

## Features

- Featuring with Industrial-grade Atheros's QCA9882 chipset
- Integrated with 2x 2 5G high power Radio Card
- 4.940GHz to 5.825GHz Frequency Range
- 2 x 5G MMCX Connectors
- 20MHz/40MHz/80MHz Bandwidth
- Support 11AC/AN
- RoHS compliance ensure a high level protection of human health and the environment from risks that can be posed by chemicals



## Applications

- Security Surveillance
- Commercial radio coverage
- Hotel Wireless application
- Country coverage
- Forest fire protection engineering
- Some special scene application

## Product Description

DR882-NAS based on QCA9882 chipset is an enterprise wireless module integrated with 2x2 5G high power Radio card 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
Supply Voltage	3.3V(MINIPCIE)	V
Operating Temperature Range	-40 ~ 60	°C
Storage Temperature Range	-65 ~ 105	°C
Operating Humidity Range	5 ~ 95 (non-condensing)	%
Storage Humidity Range	0 ~ 90 (non-condensing)	%

## Specifications

Symbol	Parameter
Chipset	QCA9882
Host Interface	Mini PCI Express 1.1 Standard
Antenna Connector	2 x 5G MMCX connectors
Frequency Range	5GHz: 4.920GHz to 5.825GHz
Operating Voltage	3.3V DC
Power Consumption	7W(MAX)
Modulation Techniques	OFDM: BPSK, QPSK, DBPSK, DQPSK, 16-QAM, 64-QAM, 256-QAM
Environmental Temperature	Operating: -40° C to 70° C, Storage: -40° C to 90° C
Environmental Humidity, non-condensing	Operating: 5% to 95%, Storage: Max. 90%
ROHS Compliance	YES
Dimensions (W×H×D)	50mm x 30mm x 16mm

## Radio TX Specifications

Operating Mode	Data Rate	Power		Tolerance
		1 Chain	2 Chains	
802.11a	6 Mbps	25dBm	28dbm	±2dB
	54 Mbps	21dBm	24dbm	±2dB
802.11n HT20	MCS0,MCS8	25dBm	28dbm	±2dB
	MCS7,MCS15	20dBm	23dbm	±2dB
802.11n HT40	MCS0,MCS8	25dBm	28dbm	±2dB
	MCS7,MCS15	20dBm	23dbm	±2dB
802.11ac	MCS0,MCS10,MCS20	25dBm	28dbm	±2dB
	MCS9,MCS19,MCS29	17dBm	20dbm	±2dB



## Radio RX Specifications

Operating Mode	Data Rate	RX Sensitivity	Tolerance
802.11a	6Mbps	-96	±2dB
	54Mbps	-78	±2dB
802.11n HT20	MCS0,MCS8	-92	±2dB
	MCS7,MCS15	-73	±2dB
802.11n HT40	MCS0,MCS8	-90	±2dB
	MCS7,MCS15	-70	±2dB

## MiniPCle Slot Pin Define

TOP Side		Bottom Side	
1	PCIE_WAKE_L	2	VCC_3V3
3	NC	4	GND
5	NC	6	NC
7	PCIE_CLKREQ_L	8	NC
9	GND	10	NC
11	PCIE_REFCLK_N	12	NC
13	PCIE_REFCLK_P	14	NC
15	GND	16	NC
Mechanical key			
17	NC	18	GND
19	NC	20	GPIO0_WLAN_DIS
21	GND	22	PCIE_RST_L
23	PCIE_TX_N	24	VCC_3V3
25	PCIE_TX_P	26	GND
27	GND	28	NC
29	GND	30	NC
31	PCIE_RX_P	32	NC
33	PCIE_RX_N	34	GND
35	GND	36	NC
37	GND	38	NC
39	VCC_3V3 (RESERVED)	40	GND
41	VCC_3V3 (RESERVED)	42	NC
43	GND	44	GPIO1_WLAN_LED
45	NC	46	NC
47	NC	48	NC
49	NC	50	GND
51	NC	52	VCC_3V3