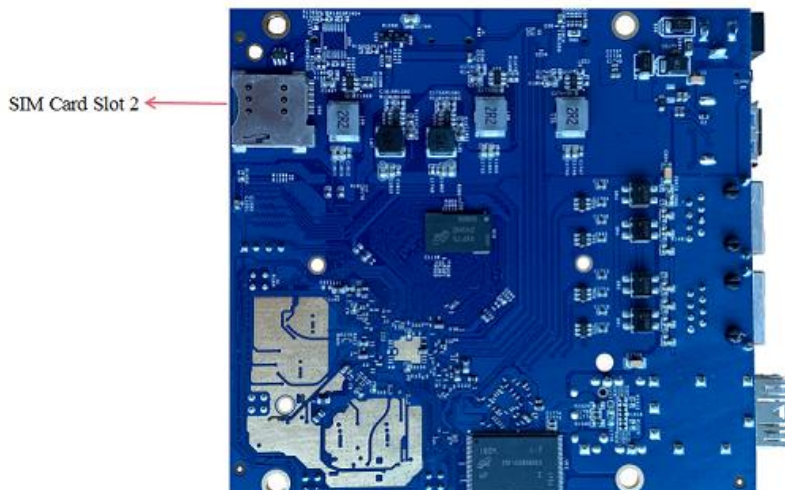
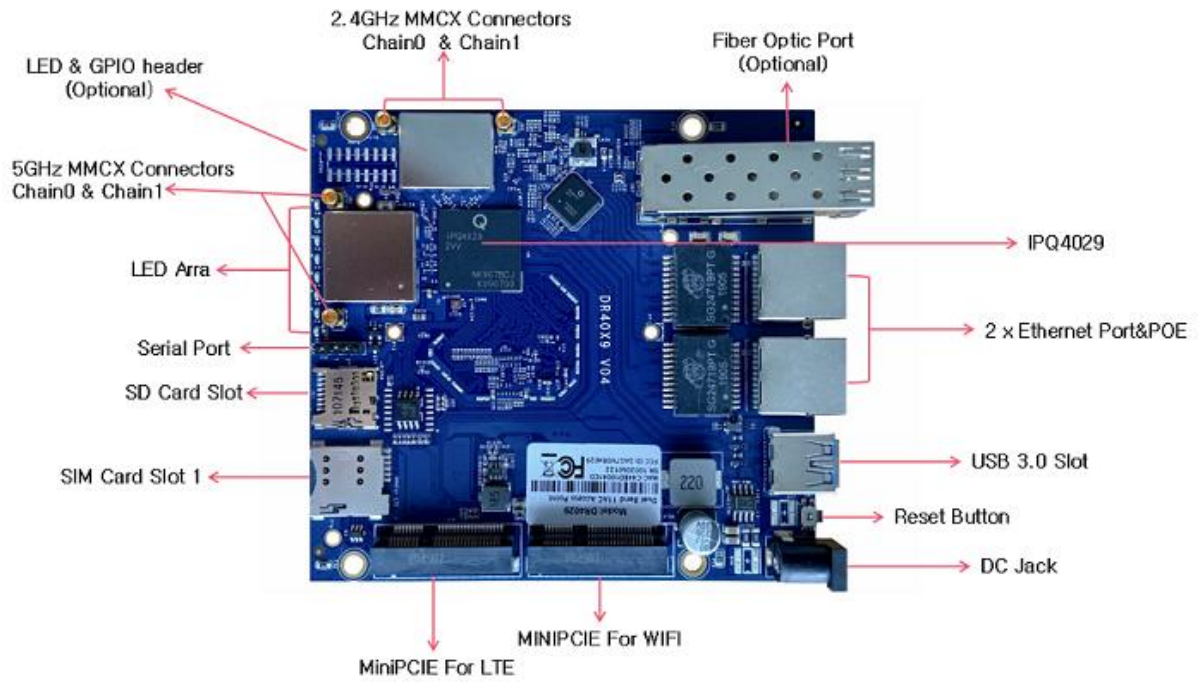
**Radio RX Specifications (2412MHz-2482MHz)**

Operating Mode	Data Rate	Power		Tolerance
		1 Chain	2 Chains	
802.11g	6 Mbps	27dbm	30dbm	±2dB
	54 Mbps	25dbm	28dbm	±2dB
802.11n HT20	MCS0 , MCS8	26dbm	29dbm	±2dB
	MCS7 , MCS15	25dbm	28dbm	±2dB
802.11n HT40	MCS0 , MCS8	26dbm	29dbm	±2dB
	MCS7 , MCS15	24dbm	27dbm	±2dB

**Radio RX Specifications (2412MHz-2482MHz)**

Operating Mode	Data Rate	Sensitivity
802.11g	6 Mbps	-96dBm
	54 Mbps	-78dBm
802.11n HT20	MCS0 , MCS8	-93dBm
	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
GPIO11	Control for the switch of SIM cards	

### Block diagrama

