

DR9274-D6G

WiFi7 DBDC 2x2 6G& 2x2 6G module



DR9274-D6G



Features

- Qualcomm QCN6274 ‘Waikiki’ series for Commercial grade;
- Qualcomm QCN9274 ‘Waikiki’ series for Industrial grade;
- 6GHz, 2×2 MU-MIMO, up to 5765 Mbps physical data rate;
- 6GHz, 2×2 MU-MIMO, up to 5765 Mbps physical data rate;
- M.2 Interface with PCIe 3.0

Version	Chip
DR9274-6G6G	QCN6274
DR9274-6G6GI	QCN9274

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Symbol	Parameter
Chipset	Qualcomm QCN6274 'Waikiki' series for Commercial grade Qualcomm QCN9274 'Waikiki' series for Industrial grade
Wireless	• 6GHz 802.11a/n/ax/be, max 19 dBm per chain • 4 x MMCX Connectors
Frequency Range	• 6GHz: 5.945~7.125GHz
Modulation Techniques	OFDMA: BPSK, QPSK, DBPSK, DQPSK, 16-QAM, 64-QAM, 256-QAM, 1024QAM, 4096QAM
Wireless	• 6GHz, 2x2 MU-MIMO, up to 5765 Mbps physical data rate
Bandwidth	• Supports 20/40/80/160/320 MHz at 6GHz
Power Supply	3.3V

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Interface	M.2 E Key interface with PCIe 3.0
Environmental Temperature	Operating(Commercial Grade): -20°C to 70°C, Operating(Industrial Grade): -40°C to 85°C,
Storage Temperature	Storage: -40°C to 90°C
Environmental Humidity, Non-Condensing	Operating: 5% to 95%, Storage: Max. 90%
Power Consumption	10W (Maximum) , 8W(Normally)
Certification	REACH & RoHS Compliance
Dimensions (W x H x D) in mm	Length width height 63mm x 57mm x 14mm

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6GHz 802.11be EHT20	Data Rate	TX Power (one chain)	TX Power (two chains)	RX Specifications Sensitivity	Tolerance
	MCS0	19dBm	22dBm	-92dBm	±2dB
	MCS1	18dBm	21dBm	-90dBm	±2dB
	MCS2	17dBm	20dBm	-87dBm	±2dB
	MCS3	17dBm	20dBm	-85dBm	±2dB
	MCS4	16dBm	19dBm	-83dBm	±2dB
	MCS5	16dBm	19dBm	-81dBm	±2dB
	MCS6	15dBm	18dBm	-78dBm	±2dB
	MCS7	15dBm	18dBm	-76dBm	±2dB
	MCS8	14dBm	17dBm	-75dBm	±2dB
	MCS9	14dBm	17dBm	-72dBm	±2dB
	MCS10	13dBm	16dBm	-69dBm	±2dB
	MCS11	13dBm	16dBm	-66dBm	±2dB
	MCS12	12dBm	15dBm	-62dBm	±2dB
	MCS13	12dBm	15dBm	-59dBm	±2dB

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6GHz 802.11be EHT40	Data Rate	TX Power (one chain)	TX Power (two chains)	RX Specifications Sensitivity	Tolerance
	MCS0	19dBm	22dBm	-90dBm	±2dB
	MCS1	18dBm	21dBm	-88dBm	±2dB
	MCS2	17dBm	20dBm	-87dBm	±2dB
	MCS3	17dBm	20dBm	-85dBm	±2dB
	MCS4	16dBm	19dBm	-82dBm	±2dB
	MCS5	16dBm	19dBm	-79dBm	±2dB
	MCS6	15dBm	18dBm	-77dBm	±2dB
	MCS7	15dBm	18dBm	-75dBm	±2dB
	MCS8	14dBm	17dBm	-72dBm	±2dB
	MCS9	14dBm	17dBm	-69dBm	±2dB
	MCS10	13dBm	16dBm	-66dBm	±2dB
	MCS11	13dBm	16dBm	-63dBm	±2dB
	MCS12	12dBm	15dBm	-59dBm	±2dB
	MCS13	12dBm	15dBm	-56dBm	±2dB

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6GHz 802.11be EHT80	Data Rate	TX Power (one chain)	TX Power (two chains)	RX Specifications Sensitivity	Tolerance
	MCS0	19dBm	22dBm	-88dBm	±2dB
	MCS1	18dBm	21dBm	-86dBm	±2dB
	MCS2	17dBm	20dBm	-83dBm	±2dB
	MCS3	17dBm	20dBm	-80dBm	±2dB
	MCS4	16dBm	19dBm	-78dBm	±2dB
	MCS5	16dBm	19dBm	-76dBm	±2dB
	MCS6	15dBm	18dBm	-74dBm	±2dB
	MCS7	15dBm	18dBm	-71dBm	±2dB
	MCS8	14dBm	17dBm	-68dBm	±2dB
	MCS9	14dBm	17dBm	-66dBm	±2dB
	MCS10	13dBm	16dBm	-63dBm	±2dB
	MCS11	13dBm	16dBm	-60dBm	±2dB
	MCS12	12dBm	15dBm	-56dBm	±2dB
	MCS13	12dBm	15dBm	-53dBm	±2dB

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6GHz 802.11be EHT160	Data Rate	TX Power (one chain)	TX Power (two chains)	RX Specifications Sensitivity	Tolerance
	MCS0	19dBm	22dBm	-84dBm	±2dB
	MCS1	18dBm	21dBm	-82dBm	±2dB
	MCS2	17dBm	20dBm	-80dBm	±2dB
	MCS3	17dBm	20dBm	-78dBm	±2dB
	MCS4	16dBm	19dBm	-75dBm	±2dB
	MCS5	16dBm	19dBm	-72dBm	±2dB
	MCS6	15dBm	18dBm	-70dBm	±2dB
	MCS7	15dBm	18dBm	-68dBm	±2dB
	MCS8	14dBm	17dBm	-65dBm	±2dB
	MCS9	14dBm	17dBm	-63dBm	±2dB
	MCS10	13dBm	16dBm	-60dBm	±2dB
	MCS11	13dBm	16dBm	-58dBm	±2dB
	MCS12	12dBm	15dBm	-53dBm	±2dB
	MCS13	12dBm	15dBm	-50dBm	±2dB

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6GHz 802.11be EHT320	Data Rate	TX Power (one chain)	TX Power (two chains)	RX Specifications Sensitivity	Tolerance
	MCS0	19dBm	22dBm	-82dBm	±2dB
	MCS1	18dBm	21dBm	-79dBm	±2dB
	MCS2	17dBm	20dBm	-76dBm	±2dB
	MCS3	17dBm	20dBm	-73dBm	±2dB
	MCS4	16dBm	19dBm	-70dBm	±2dB
	MCS5	16dBm	19dBm	-67dBm	±2dB
	MCS6	15dBm	18dBm	-63dBm	±2dB
	MCS7	15dBm	18dBm	-61dBm	±2dB
	MCS8	14dBm	17dBm	-58dBm	±2dB
	MCS9	14dBm	17dBm	-56dBm	±2dB
	MCS10	13dBm	16dBm	-53dBm	±2dB
	MCS11	13dBm	16dBm	-51dBm	±2dB
	MCS12	12dBm	15dBm	-49dBm	±2dB
	MCS13	12dBm	15dBm	-47dBm	±2dB

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		QCN6274	QCN9274
Band Support	4 Single Bands	Support	Support
	2+2 Dual Bands	Support	Support
	2.4Ghz	Support	Support
	4.9GHz		Support
	5GHz	Support	Support
	6GHz	Support	Support
Performance	4K QAM	Support	Support
	Clients	256	512
	OFDMA uses	16	37
	DL OFDMA+TX BF	Support	Support
	DL/UL MU-MIMO	Support	Support
	MLO	Support	Support
	Puncture	Static	Static & Dynamic
Security	AES-CCMP/AES-GCMP	128/256	128/256
	WEP	Support	Support
	WPA/WPA2/WPA3	Support	Support
	FIPS	Support	Support

Pin out

PIN	Description	PIN	Description
1	GND	2	VDD3P3_PCIE(3.3V)
3		4	VDD3P3_PCIE(3.3V)
5		6	PCIE_LED0
7	GND	8	
9		10	
11		12	
13		14	WSI_DAT_OUT
15	VDD_XPA_PCIE(5V)	16	
17	VDD_XPA_PCIE(5V)	18	GND
19	VDD_XPA_PCIE(5V)	20	WSI_CLK_OUT
21	VDD_XPA_PCIE(5V)	22	
23	VDD_XPA_PCIE(5V)		

PIN	Description	PIN	Description
33	GND	32	WSI_DAT_IN
35	PCIE0_RX0_P	34	GND
37	PCIE0_RX0_N	36	WSI_CLK_IN
39	GND	38	
41	PCIE0_TX0_P	40	
43	PCIE0_TX0_N	42	
45	GND	44	
47	PCIE0_REFCLK_P	46	
49	PCIE0_REFCLK_N	48	
51	GND	50	
53	PCIE0_CLKREQ_3P3_N	52	PCIE0_PERST_3P3 (1.8V/3.3V) *
55	PCIE0_WAKE_3P3_N	54	
57	GND	56	WLAN_DISABLE(1.8V/3.3V)*

Pin out

PIN	Description	PIN	Description
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(3.3V)
75	GND	74	VDD3P3_PCIE(3.3V)



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