

802.11BE wireless modules

WiFi 7 (802.11be) 4×4 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, 4×4 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 QCN6274 'Waikiki' series for Commercial Grade Qualcomm QCN9274 'Waikiki' series for Industrial Grade			
System Memory	2Mbit serial I²C 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.

Copyright © Compex Systems. All rights reserved. COMPEX and the COMPEX logo, are registered trademarks of Compex Systems Pte Ltd. While every effort is made to ensure the information is accurate, Compex does not accept liability for any errors or mistakes that may arise. All specifications are subject to change without notice.





802.11BE wireless modules

RF Performance Table at 2.4GHz

	Data Rate	TX Power (per chain)	TX Power (4 chains)	Tolerance		Data Rate	RX Specifications Sensitivity	Tolerance
2.4GHz 802.11be EHT20	MCS 0	22dBm	28dBm	±2dB		MCS 0	-97dBm	±2dB
	MCS 1	22dBm	28dBm	±2dB		MCS 1	-95dBm	±2dB
	MCS 2	22dBm	28dBm	±2dB		MCS 2	-93dBm	±2dB
	MCS 3	22dBm	28dBm	±2dB		MCS 3	-90dBm	±2dB
	MCS 4	22dBm	28dBm	±2dB		MCS 4	-88dBm	±2dB
	MCS 5	22dBm	28dBm	±2dB		MCS 5	-84dBm	±2dB
	MCS 6	22dBm	28dBm	±2dB	2.4GHz 802.11be	MCS 6	-81dBm	±2dB
	MCS 7	22dBm	28dBm	±2dB	EHT20	MCS 7	-79dBm	±2dB
	MCS 8	22dBm	28dBm	±2dB		MCS 8	-75dBm	±2dB
	MCS 9	22dBm	28dBm	±2dB		MCS 9	-73dBm	±2dB
	MCS 10	21dBm	27dBm	±2dB		MCS 10	-69dBm	±2dB
	MCS 11	21dBm	27dBm	±2dB		MCS 11	-67dBm	±2dB
	MCS 12	21dBm	27dBm	±2dB		MCS 12	-64dBm	±2dB
	MCS 13	21dBm	27dBm	±2dB		MCS 13	-61dBm	±2dB
2.4GHz 802.11 be EHT 40	MCS 0	22dBm	28dBm	±2dB		MCS 0	-95dBm	±2dB
	MCS 1	22dBm	28dBm	±2dB	2.4GHz 802.11 be EHT 40	MCS 1	-93dBm	±2dB
	MCS 2	22dBm	28dBm	±2dB		MCS 2	-91dBm	±2dB
	MCS 3	22dBm	28dBm	±2dB		MCS 3	-88dBm	±2dB
	MCS 4	22dBm	28dBm	±2dB		MCS 4	-85dBm	±2dB
	MCS 5	22dBm	28dBm	±2dB		MCS 5	-81dBm	±2dB
	MCS 6	22dBm	28dBm	±2dB		MCS 6	-78dBm	±2dB
	MCS 7	22dBm	28dBm	±2dB		MCS 7	-76dBm	±2dB
	MCS 8	22dBm	28dBm	±2dB		MCS 8	-73dBm	±2dB
	MCS 9	22dBm	28dBm	±2dB		MCS 9	-70dBm	±2dB
	MCS 10	21dBm	27dBm	±2dB		MCS 10	-67dBm	±2dB
	MCS 11	21dBm	27dBm	±2dB		MCS 11	-65dBm	±2dB
	MCS 12	21dBm	27dBm	±2dB		MCS 12	-61dBm	±2dB
	MCS 13	21dBm	27dBm	±2dB		MCS 13	-58dBm	±2dB

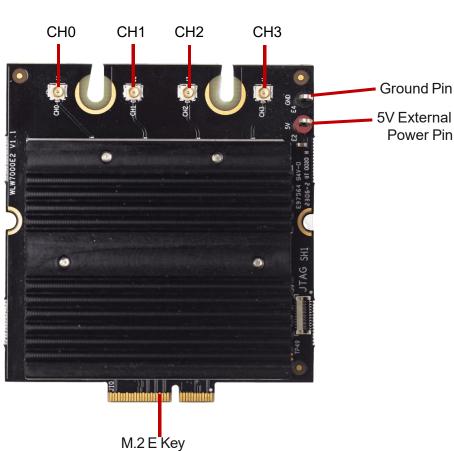


Copyright © Compex Systems. All rights reserved. COMPEX and the COMPEX logo, are registered trademarks of Compex Systems Pte Ltd. While every effort is made to ensure the information is accurate, Compex does not accept liability for any errors or mistakes that may arise.



802.11BE wireless modules

Component Map



U.FL Connector

Copyright © Compex Systems. All rights reserved. COMPEX and the COMPEX logo, are registered trademarks of Compex Systems Pte Ltd. While every effort is made to ensure the information is accurate, Compex does not accept liability for any errors or mistakes that may arise. All specifications are subject to change without notice.

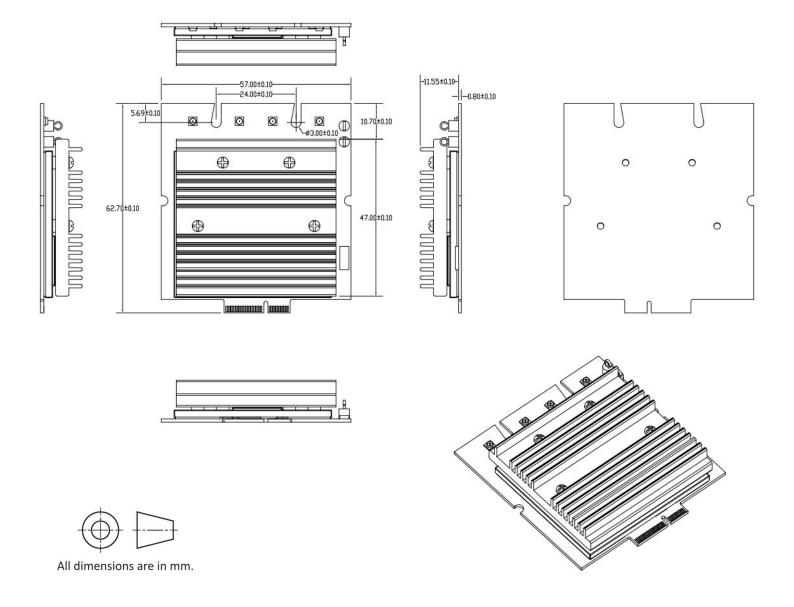


3



802.11BE wireless modules

Mechanical Dimensions



Copyright © Compex Systems. All rights reserved. COMPEX and the COMPEX logo, are registered trademarks of Compex Systems Pte Ltd. While every effort is made to ensure the information is accurate, Compex does not accept liability for any errors or mistakes that may arise. All specifications are subject to change without notice.





802.11BE wireless modules

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

COMPEX