



DR9074-6E(PN02.7)

WiFi 6E (802.11ax) 4x4 MU-MIMO 6GHz
QCN9074 Single Band Wireless Module

Features

- Qualcomm Atheros QCN9074
- 6GHz, max 23dBm per chain, up to 4949Mbps
- Single Band 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

DR9074-6E(PN02.7) based on QCN9074 Chipset is an enterprise wireless module integrated with 4x4 MU-MIMO 6GHz 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 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)	%

Hardware Specifications

Symbol	Parameter
Chipset	Qualcomm Atheros QCN9074
WLAN Host Interface	PCI Express 3.0 Interface
System Memory	2Mbit serial I2C bus EEPROM
Standard Operating Voltage	5V
Operating Systems	QSDK
Host Interface	M.2 E Key
Antenna Cable / Port	4 x MMCX Connectors, 4 T4 R
Frequency Range	5.925GHz-7.125GHz
Data Rates for WLAN	6GHz, max 23dBm per chain, up to 4949Mbps
Channel Spectrum Widths for WLAN	Support 20/40/80/ 160MHz at 6GHz
Modulation Techniques	OFDMA: BPSK, QPSK, DBPSK, DQPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM, 4096-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% (non-condensing)
Certification	TBD
Power Consumption	TBD
Reference Design	PN02.7
Dimensions (WxHxD)	57mm x 63mm x 6mm

Product Version

	P/N	CPU	Chains	Frequency
1	DR9074-6EI	QCN9074	4	5950-7150
2	DR9074-6E	QCN9024	4	5950-7150

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_3P3_N	52	PCIE0_PERST_3P3
55	PCIE0_WAKE_3P3_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