

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

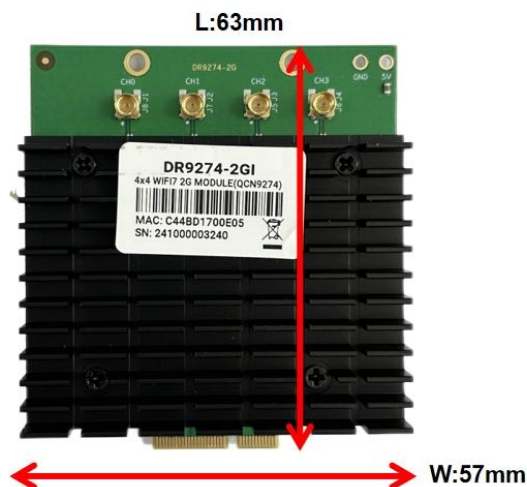
DR9274-2.4G based on QCN9274 or QCN6274 Chipset is an enterprise wireless module integrated with 4x4 MU-MIMO Single Band Wireless Module designed specifically to provide users with mobile access to high-bandwidth video streaming, voice, and data transmission for office and challenging RF environment 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 WLAN	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 Specificatio	Tolerance
		Per Chain	2 Chain	Sensitivity	
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
55	PCIE0_WAKE_3P3_N	54	
57	GND	56	WLAN_DISABLE
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)



DR9274-2.4G

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

75	GND	74	VDD3P3_PCIE(3.3V)
----	-----	----	-------------------

Version

NO	Name	Mainchip
1	DR9274-2.4GI	QCN9274
2	DR9274-2.4G	QCN6274