

Single Band 2.4GHz 2x2 802.11n MiniPCle Module Designed for 2.4GHz Band Wireless Access Points

Model: WLE200N2



KEY FEATURES

- Qualcomm Atheros AR9287
- 2.4GHz, 2x2 MIMO OFDM Technology, up to 300Mbps physical data rate
- Single Band 2.4GHz 2x2 WiFi 4 (802.11n)
- MiniPCle interface with PCIe 1.1
- IEEE 802.11n compliant & backward compatible with 802.11b/g
- Supports WPA2 encryption to help protect users' devices from malicious attacks
- Supports IEEE 802.11d, e, h, and i standards

Specifications

Chipset	Qualcomm Atheros AR9287 'Kiwi' Series
Reference Design	Qualcomm Atheros HB97
Host Interface	MiniPCle interface with PCIe 1.1
Operating Voltage	3.3V
Power Consumption	1.9W
Wireless	2.4GHz 802.11b/g/n, max 16dBm per chain 2x U.FL Connectors
Frequency Range	2.412~2.484GHz
Modulation Techniques	OFDM: BPSK, QPSK, 16-QAM, 64-QAM DSSS: DBPSK, DQPSK, CCK
Channel Spectrum Widths for WLAN	Supports 20/40MHz at 2.4GHz
ESD Sensitivity	Class 1C
Supported Operating System	CompexWRT or OpenWRT/LEDE
Certification	IC, CE, FCC, REACH and RoHS Compliance
Environmental Temperature	Operating: -20°C to 70°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	30.0 x 26.8 x 3.2

*Configurations are subject to change without notifications.

RF Performance Table for 2.4GHz

	Data Rate	TX Power (per chain)	TX Power (2 chains)	Tolerance
2.4GHz 802.11b	1Mbps	16dBm	19dBm	±2dB
	2Mbps	16dBm	19dBm	±2dB
	5.5Mbps	16dBm	19dBm	±2dB
	11Mbps	16dBm	19dBm	±2dB
2.4GHz 802.11g	6Mbps	16dBm	19dBm	±2dB
	9Mbps	16dBm	19dBm	±2dB
	12Mbps	16dBm	19dBm	±2dB
	18Mbps	16dBm	19dBm	±2dB
	24Mbps	16dBm	19dBm	±2dB
	36Mbps	16dBm	19dBm	±2dB
	48Mbps	14dBm	17dBm	±2dB
	54Mbps	11dBm	14dBm	±2dB
2.4GHz 802.11n HT20	MCS 0	16dBm	19dBm	±2dB
	MCS 1	16dBm	19dBm	±2dB
	MCS 2	16dBm	19dBm	±2dB
	MCS 3	16dBm	19dBm	±2dB
	MCS 4	15dBm	18dBm	±2dB
	MCS 5	13dBm	16dBm	±2dB
	MCS 6	11dBm	14dBm	±2dB
	MCS 7	9dBm	12dBm	±2dB
2.4GHz 802.11n HT40	MCS 0	16dBm	19dBm	±2dB
	MCS 1	16dBm	19dBm	±2dB
	MCS 2	16dBm	19dBm	±2dB
	MCS 3	16dBm	19dBm	±2dB
	MCS 4	14dBm	17dBm	±2dB
	MCS 5	12dBm	15dBm	±2dB
	MCS 6	10dBm	13dBm	±2dB
	MCS 7	8dBm	11dBm	±2dB

	Data Rate	RX Specifications Sensitivity	Tolerance
2.4GHz 802.11b	1Mbps	-87dBm	±2dB
	2Mbps	-87dBm	±2dB
	5.5Mbps	-86dBm	±2dB
	11Mbps	-84dBm	±2dB
2.4GHz 802.11g	6Mbps	-87dBm	±2dB
	9Mbps	-87dBm	±2dB
	12Mbps	-86dBm	±2dB
	18Mbps	-84dBm	±2dB
	24Mbps	-80dBm	±2dB
	36Mbps	-76dBm	±2dB
	48Mbps	-72dBm	±2dB
	54Mbps	-70dBm	±2dB
2.4GHz 802.11n HT20	MCS 0	-81dBm	±2dB
	MCS 1	-80dBm	±2dB
	MCS 2	-79dBm	±2dB
	MCS 3	-75dBm	±2dB
	MCS 4	-73dBm	±2dB
	MCS 5	-70dBm	±2dB
	MCS 6	-69dBm	±2dB
	MCS 7	-67dBm	±2dB
2.4GHz 802.11n HT40	MCS 0	-75dBm	±2dB
	MCS 1	-73dBm	±2dB
	MCS 2	-72dBm	±2dB
	MCS 3	-71dBm	±2dB
	MCS 4	-70dBm	±2dB
	MCS 5	-68dBm	±2dB
	MCS 6	-67dBm	±2dB
	MCS 7	-65dBm	±2dB

Component Map

U.FL connectors

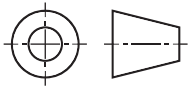
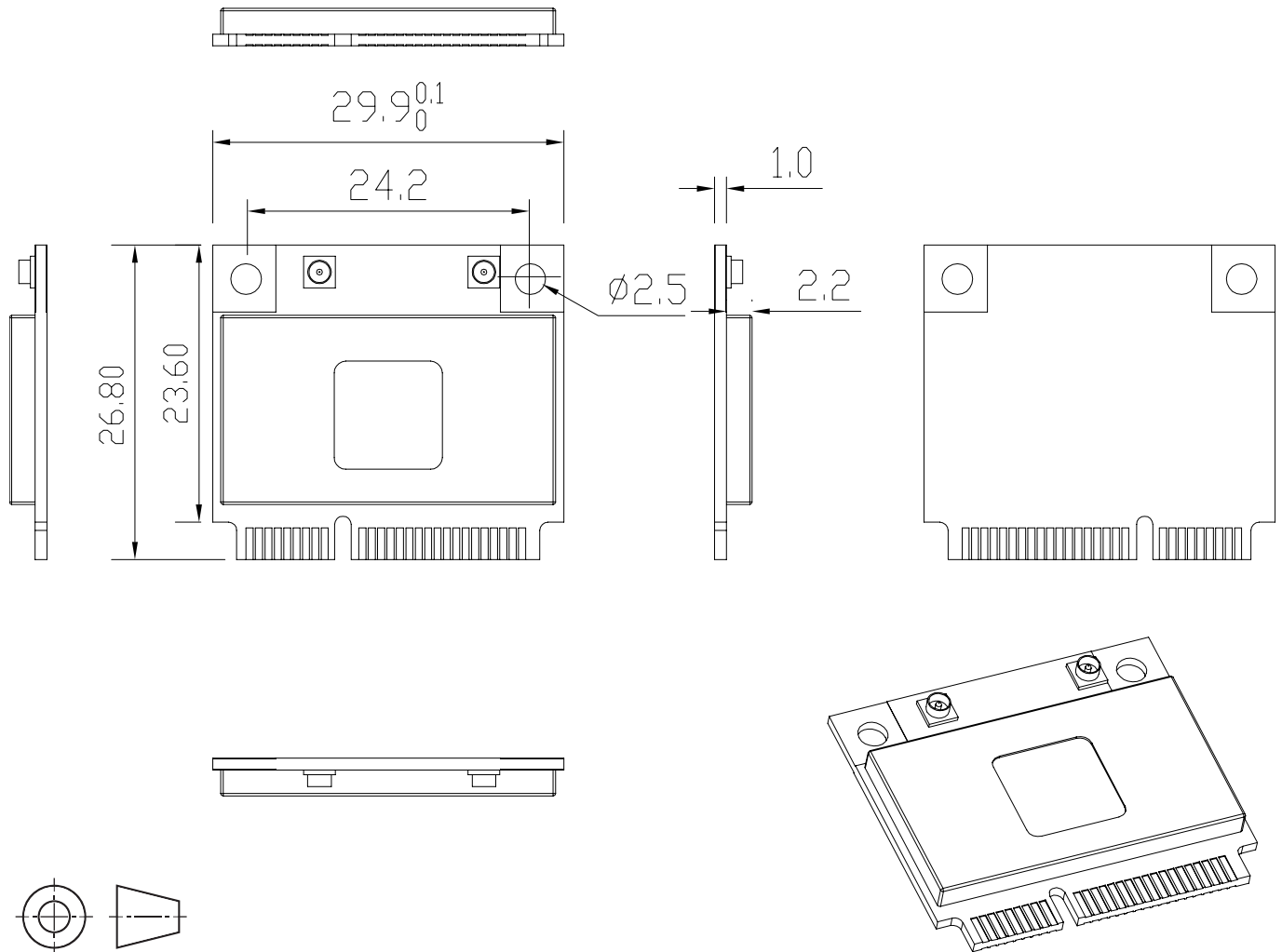
CHO

CHI



MiniPCIe
Edge Connector

Mechanical Dimensions



All dimensions are in mm.

Ordering Configuration

Item Code	Model	Description
WLE200N2 6A0000	WLE200N2	AR9287 2x2 2.4GHz half size miniPCIe card