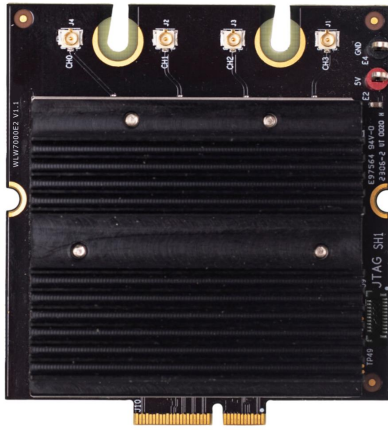


WiFi 7 (802.11be) 4x4 MU-MIMO 2.4GHz Single Band Wireless Module

Model: WLW7000E2



KEY FEATURES

- Qualcomm QCN6224/6274 'Waikiki' series for Commercial Grade
- Qualcomm QCN9274 'Waikiki' series for Industrial Grade
- 2.4GHz, 4x4 MU-MIMO, up to 1376 Mbps 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 QCN6224/6274 '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 22dBm 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.

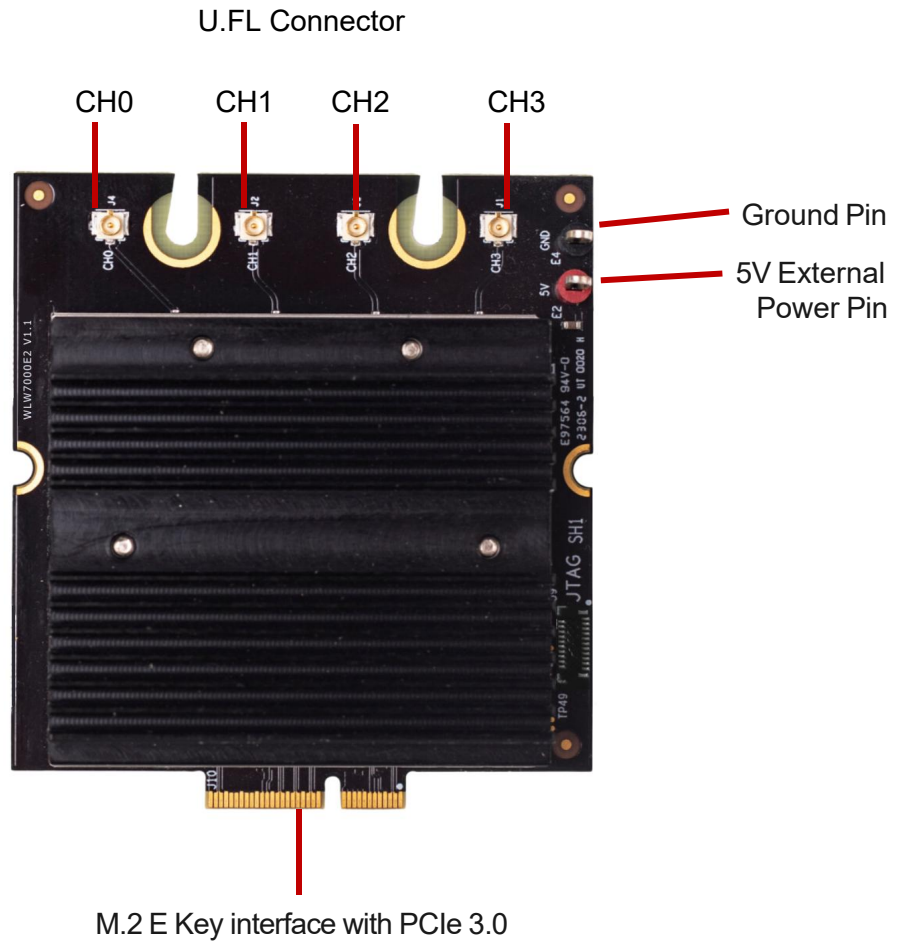
**Can be requested from respective sales executive.

RF Performance Table at 2.4GHz

	Data Rate	TX Power (per chain)	TX Power (4 chains)	Tolerance
2.4GHz 802.11be EHT20	MCS 0	22dBm	28dBm	±2dB
	MCS 1	22dBm	28dBm	±2dB
	MCS 2	22dBm	28dBm	±2dB
	MCS 3	22dBm	28dBm	±2dB
	MCS 4	22dBm	28dBm	±2dB
	MCS 5	22dBm	28dBm	±2dB
	MCS 6	22dBm	28dBm	±2dB
	MCS 7	22dBm	28dBm	±2dB
	MCS 8	22dBm	28dBm	±2dB
	MCS 9	22dBm	28dBm	±2dB
	MCS 10	21dBm	27dBm	±2dB
	MCS 11	21dBm	27dBm	±2dB
	MCS 12	21dBm	27dBm	±2dB
	MCS 13	21dBm	27dBm	±2dB
2.4GHz 802.11 be EHT 40	MCS 0	22dBm	28dBm	±2dB
	MCS 1	22dBm	28dBm	±2dB
	MCS 2	22dBm	28dBm	±2dB
	MCS 3	22dBm	28dBm	±2dB
	MCS 4	22dBm	28dBm	±2dB
	MCS 5	22dBm	28dBm	±2dB
	MCS 6	22dBm	28dBm	±2dB
	MCS 7	22dBm	28dBm	±2dB
	MCS 8	22dBm	28dBm	±2dB
	MCS 9	22dBm	28dBm	±2dB
	MCS 10	21dBm	27dBm	±2dB
	MCS 11	21dBm	27dBm	±2dB
	MCS 12	21dBm	27dBm	±2dB
	MCS 13	21dBm	27dBm	±2dB

	Data Rate	RX Specifications Sensitivity	Tolerance
2.4GHz 802.11be EHT20	MCS 0	-97dBm	±2dB
	MCS 1	-95dBm	±2dB
	MCS 2	-93dBm	±2dB
	MCS 3	-90dBm	±2dB
	MCS 4	-88dBm	±2dB
	MCS 5	-84dBm	±2dB
	MCS 6	-81dBm	±2dB
	MCS 7	-79dBm	±2dB
	MCS 8	-75dBm	±2dB
	MCS 9	-73dBm	±2dB
	MCS 10	-69dBm	±2dB
	MCS 11	-67dBm	±2dB
	MCS 12	-64dBm	±2dB
	MCS 13	-61dBm	±2dB
2.4GHz 802.11 be EHT 40	MCS 0	-95dBm	±2dB
	MCS 1	-93dBm	±2dB
	MCS 2	-91dBm	±2dB
	MCS 3	-88dBm	±2dB
	MCS 4	-85dBm	±2dB
	MCS 5	-81dBm	±2dB
	MCS 6	-78dBm	±2dB
	MCS 7	-76dBm	±2dB
	MCS 8	-73dBm	±2dB
	MCS 9	-70dBm	±2dB
	MCS 10	-67dBm	±2dB
	MCS 11	-65dBm	±2dB
	MCS 12	-61dBm	±2dB
	MCS 13	-58dBm	±2dB

Component Map



Ordering Configuration

Item Code	Model	Description
WLW7000E2 8A0624S-TE WLW7000E2 8A0674S-TE	WLW7000E2	QCN6224/6274 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

Chipsets Comparisons

		QCN6224	QCN6274	QCN9274
Band Operation	4 Single Band	✓	✓	✓
	2+2 Dual Band	✓	✓	✓
	2.4GHz	✓	✓	✓
	4.9GHz	-	-	✓
	5GHz	✓	✓	✓
	6GHz	-	✓	✓
Performance	Channel Support	Up to 160MHz at 5GHz	Up to 320MHz at 6GHz	Up to 320MHz at 6GHz
	4K QAM	✓	✓	✓
	#clients	128	256	512
	#OFDMA users	8	16	37
	DL OFDMA + TxBF	-	✓	✓
	DL/UL MU-MIMO	✓	✓	✓
Advanced 11be Features	WFA certified MLO	✓	✓	✓
	Puncture	Static	Static	Static & Dynamic
Others	DPD	✓	✓	✓
	FIPS	-	-	✓
Software Packages	Provisioned Multi Link	✓	✓	✓
	Dense Deployment	✓	✓	✓
	Location & RF Sensing	✓	✓	✓