

# 2x2 5GHz 11ac miniPCIe Radio

Model: WLE600V5-27-ESD

Revision: 1.04 IL  
Date: 2014,10,10



## Features

- Qualcomm-Atheros QCA9882,CUS223 (High Power) Reference Design
- Maximum 27dBm output power (per chain), 30dBm (aggregate)
- IEEE 802.11ac compliant & backward compatible with 802.11a/n
- 2X2 MIMO Technology & up to 867Mbps
- Built-in ESD Protection with ESD/EMP Immunity Threshold: 15KeV<sup>1</sup>
- MiniPCI Express 1.1 interface
- Supports Spatial Multiplexing, Cyclic-Delay Diversity (CDD), low-density parity check (LDPC), Maximal Ratio Combining (MRC), Space Time Block Code (STBC)
- Supports IEEE 802.11d, e, h, I, k, RO, v time stamp, and w standards
- Supports Dynamic Frequency Selection (DFS)
- Cards are individually calibrated for Quality Assurance
- Supported by either CompexWRT with Atheros Reference Wireless Driver OR OpenWRT with ath10k Wireless Driver on WPJ344

## Applications (combined with WPJ344)

- Indoor AP
- Outdoor AP
- 802.11ac/an CPE
- 802.11ac/an Point to Point
- Base Station

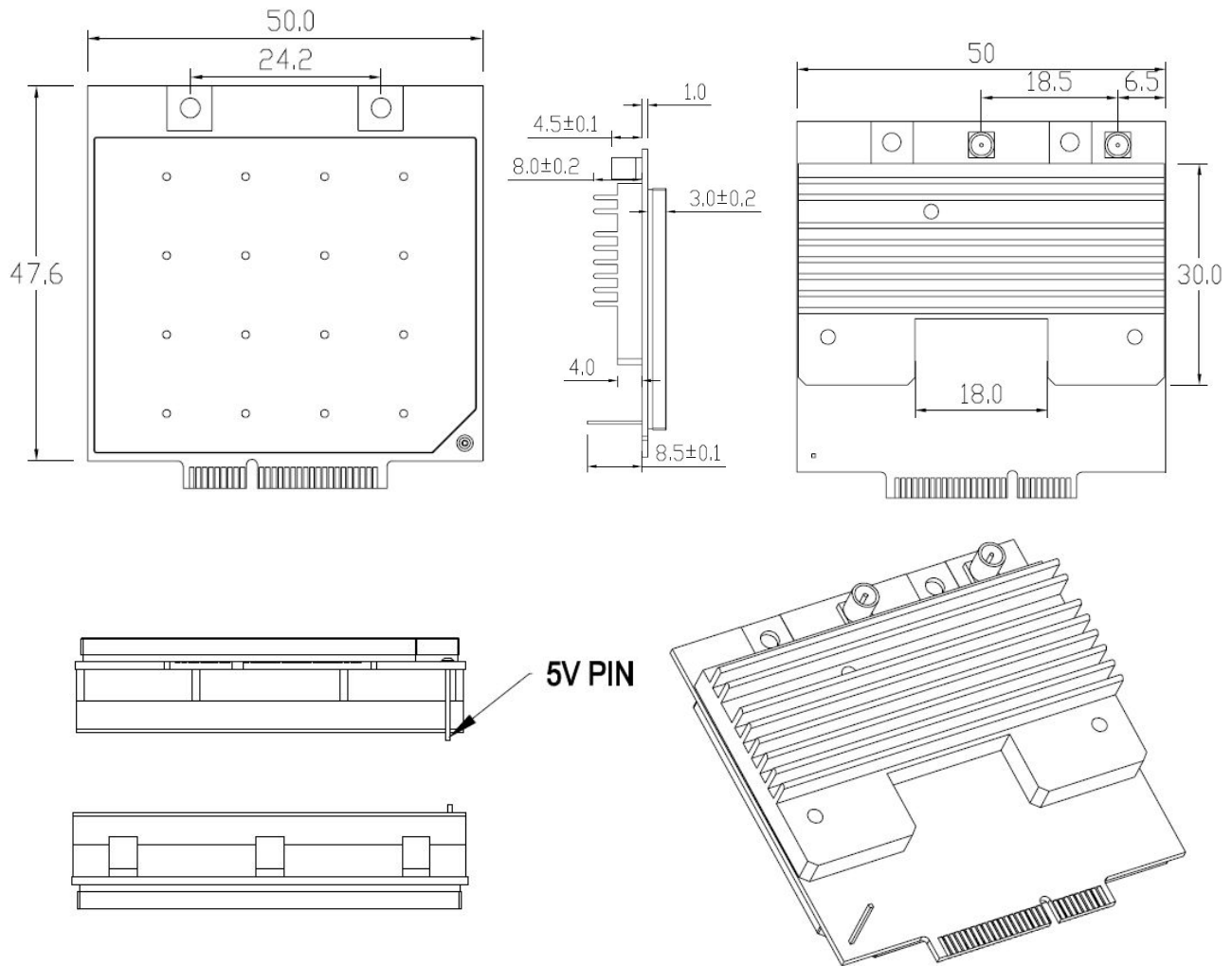
## Technical Specifications

System Information									
<b>Chipset</b>		Qualcomm-Atheros QCA9882							
<b>Host Interface</b>		PCI-Express 1.1 Standard							
<b>Operating Voltage</b>		3.3 VDC, 5V (compulsory and external) <sup>2</sup>							
<b>Power Consumption</b>		7.5W							
<b>Antenna Connector</b>		2 x MMCX Antenna Connector							
<b>Frequency Range</b>		5.180 ~ 5.825 GHz							
<b>Modulation Techniques</b>		OFDM: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM							
<b>Certifications</b>		CE, FCC							
<b>Temperature Range</b>		Operating: -20°C to 70°C;							
<b>Humidity</b>		Operating:5% to 95% (non-condensing)							
<b>Dimensions (mm)</b>		50.95 x 50 x 3.2 (H x W x D)							
TX Specifications									
	Data Rate	TX Power (per chain)	TX Power (2 chains)	Tolerance		Data Rate	TX Power (per chain)	TX Power (2 chains)	Tolerance
<b>802.11a</b>	6Mbps	27dBm	30dBm	±2dB	<b>11n HT20</b>	MCS 0	27dBm	30dBm	±2dB
	54Mbps	24dBm	27dBm	±2dB		MCS 7	23dBm	26dBm	±2dB
<b>11n HT40</b>	MCS 0	27dBm	30dBm	±2dB	<b>11ac HT20</b>	MCS 0	27dBm	30dBm	±2dB
	MCS 7	23dBm	26dBm	±2dB		MCS 9	22dBm	25dBm	±2dB
<b>11ac HT40</b>	MCS 0	27dBm	30dBm	±2dB	<b>11ac HT80</b>	MCS 0	27dBm	30dBm	±2dB
	MCS 9	22dBm	25dBm	±2dB		MCS 9	22dBm	25dBm	±2dB
RX Specifications									
	DataRate	Sensitivity	Tolerance		DataRate	Sensitivity	Tolerance		
<b>802.11a</b>	6Mbps	-96dBm	±2dB	<b>11n HT20</b>	MCS 0	-95dBm	±2dB		
	54Mbps	-84dBm	±2dB		MCS 7	-77dBm	±2dB		
<b>11n HT40</b>	MCS 0	-92dBm	±2dB	<b>11ac HT20</b>	MCS 0	-94dBm	±2dB		
	MCS 7	-77dBm	±2dB		MCS 9	-70dBm	±2dB		
<b>11ac HT40</b>	MCS 0	-91dBm	±2dB	<b>11ac HT80</b>	MCS 0	-90dBm	±2dB		
	MCS 9	-65dBm	±2dB		MCS 9	-61dBm	±2dB		

1 Module grounding cable included

2 Module requires an external 5V power source to the 5V pin. A cable is provided for connecting to the 5V source.

## Dimension Drawing



## Ordering Information

Item Code	Chipset	Form factor	Card Informations
WLE600V5-27 8AB000ESD	Atheros 9882	Wide size	2x2 11ac 5GHz High Power miniPCIe Radio