

Features

- Qualcomm Atheros QCN6274;
- Qualcomm Atheros QCN9274 for Industrial Grade;
- Maxim Tx power 20dBm per chain;
- 4x4 2.4GHz MU-MIMO, up to 1376Mbps physical data rate;
- M.2 connector;
- PCI Express 3.0 Interface;



Applications

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



Product Description

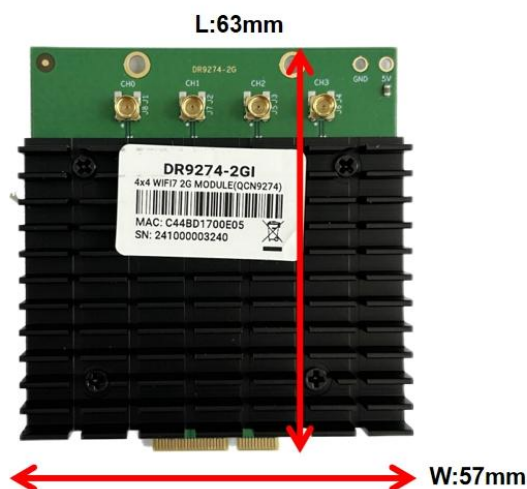
DR9274-2G based on QCN9274 or QCN6274 Chipset is an enterprise wireless module integrated with 4x4 MU-MIMO Single Band Wireless Module designed specifically to provide users with mobile access to high-bandwidth video streaming, voice, and data transmission for office and challenging RF environment in factories, warehouses establishment.

Absolute Maximum Rating

Parameter	Rating	Unit
Operating Temperature Range	-20 ~ 70	°C
Storage Temperature Range	-40 ~ 85	°C
Operating Humidity Range	5 ~ 95 (non-condensing)	%
Storage Humidity Range	0 ~ 90 (non-condensing)	%

Hardware Specifications

Symbol	Parameter
Chipset	Qualcomm Atheros QCN9274(QCN6274)
WLAN Host Interface	PCI Express 3.0 Interface
System Memory	2Mbit serial I ² C bus EEPROM
Standard Operating Voltage	5V
Operating Systems	QSDK
Host Interface	M.2 E Key interface with PCIe 3.0
Antenna Cable / Port	4 x UFL/MMCX Connectors
Frequency Range	2.4GHz: 2.412~2.472GHz
Data Rates for WALN	2.4GHz 802.11b/g/n/ax/be, max 20dBm per chain
Channel Spectrum Widths for WLAN	Supports 20/40MHz at 2.4GHz
Modulation Techniques	OFDMA: BPSK, QPSK, DBPSK, DQPSK, 16-QAM, 64-QAM, 256-QAM,1024QAM; 4K QAM
Temperature Range	Operating: -20 °C to 70 °C, Storage: -40 °C to 85 °C
Humidity	Operating: 5% to 95%, Storage: Max. 90%
Certification	REACH & RoHS Compliance
Power Consumption	10W (Maximum) , 8W(Normally)
Dimensions (WxHxD)	Length width height 63mm x 57mm x 14mm



RF Performance Table at 2.4GHz

Operating Mode	Data Rate	Power		RX Specifications	Tolerance
		Per Chain	2 Chain		
2.4GHz 802.11be EHT20	MCS 0	20dBm	23dBm	TBD	±2dB
	MCS 1	20dBm	23dBm	TBD	±2dB
	MCS 2	20dBm	23dBm	TBD	±2dB
	MCS 3	20dBm	23dBm	TBD	±2dB
	MCS 4	19dBm	22dBm	TBD	±2dB
	MCS 5	19dBm	22dBm	TBD	±2dB
	MCS 6	19dBm	22dBm	TBD	±2dB
	MCS 7	18dBm	21dBm	TBD	±2dB
	MCS 8	18dBm	21dBm	TBD	±2dB
	MCS 9	17dBm	20dBm	TBD	±2dB
	MCS 10	17dBm	20dBm	TBD	±2dB
	MCS 11	17dBm	20dBm	TBD	±2dB
	MCS 12	16dBm	19dBm	TBD	±2dB
	MCS 13	16dBm	19dBm	TBD	±2dB
2.4GHz 802.11be EHT40	MCS 0	20dBm	23dBm	TBD	±2dB
	MCS 1	20dBm	23dBm	TBD	±2dB
	MCS 2	20dBm	23dBm	TBD	±2dB
	MCS 3	20dBm	23dBm	TBD	±2dB
	MCS 4	19dBm	22dBm	TBD	±2dB
	MCS 5	19dBm	22dBm	TBD	±2dB
	MCS 6	19dBm	22dBm	TBD	±2dB
	MCS 7	18dBm	21dBm	TBD	±2dB
	MCS 8	18dBm	21dBm	TBD	±2dB
	MCS 9	17dBm	20dBm	TBD	±2dB
	MCS 10	17dBm	20dBm	TBD	±2dB

	MCS 11	17dBm	20dBm	TBD	±2dB
	MCS 12	16dBm	19dBm	TBD	±2dB
	MCS 13	16dBm	19dBm	TBD	±2dB

M.2 Pin Definitions

DR9274-2.4G M.2			
Pin No.	Name	Pin No.	Name
1	GND	2	VDD3P3_PCIE(3.3V)
3		4	VDD3P3_PCIE(3.3V)
5		6	PCIE_LED0
7	GND	8	
9		10	
11		12	
13		14	WSI_DAT_OUT
15	VDD_XPA_PCIE(5V)	16	
17	VDD_XPA_PCIE(5V)	18	GND
19	VDD_XPA_PCIE(5V)	20	WSI_CLK_OUT
21	VDD_XPA_PCIE(5V)	22	
23	VDD_XPA_PCIE(5V)		
33	GND	32	WSI_DAT_IN
35	PCIE0_RX0_P	34	GND
37	PCIE0_RX0_N	36	WSI_CLK_IN
39	GND	38	
41	PCIE0_TX0_P	40	
43	PCIE0_TX0_N	42	
45	GND	44	
47	PCIE0_REFCLK_P	46	
49	PCIE0_REFCLK_N	48	
51	GND	50	
53	PCIE0_CLKREQ_3P3_N	52	PCIE0_PERST_3P3 (1.8V/3.3V) *
55	PCIE0_WAKE_3P3_N	54	
57	GND	56	WLAN_DISABLE(1.8V/3.3V)*
59	PCIE0_RX1_P	58	
61	PCIE0_RX1_N	60	
63	GND	62	
65	PCIE0_TX1_P	64	
67	PCIE0_TX1_N	66	
69	GND	68	
71		70	
73		72	VDD3P3_PCIE(3.3V)



DR9274-2G

WiFi7 4x4 2.4G MU-MIMO single band WiFi Module

75	GND	74	VDD3P3_PCIE(3.3V)
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*The pins can support 1.8V and 3.3V work voltage, normally it works 1.8V, if customer need 3.3V, they must tell us and confirm the pin define of the main board.

Version

NO	Name	Mainchip
1	DR9274-2GI	QCN9274
2	DR9274-2G	QCN6274