

Features

- Qualcomm Atheros QCN9274 for Industrial Grade;
- Maxim Tx power 22dBm per chain;
- 4x 4 5G MU-MIMO, up to 5765Mbps physical data rate;
- Support up to 4096-QAM;
- 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

DR9274-5G based on QCN9274 Chipset is an enterprise wireless module integrated with 4x4 MU-MIMO Dual 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
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	4x MMCX Connectors
Frequency Range	5GHz: 5.15~5.825GHz
Data Rates for WLAN	5GHz 802.11a/n/ax/be, max 22dBm per chain
Channel Spectrum Widths for WLAN	Supports 20/40/80/160MHz at 5GHz
Modulation Techniques	OFDMA: BPSK, QPSK, DBPSK, DQPSK, 16-QAM, 64-QAM, 256-QAM, 1024QAM, 4096QAM
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)	30mm x 50mm x 14.5mm

RF Performance Table at 5GHz

Operating Mode	Data Rate	TX Power		RX Specificatioos	Tolerance
		Per Chain	4 Chains	Sensitivity	
5GHz 802.11be EHT20	MCS0	22dBm	28dBm	-96dBm	±2dB
	MCS1	22dBm	28dBm	-93dBm	±2dB
	MCS2	22dBm	28dBm	-91dBm	±2dB
	MCS3	22dBm	28dBm	-87dBm	±2dB
	MCS4	22dBm	28dBm	-84dBm	±2dB
	MCS5	22dBm	28dBm	-80dBm	±2dB
	MCS6	21dBm	27dBm	-78dBm	±2dB
	MCS7	21dBm	27dBm	-77dBm	±2dB
	MCS8	20dBm	26dBm	-73dBm	±2dB
	MCS9	20dBm	26dBm	-70dBm	±2dB
	MCS10	19dBm	25dBm	-67dBm	±2dB
	MCS11	19dBm	25dBm	-64dBm	±2dB
	MCS12	18dBm	24dBm	-61dBm	±2dB
	MCS13	18dBm	24dBm	-58dBm	±2dB
5GHz 802.11be EHT40	MCS0	22dBm	28dBm	-93dBm	±2dB
	MCS1	22dBm	28dBm	-91dBm	±2dB
	MCS2	22dBm	28dBm	-88dBm	±2dB
	MCS3	22dBm	28dBm	-84dBm	±2dB
	MCS4	22dBm	28dBm	-82dBm	±2dB
	MCS5	22dBm	28dBm	-78dBm	±2dB
	MCS6	21dBm	27dBm	-76dBm	±2dB
	MCS7	21dBm	27dBm	-75dBm	±2dB
	MCS8	20dBm	26dBm	-71dBm	±2dB
	MCS9	20dBm	26dBm	-68dBm	±2dB
	MCS10	19dBm	25dBm	-64dBm	±2dB
	MCS11	19dBm	25dBm	-61dBm	±2dB
	MCS12	18dBm	24dBm	-59dBm	±2dB
	MCS13	18dBm	24dBm	-56dBm	±2dB
5GHz 802.11be EHT80	MCS 0	22dBm	28dBm	-90dBm	±2dB
	MCS 1	22dBm	28dBm	-88dBm	±2dB
	MCS 2	22dBm	28dBm	-85dBm	±2dB
	MCS 3	22dBm	28dBm	-82dBm	±2dB
	MCS 4	22dBm	28dBm	-79dBm	±2dB
	MCS 5	22dBm	28dBm	-75dBm	±2dB
	MCS 6	21dBm	27dBm	-73dBm	±2dB
	MCS 7	21dBm	27dBm	-71dBm	±2dB
	MCS 8	20dBm	26dBm	-67dBm	±2dB
	MCS 9	20dBm	26dBm	-65dBm	±2dB
	MCS 10	19dBm	25dBm	-61dBm	±2dB
	MCS 11	19dBm	25dBm	-59dBm	±2dB
	MCS 12	18dBm	24dBm	-55dBm	±2dB
	MCS 13	18dBm	24dBm	-52dBm	±2dB

RF Performance Table at 5GHz

Operating Mode	Data Rate	TX Power		RX Specificatios Sensitivity	Tolerance
		per Chain	4 Chains		
5GHz 802.11be EHT160	MCS 0	22dBm	28dBm	-88dBm	±2dB
	MCS 1	22dBm	28dBm	-84dBm	±2dB
	MCS 2	22dBm	28dBm	-82dBm	±2dB
	MCS 3	22dBm	28dBm	-79dBm	±2dB
	MCS 4	22dBm	28dBm	-76dBm	±2dB
	MCS 5	22dBm	28dBm	-72dBm	±2dB
	MCS 6	21dBm	27dBm	-70dBm	±2dB
	MCS 7	21dBm	27dBm	-68dBm	±2dB
	MCS 8	20dBm	26dBm	-64dBm	±2dB
	MCS 9	19dBm	25dBm	-62dBm	±2dB
	MCS 10	19dBm	25dBm	-58dBm	±2dB
	MCS 11	18dBm	24dBm	-55dBm	±2dB
	MCS 12	18dBm	24dBm	-53dBm	±2dB
	MCS 13	18dBm	24dBm	-50dBm	±2dB

Version

NO	Name	Mainchip	FEM supplier	Maxim power comsuption
1	DR9274-5G	QCN6274	Skywork	8.5W
2	DR9274-5GK	QCN6274	KCT	7W
3	DR9274-5GI	QCN9274	Skywork	8.5W