

Dual Band 2x2 MIMO 802.11n Mini PCIe Module Designed for 2.4GHz Band Wireless Access Points

Model: WLE200N2



KEY FEATURES

- Qualcomm Atheros AR9287
- Atheros HB97 Reference Design
- 2.4GHz Single-band 2x2 MIMO spatial multiplexing technique
- 2.4GHz max 16dBm output power (per chain)
- IEEE 802.11n compliant & backward compatible with 802.11b/g
- 2x2 MIMO Technology, up to 300Mbps
- Mini PCI Express edge connector
- Supports WPA2 encryption to help protect users' devices from malicious attacks

Specifications

Chipset	AR9287
Host Interface	PCI Express 1.1 Standard
Operating Voltage	3.3V DC
Antenna Connector	2x U.FL
Frequency Range	2.4GHz: 2.412 ~ 2.484 GHz
Power Consumption	1.9W
Modulation Techniques	OFDM: BPSK, QPSK, 16-QAM, 64-QAM DSSS: DBPSK, DQPSK, CCK
Temperature Range	Operating: -20°C to 70°C Storage: -40°C to 90°C
Humidity	Operating: 5% to 95% (non-condensing) Storage: Max. 90% (non-condensing)
Dimensions (W x H x D)	30 x 26.8 x 3.45 mm

RF Performance Table

	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

Connector Map

U.FL connectors

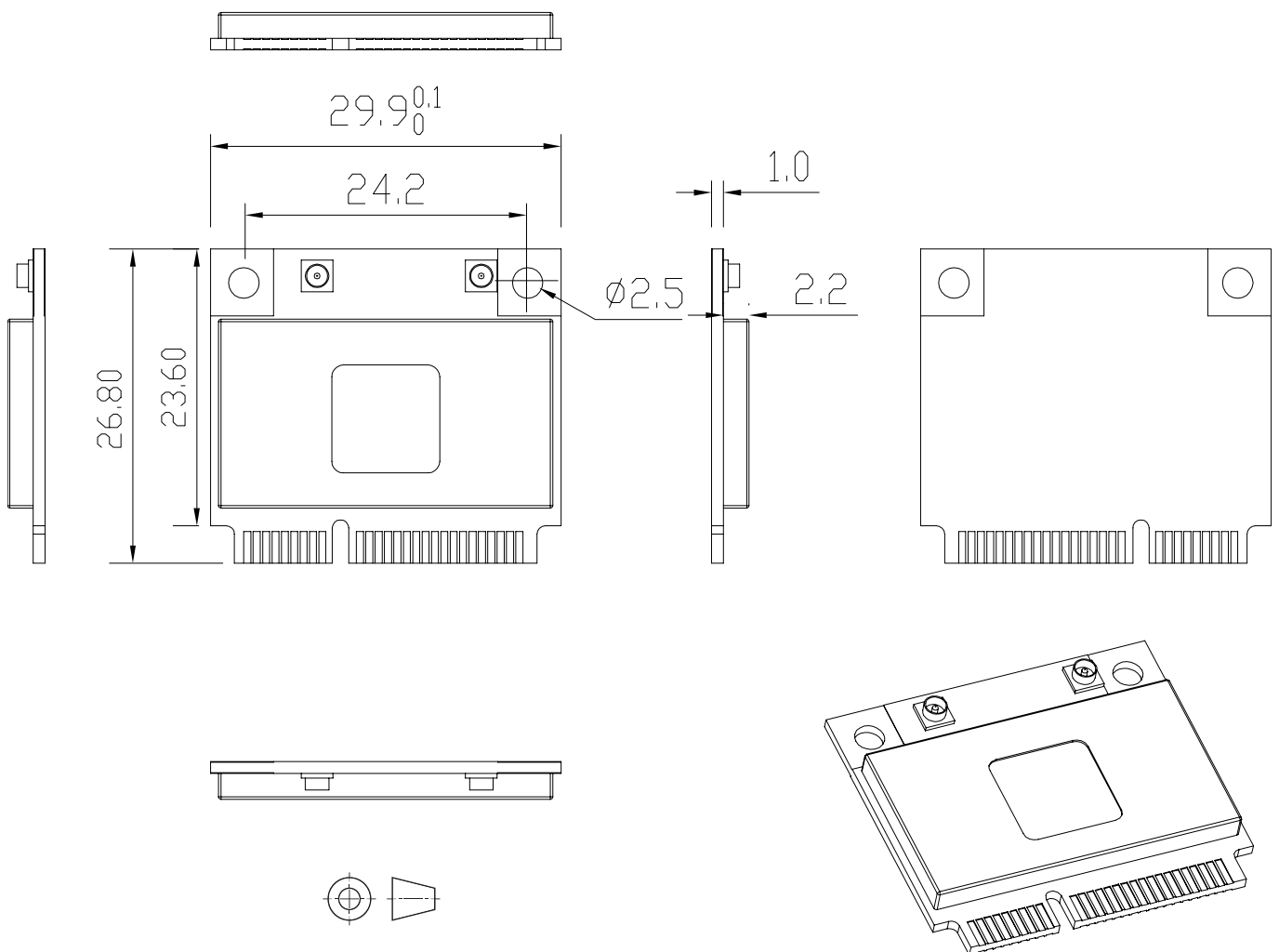
CHO

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Mini PCIe 1.1
Edge Connector

Mechanical Dimensions



Ordering Configuration

Item Code	Chipset	Form factor	Card Information
WLE200N2 6A0000	AR9287	Half size card	2x2 802.11b/g/n 2.4GHz Mini PCIe card

Packaging Information

Packaging Type	Dimensions	Weight	Dimensional Weight
Carton Box (250 units)	422 x 410 x 240 mm	4.8 kg	8.5 kg