

## 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 I <sup>2</sup> C bus EEPROM
Standard Operating Voltage	5V
Operating Systems	QSDK
Host Interface	M.2 E Key
Antenna Cable / Port	4 x MMCX Connectors,4T4R
Frequency Range	5.925GHz-7.125GHz
Data Rates for WALN	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

## 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