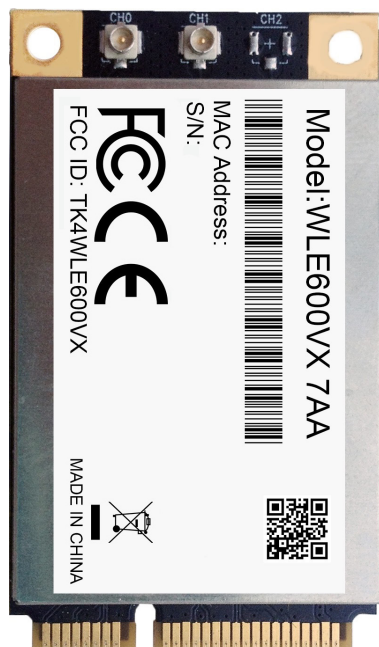


Dual Band 5GHz 2x2 MIMO 802.11ac Mini PCIe WiFi Module

Designed for Dual Band Wireless Access Points



Model: WLE600VX

KEY FEATURES

- Qualcomm Atheros QCA9882
- 2.4GHz max 21dBm & 5GHz max 20dBm output power (per chain)
- IEEE 802.11ac compliant & backward compatible with 802.11a/b/g/n
- 2x2 MIMO Technology, up to 867Mbps
- Mini PCI Express edge connector
- Supports Spatial Multiplexing, Cyclic-Delay Diversity (CDD), Low-Density Parity Check (LDPC) Codes, Maximal Ratio Combining (MRC), Space Time Block Code (STBC)
- Supports IEEE 802.11d, e, h, i, k, r, v time stamp, and w standards
- Supports Dynamic Frequency Selection (DFS)
- Cards are individually calibrated for Quality Assurance

Specifications

Chipset	QCA9882
Reference Design	XB140
Host Interface	Mini PCI Express 1.1 Standard
Operating Voltage	3.3V DC
Antenna Connector	2x U.FL
Frequency Range	2.4GHz: 2.412GHz to 2.472GHz, or 5GHz: 5.180GHz to 5.825GHz, selectable dual band
Certification	FCC & CE Certified, RoHS Compliant
Power Consumption	3.5W (Max)
Supported Operating System	Supported by CompexWRT with Qualcomm Atheros reference wireless drivers or OpenWRT/LEDE with ath10k wireless drivers, on WPJ344, WPJ558, WPJ563, WPJ564, WPQ864, and WPQ865.
Modulation Techniques	OFDM: BPSK, QPSK, DBPSK, DQPSK, 16-QAM, 64-QAM, 256-QAM
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%
ESD Sensitivity	Class 1C
Dimensions (W x H x D)	30.0mm x 50.9mm x 3.2mm

RF Performance Table

	Data Rate	TX Power (per chain)	TX Power (2 chains)	Tolerance
2.4GHz 802.11b	1Mbps	20dBm	23dBm	±2dB
	2Mbps	20dBm	23dBm	±2dB
	5.5Mbps	20dBm	23dBm	±2dB
	11Mbps	20dBm	23dBm	±2dB
2.4GHz 802.11g	6Mbps	21dBm	24dBm	±2dB
	9Mbps	21dBm	24dBm	±2dB
	12Mbps	21dBm	24dBm	±2dB
	18Mbps	21dBm	24dBm	±2dB
	24Mbps	21dBm	24dBm	±2dB
	36Mbps	20dBm	23dBm	±2dB
	48Mbps	19dBm	22dBm	±2dB
	54Mbps	18dBm	21dBm	±2dB
2.4GHz 802.11n HT20	MCS 0	21dBm	24dBm	±2dB
	MCS 1	21dBm	24dBm	±2dB
	MCS 2	21dBm	24dBm	±2dB
	MCS 3	20dBm	23dBm	±2dB
	MCS 4	20dBm	23dBm	±2dB
	MCS 5	20dBm	23dBm	±2dB
	MCS 6	18dBm	21dBm	±2dB
	MCS 7	16dBm	19dBm	±2dB
2.4GHz 802.11n HT40	MCS 0	20dBm	23dBm	±2dB
	MCS 1	20dBm	23dBm	±2dB
	MCS 2	20dBm	23dBm	±2dB
	MCS 3	19dBm	22dBm	±2dB
	MCS 4	19dBm	22dBm	±2dB
	MCS 5	19dBm	22dBm	±2dB
	MCS 6	18dBm	21dBm	±2dB
	MCS 7	16dBm	19dBm	±2dB

	Data Rate	RX Specifications Sensitivity	Tolerance
2.4GHz 802.11b	1Mbps	-95dBm	±2dB
	2Mbps	-94dBm	±2dB
	5.5Mbps	-92dBm	±2dB
	11Mbps	-90dBm	±2dB
2.4GHz 802.11g	6Mbps	-94dBm	±2dB
	9Mbps	-93dBm	±2dB
	12Mbps	-92dBm	±2dB
	18Mbps	-90dBm	±2dB
	24Mbps	-88dBm	±2dB
	36Mbps	-85dBm	±2dB
	48Mbps	-81dBm	±2dB
	54Mbps	-80dBm	±2dB
2.4GHz 802.11n HT20	MCS 0	-93dBm	±2dB
	MCS 1	-91dBm	±2dB
	MCS 2	-89dBm	±2dB
	MCS 3	-84dBm	±2dB
	MCS 4	-83dBm	±2dB
	MCS 5	-78dBm	±2dB
	MCS 6	-78dBm	±2dB
	MCS 7	-76dBm	±2dB
2.4GHz 802.11n HT40	MCS 0	-92dBm	±2dB
	MCS 1	-88dBm	±2dB
	MCS 2	-85dBm	±2dB
	MCS 3	-82dBm	±2dB
	MCS 4	-79dBm	±2dB
	MCS 5	-75dBm	±2dB
	MCS 6	-75dBm	±2dB
	MCS 7	-73dBm	±2dB

RF Performance Table

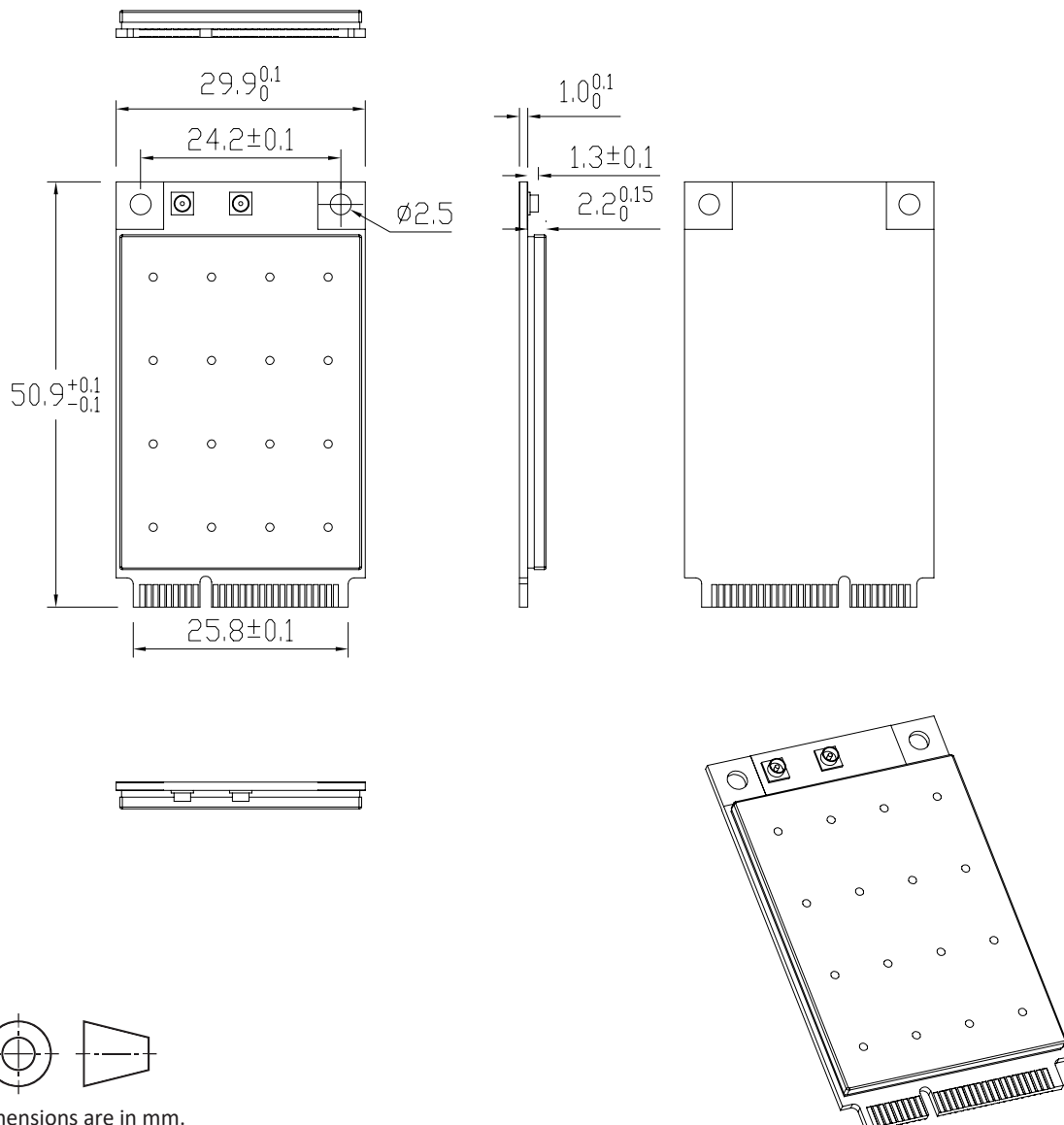
	Data Rate	TX Power (per chain)	TX Power (2 chains)	Tolerance
5GHz 802.11a	6Mbps	20dBm	23dBm	±2dB
	9Mbps	20dBm	23dBm	±2dB
	12Mbps	20dBm	23dBm	±2dB
	18Mbps	20dBm	23dBm	±2dB
	24Mbps	20dBm	23dBm	±2dB
	36Mbps	18dBm	21dBm	±2dB
	48Mbps	16dBm	19dBm	±2dB
	54Mbps	15dBm	18dBm	±2dB
5GHz 802.11n/ac HT20	MCS 0	19dBm	22dBm	±2dB
	MCS 1	19dBm	22dBm	±2dB
	MCS 2	19dBm	22dBm	±2dB
	MCS 3	18dBm	21dBm	±2dB
	MCS 4	18dBm	21dBm	±2dB
	MCS 5	17dBm	20dBm	±2dB
	MCS 6	16dBm	19dBm	±2dB
	MCS 7	14dBm	17dBm	±2dB
5GHz 802.11n/ac HT40	MCS 8	13dBm	16dBm	±2dB
	MCS 0	18dBm	21dBm	±2dB
	MCS 1	18dBm	21dBm	±2dB
	MCS 2	18dBm	21dBm	±2dB
	MCS 3	17dBm	20dBm	±2dB
	MCS 4	17dBm	20dBm	±2dB
	MCS 5	16dBm	19dBm	±2dB
	MCS 6	15dBm	18dBm	±2dB
5GHz 802.11ac HT80	MCS 7	14dBm	17dBm	±2dB
	MCS 8	13dBm	16dBm	±2dB
	MCS 9	13dBm	16dBm	±2dB
	MCS 0	18dBm	21dBm	±2dB
	MCS 1	18dBm	21dBm	±2dB
	MCS 2	18dBm	21dBm	±2dB
	MCS 3	17dBm	20dBm	±2dB
	MCS 4	17dBm	20dBm	±2dB
	MCS 5	16dBm	19dBm	±2dB
	MCS 6	15dBm	18dBm	±2dB
	MCS 7	14dBm	17dBm	±2dB
	MCS 8	13dBm	16dBm	±2dB
	MCS 9	13dBm	16dBm	±2dB

	Data Rate	RX Specifications Sensitivity	Tolerance
5GHz 802.11a	6Mbps	-94dBm	±2dB
	9Mbps	-94dBm	±2dB
	12Mbps	-92dBm	±2dB
	18Mbps	-90dBm	±2dB
	24Mbps	-86dBm	±2dB
	36Mbps	-84dBm	±2dB
	48Mbps	-81dBm	±2dB
	54Mbps	-80dBm	±2dB
5GHz 802.11n/ac HT20	MCS 0	-93dBm	±2dB
	MCS 1	-90dBm	±2dB
	MCS 2	-87dBm	±2dB
	MCS 3	-83dBm	±2dB
	MCS 4	-80dBm	±2dB
	MCS 5	-77dBm	±2dB
	MCS 6	-74dBm	±2dB
	MCS 7	-73dBm	±2dB
5GHz 802.11n/ac HT40	MCS 8	-71dBm	±2dB
	MCS 0	-90dBm	±2dB
	MCS 1	-88dBm	±2dB
	MCS 2	-85dBm	±2dB
	MCS 3	-82dBm	±2dB
	MCS 4	-79dBm	±2dB
	MCS 5	-75dBm	±2dB
	MCS 6	-73dBm	±2dB
5GHz 802.11ac HT80	MCS 7	-73dBm	±2dB
	MCS 8	-69dBm	±2dB
	MCS 9	-66dBm	±2dB
	MCS 0	-88dBm	±2dB
	MCS 1	-86dBm	±2dB
	MCS 2	-84dBm	±2dB
	MCS 3	-81dBm	±2dB
	MCS 4	-77dBm	±2dB
	MCS 5	-74dBm	±2dB
	MCS 6	-73dBm	±2dB
	MCS 7	-70dBm	±2dB
	MCS 8	-67dBm	±2dB
	MCS 9	-65dBm	±2dB

Connector Map



Mechanical Dimensions



Ordering Configuration

Item Code	Model	Description
WLE600VX 7AA000S	WLE600VX	2x2 802.11a/b/g/n/ac 2.4GHz/5GHz miniPCle card