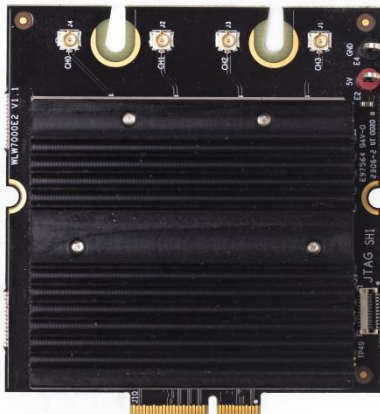


WiFi 7 (802.11be) 4x4 MU-MIMO 2.4GHz Single Band Wireless Module

Model: WLW7000E2



KEY FEATURES

- Qualcomm QCN6274 'Waikiki' series for Commercial Grade
- Qualcomm QCN9274 'Waikiki' series for Industrial Grade
- 2.4GHz, 4x4 MU-MIMO, up to 1376Mbps physical data rate
- M.2 E Key interface with PCIe 3.0
- Based on WK02.2 reference design
- Supports up to 4096-QAM
- -20°C to 70°C operating temperature for commercial grade
- -40°C to 85°C operating temperature for industrial grade

Specifications

Chipset	Qualcomm QCN6274 'Waikiki' series for Commercial Grade Qualcomm QCN9274 'Waikiki' series for Industrial Grade
System Memory	2Mbit serial I ² C bus EEPROM
Reference Design	WK02.2
Host Interface	M.2 E Key interface with PCIe 3.0
Operating Voltage	5V
Power Consumption	12.3W (Max)
Wireless	2.4GHz 802.11b/g/n/ax/be, max 24dBm per chain 4x U.FL Connectors
Frequency Range	2.412~2.472GHz
Modulation Techniques	OFDMA: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024QAM, 4096QAM
Channel Spectrum Widths for WLAN	Supports 20/40MHz at 2.4GHz
Operating Systems	Linux
Certification	REACH & RoHS Compliance
Environmental Temperature	Operating (Commercial Grade): -20°C to 70°C, Storage: -40°C to 90°C Operating (Industrial Grade): -40°C to 85°C, Storage: -40°C to 90°C
Environmental Humidity, Non-Condensing	Operating: 5% to 95%, Storage: Max. 90%
Dimensions (W x H x D) in mm	62.7 X 57 X 15mm

*Configurations are subject to change without notifications.

**Can be requested from respective sales executive.

RF Performance Table at 2.4GHz

	Data Rate	TX Power (per chain)	TX Power (4 chains)	Tolerance
2.4GHz 802.11b	1Mbps	24dBm	30dBm	±2dB
	2Mbps	24dBm	30dBm	±2dB
	5.5Mbps	24dBm	30dBm	±2dB
	11Mbps	24dBm	30dBm	±2dB
2.4GHz 802.11g	6Mbps	24dBm	30dBm	±2dB
	9Mbps	24dBm	30dBm	±2dB
	12Mbps	24dBm	30dBm	±2dB
	18Mbps	24dBm	30dBm	±2dB
	24Mbps	24dBm	30dBm	±2dB
	36Mbps	24dBm	30dBm	±2dB
	48Mbps	23dBm	29dBm	±2dB
	54Mbps	23dBm	29dBm	±2dB
2.4GHz 802.11n HT20	MCS0	24dBm	30dBm	±2dB
	MCS1	24dBm	30dBm	±2dB
	MCS2	24dBm	30dBm	±2dB
	MCS3	24dBm	30dBm	±2dB
	MCS4	24dBm	30dBm	±2dB
	MCS5	24dBm	30dBm	±2dB
	MCS6	23dBm	29dBm	±2dB
	MCS7	23dBm	29dBm	±2dB
2.4GHz 802.11n HT40	MCS0	24dBm	30dBm	±2dB
	MCS1	24dBm	30dBm	±2dB
	MCS2	24dBm	30dBm	±2dB
	MCS3	24dBm	30dBm	±2dB
	MCS4	24dBm	30dBm	±2dB
	MCS5	24dBm	30dBm	±2dB
	MCS6	23dBm	29dBm	±2dB
	MCS7	23dBm	29dBm	±2dB
2.4GHz 802.11ax HE20	MCS 0	24dBm	30dBm	±2dB
	MCS 1	24dBm	30dBm	±2dB
	MCS 2	24dBm	30dBm	±2dB
	MCS 3	24dBm	30dBm	±2dB
	MCS 4	24dBm	30dBm	±2dB
	MCS 5	24dBm	30dBm	±2dB
	MCS 6	24dBm	30dBm	±2dB
	MCS 7	24dBm	30dBm	±2dB
	MCS 8	23dBm	29dBm	±2dB
	MCS 9	23dBm	29dBm	±2dB
	MCS 10	22dBm	28dBm	±2dB
	MCS 11	21dBm	27dBm	±2dB

	Data Rate	RX Specifications Sensitivity	Tolerance
2.4GHz 802.11b	6Mbps	TBD	±2dB
	9Mbps	TBD	±2dB
	12Mbps	TBD	±2dB
	18Mbps	TBD	±2dB
2.4GHz 802.11g	6Mbps	TBD	±2dB
	9Mbps	TBD	±2dB
	12Mbps	TBD	±2dB
	18Mbps	TBD	±2dB
	24Mbps	TBD	±2dB
	36Mbps	TBD	±2dB
	48Mbps	TBD	±2dB
	54Mbps	TBD	±2dB
2.4GHz 802.11n HT20	MCS 0	TBD	±2dB
	MCS 1	TBD	±2dB
	MCS 2	TBD	±2dB
	MCS 3	TBD	±2dB
	MCS 4	TBD	±2dB
	MCS 5	TBD	±2dB
	MCS 6	TBD	±2dB
	MCS 7	TBD	±2dB
2.4GHz 802.11n HT40	MCS 0	TBD	±2dB
	MCS 1	TBD	±2dB
	MCS 2	TBD	±2dB
	MCS 3	TBD	±2dB
	MCS 4	TBD	±2dB
	MCS 5	TBD	±2dB
	MCS 6	TBD	±2dB
	MCS 7	TBD	±2dB
2.4GHz 802.11ax HE20	MCS 0	TBD	±2dB
	MCS 1	TBD	±2dB
	MCS 2	TBD	±2dB
	MCS 3	TBD	±2dB
	MCS 4	TBD	±2dB
	MCS 5	TBD	±2dB
	MCS 6	TBD	±2dB
	MCS 7	TBD	±2dB
	MCS 8	TBD	±2dB
	MCS 9	TBD	±2dB
	MCS 10	TBD	±2dB
	MCS 11	TBD	±2dB

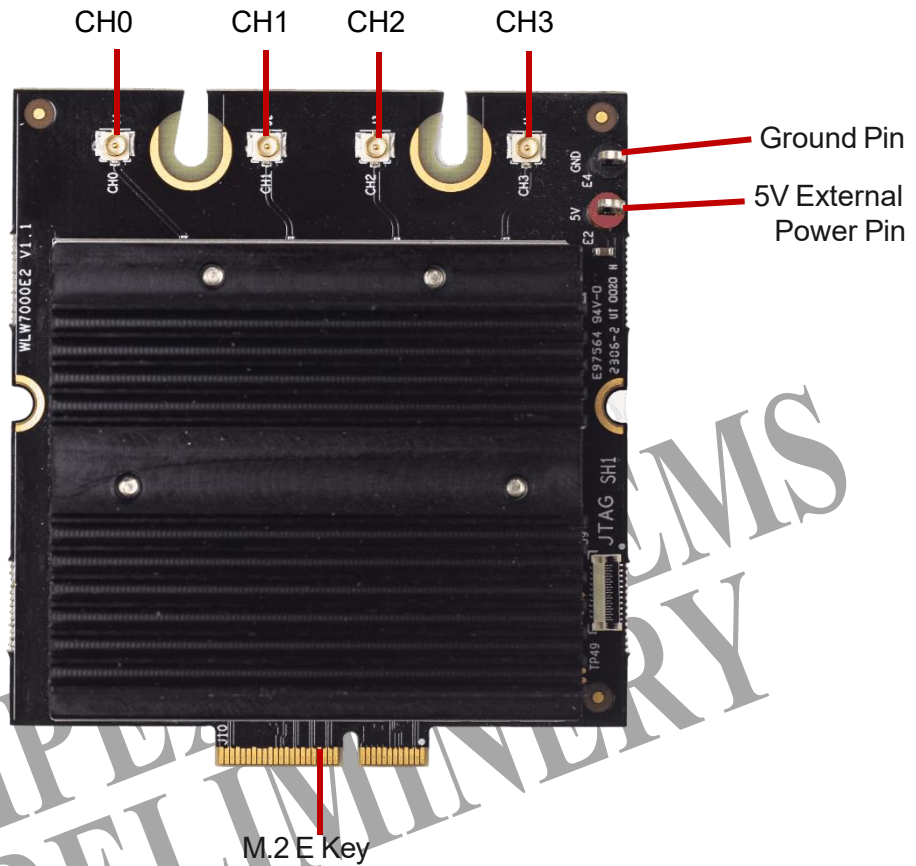
RF Performance Table at 2.4GHz

	Data Rate	TX Power (per chain)	TX Power (4 chains)	Tolerance
2.4GHz 802.11ax HE40	MCS 0	24dBm	30dBm	±2dB
	MCS 1	24dBm	30dBm	±2dB
	MCS 2	24dBm	30dBm	±2dB
	MCS 3	24dBm	30dBm	±2dB
	MCS 4	24dBm	30dBm	±2dB
	MCS 5	24dBm	30dBm	±2dB
	MCS 6	24dBm	30dBm	±2dB
	MCS 7	24dBm	30dBm	±2dB
	MCS 8	23dBm	29dBm	±2dB
	MCS 9	23dBm	29dBm	±2dB
	MCS 10	22dBm	28dBm	±2dB
	MCS 11	21dBm	27dBm	±2dB
2.4GHz 802.11be EHT20	MCS 0	24dBm	30dBm	±2dB
	MCS 1	24dBm	30dBm	±2dB
	MCS 2	24dBm	30dBm	±2dB
	MCS 3	24dBm	30dBm	±2dB
	MCS 4	24dBm	30dBm	±2dB
	MCS 5	24dBm	30dBm	±2dB
	MCS 6	24dBm	30dBm	±2dB
	MCS 7	24dBm	30dBm	±2dB
	MCS 8	23dBm	29dBm	±2dB
	MCS 9	23dBm	29dBm	±2dB
	MCS 10	22dBm	28dBm	±2dB
	MCS 11	21dBm	27dBm	±2dB
	MCS 12	18dBm	24dBm	±2dB
	MCS 13	18dBm	24dBm	±2dB
2.4GHz 802.11be EHT40	MCS 0	24dBm	30dBm	±2dB
	MCS 1	24dBm	30dBm	±2dB
	MCS 2	24dBm	30dBm	±2dB
	MCS 3	24dBm	30dBm	±2dB
	MCS 4	24dBm	30dBm	±2dB
	MCS 5	24dBm	30dBm	±2dB
	MCS 6	24dBm	30dBm	±2dB
	MCS 7	24dBm	30dBm	±2dB
	MCS 8	23dBm	29dBm	±2dB
	MCS 9	23dBm	29dBm	±2dB
	MCS 10	22dBm	28dBm	±2dB
	MCS 11	21dBm	27dBm	±2dB
	MCS 12	18dBm	24dBm	±2dB
	MCS 13	18dBm	24dBm	±2dB

	Data Rate	RX Specifications Sensitivity	Tolerance
2.4GHz 802.11ax HE40	MCS 0	TBD	±2dB
	MCS 1	TBD	±2dB
	MCS 2	TBD	±2dB
	MCS 3	TBD	±2dB
	MCS 4	TBD	±2dB
	MCS 5	TBD	±2dB
	MCS 6	TBD	±2dB
	MCS 7	TBD	±2dB
	MCS 8	TBD	±2dB
	MCS 9	TBD	±2dB
	MCS 10	TBD	±2dB
	MCS 11	TBD	±2dB
2.4GHz 802.11be EHT20	MCS 0	TBD	±2dB
	MCS 1	TBD	±2dB
	MCS 2	TBD	±2dB
	MCS 3	TBD	±2dB
	MCS 4	TBD	±2dB
	MCS 5	TBD	±2dB
	MCS 6	TBD	±2dB
	MCS 7	TBD	±2dB
	MCS 8	TBD	±2dB
	MCS 9	TBD	±2dB
	MCS 10	TBD	±2dB
	MCS 11	TBD	±2dB
	MCS 12	TBD	±2dB
	MCS 13	TBD	±2dB
2.4GHz 802.11be EHT40	MCS 0	TBD	±2dB
	MCS 1	TBD	±2dB
	MCS 2	TBD	±2dB
	MCS 3	TBD	±2dB
	MCS 4	TBD	±2dB
	MCS 5	TBD	±2dB
	MCS 6	TBD	±2dB
	MCS 7	TBD	±2dB
	MCS 8	TBD	±2dB
	MCS 9	TBD	±2dB
	MCS 10	TBD	±2dB
	MCS 11	TBD	±2dB
	MCS 12	TBD	±2dB
	MCS 13	TBD	±2dB

Component Map

U.FL Connectors



COMPEX SYSTEMS
PRELIMINARY

Ordering Configuration

Item Code	Model	Description
WLW7000E2 8A0674S-TE	WLW7000E2	QCN6274 4x4 802.11b/g/n/ax/be support 2.4GHz M.2 E Key interface with PCIe 3.0
WLW7000E2 8A0974S-TE	WLW7000E2-I	QCN9274 4x4 802.11b/g/n/ax/be support 2.4GHz M.2 E Key interface with PCIe 3.0

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