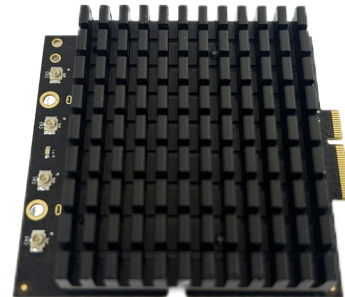


Features

- Qualcomm Atheros QCN9024
- max 23dBm per chain, up to 4804Mbps
- Tri Band 2.4GHz&5GHz&6GHz 4x4 WiFi 6E (802.11ax)
- 4 spatial streams (4SS)
- M.2 E Key Interface
- 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

DR9074-Tidband based on QCN9024 Chipset is an enterprise wireless module integrated with 4 x4 MU-MIMO 2.4GHz&5GHz&6GHz TriBand 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 to 70	° C
Storage Temperature Range	-40 to 90	° C
Operating Humidity Range	5 to +95 (non-condensing)	%
Storage Humidity Range	0 to +90 (non-condensing)	%



DR9074-Triband

WiFi 6E(802.11ax) 4x4 MU-MIMO 2.4GHz&5GHz&6GHz
QCN9074 Tri Band Wireless Module

Hardware Specifications

Symbol	Parameter
Chipset	Qualcomm Atheros QCN9024
WLAN Host Interface	PCI Express 3 . 0 Interface
System Memory	2 Mbit serial I2C bus EEPROM
StandardOperating Voltage	5V
Operating Systems	QSDK
Host Interface	M.2 E Key
Antenna Cable/Port	4 x UFL Connectors, 4 T4 R
Frequency Range	2.412GHz-2.472GHz 5.15GHz-5.95GHz 5.925GHz-7.125GHz
Data Rates	max 20dBm per chain, up to 4804Mbps
Channel Spectrum Widths	Support 20/40MHz at 2.4GHz Support 20/40/80/160MHz at 5GHz Support 20/40/80/160MHz at 6GHz
Modulation Techniques	OFDMA: BPSK, QPSK, DBPSK, DQPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM;
Temperature Range	Operating: -20 ° C to 70 ° C, Storage: -40 ° C to 90 ° C
Humidity	Operating: 5% to 95% (non-condensing) , Storage: Max. 90% (n on- condensing)
Certification	TBD
Power Consumption	TBD
Reference Design	PN02 .7
Dimensions (WxHxD)	57mm x 63mm x 6mm



DR9074-Triband

WiFi 6E(802.11ax) 4x4 MU-MIMO 2.4GHz&5GHz&6GHz
 QCN9074 Tri Band Wireless Module

Radio TX RX Specifications(5.180GHz- 7.125GHz)

Mode	Data rate	TX Power(dbm) (per Chain)	TX Power(dbm) (4 Chains)	RX Sensitivity(dbm)	Tolerance
5GHz 802.11a	6Mbps	20	26	-97	±2dB
	54Mbps	19	25	-82	±2dB
5GHz 802.11n/ac VHT20	MCS0	20	26	-97	±2dB
	MCS7	17	23	-83	±2dB
	MCS8	16	22	-81	±2dB
5GHz 802.11n/ac VHT40	MCS0	19	25	-95	±2dB
	MCS7	17	23	-80	±2dB
	MCS8	16	22	-77	±2dB
	MCS9	15	21	-74	±2dB
5GHz 802.11ac VHT80	MCS0	19	25	-91	±2dB
	MCS7	17	23	-75	±2dB
	MCS8	16	22	-72	±2dB
	MCS9	15	21	-69	±2dB
5GHz 802.11ac VHT160	MCS0	18	24	-84	±2dB
	MCS7	16	22	-74	±2dB
	MCS8	15	21	-71	±2dB
	MCS9	14	20	-68	±2dB
5GHz 802.11ax HE20	MCS0	19	25	-96	±2dB
	MCS9	16	22	-77	±2dB
	MCS10	15	21	-74	±2dB
	MCS11	14	20	-71	±2dB
5GHz 802.11ax HE40	MCS0	19	25	-94	±2dB
	MCS9	16	22	-74	±2dB
	MCS10	15	21	-71	±2dB
	MCS11	14	20	-68	±2dB
5GHz 802.11ax HE80	MCS0	18	24	-91	±2dB
	MCS9	15	21	-71	±2dB
	MCS10	14	20	-69	±2dB
	MCS11	13	19	-66	±2dB
5GHz 802.11ax HE160	MCS0	18	24	-86	±2dB
	MCS9	13	19	-65	±2dB
	MCS10	12	18	-62	±2dB
	MCS11	11	17	-59	±2dB



DR9074-Triband

WiFi 6E(802.11ax) 4x4 MU-MIMO 2.4GHz&5GHz&6GHz
 QCN9074 Tri Band Wireless Module

Radio TX RX Specifications(2.412GHz-2.472GHz)

Mode	Data rate	TX Power(dbm) (per Chain)	TX Power(dbm) (4 Chains)	RX Sensitivity(dbm)	Tolerance
2.4Ghz 802.11b	1Mbps	20	26	-102	±2dB
	2Mbps	20	26	-99	±2dB
	5.5Mbps	20	26	-97	±2dB
	11Mbps	19	25	-95	±2dB
2.4Ghz 802.11g	6Mbps	20	26	-97	±2dB
	54Mbps	19	25	-83	±2dB
2.4Ghz 802.11n/ac VHT20	MCS0	20	26	-95	±2dB
	MCS7	17	23	-78	±2dB
2.4Ghz 802.11n/ac VHT40	MCS0	19	25	-93	±2dB
	MCS7	17	23	-73	±2dB
2.4Ghz 802.11ax HE20	MCS0	19	25	-95	±2dB
	MCS8	17	23	-77	±2dB
	MCS9	16	22	-75	±2dB
	MCS10	15	21	-72	±2dB
	MCS11	14	20	-69	±2dB
2.4Ghz 802.11ax HE40	MCS0	19	25	-92	±2dB
	MCS8	17	23	-75	±2dB
	MCS9	16	22	-72	±2dB
	MCS10	15	21	-69	±2dB
	MCS11	14	20	-66	±2dB

M.2 Pin Definitions

Pin No.	Name	Pin No.	Name
1	GND	2	VDD3P3_ PCIE
3		4	VDD3P3_ PCIE
5		6	PCIE_ LED0
7	GND	8	GPIO46_WCI2_ UART_TXD_ PCIE
9	TP19	10	GPIO47_ WCI2_ UART_RXD_ PCIE
11		12	
13		14	
15	VDD_XPA_ PCIE	16	PCIE_ LED1
17	VDD_XPA_ PCIE	18	GND
19	VDD_XPA_ PCIE	20	
21	VDD_XPA_ PCIE	22	
23	VDD_XPA_ PCIE		
33	GND	32	
35	PCIE0_ RX0_ P	34	
37	PCIE0_ RX0_ N	36	
39	GND	38	MOD_BT_STS_2
41	PCIE0_TX0_ P	40	MOD_WL_ACT_2
43	PCIE0_TX0_ N	42	PINE_BT_ACT_2
45	GND	44	MOD_BT_STS
47	PCIE0_ REFCLK_ P	46	MOD_WL_ACT
49	PCIE0_ REFCLK_ N	48	PINE_BT_ACT
51	GND	50	
53	PCIE0_ CLKREQ_3 P3_ N	52	PCIE0_ PERST_3P3
55	PCIE0_WAKE_3 P3_ N	54	
57	GND	56	
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
75	GND	74	VDD3P3_ PCIE