

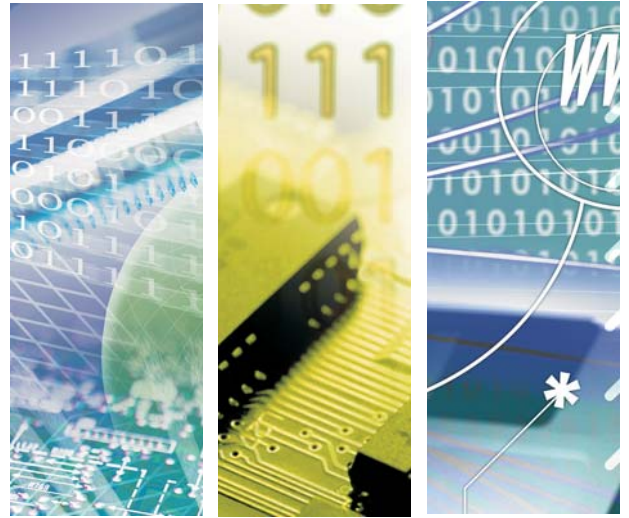


CPE102A

IEEE 802.11ac/abgn miniPCIe 2T2R Module



802.11ac/abgn miniPCIe, 2T2R



CPE102A

Introduction of Products

Bointec CPE102A is a WLAN module supporting IEEE 802.11 ac/abgn standard via the miniPCIe full size card.

The CPE102A is a highly integrated wireless local area network (WLAN) system-on-chip (SoC) for 2.4GHz and 5GHz applications. It enables high-performance 2x2 MIMO with two spatial streams for wireless demanding the highest robust link quality, maximum throughput and range such as Home Entertainment, Health Care, Monitor System or Industry and Enterprise applications. Thus, the CPE102A will be a perfect solution to meet these advanced conditions.

CPE102A is truly a cost-effective solution for the current wireless market with the powerful performance. Besides, it possesses 2X2 MIMO technology (2T2R). It can achieve the max throughput of 867Mbps based on its comprehensive modulation technique and supporting HT80. It is convenient for all users to use miniPCIe interface in order to assemble on customer's host board or custom boards. Based on the standard size module and robust setup scheme, CPE102A provides those advantages to enhance the value of our customer's target product.

Product Highlight

- Main Chip Qualcomm Atheros QCA9882
- IEEE 802.11 ac/abgn based on 2.4GHz and 5GHz frequency band
- 2x2 MIMO Technology (2T2R)
- Support 20MHz, 40MHz and 80MHz Bandwidth
- Support 256QAM Modulation
- Max throughput 867Mbps
- 30 X 50.8 mm size with the same mounting hole location as the standard full mini card
- 2 SMT Ultra-miniature coaxial connectors (U.FL type)
- Operation Voltage: 3.3V
- Operating temperature: -20~70 degrees C
- RoHS compliance



Specification

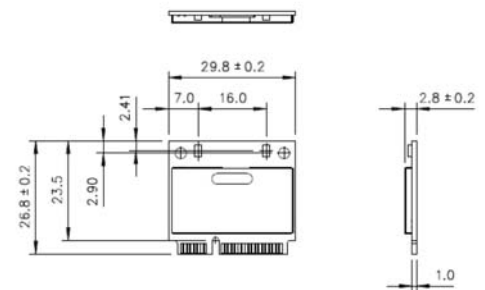
Specifications																	
Chipset	Qualcomm Atheros QCA9882																
Data Rate	11b : up to 11Mbps 11a/g : up to 54Mbps 11n : up to 300Mbps 11ac : up to 867Mbps																
Host Interface	Mini PCIe																
Radio Operation	Output Power Tx +/- 2dB Receiver Sensitivity Rx +/- 2dB																
IEEE 802.11 b/g/n	<table border="0"> <tr> <td>20dBm @ 1~11Mbps</td> <td>-90dBm @ 1~11Mbps</td> </tr> <tr> <td>21dBm @ 6~24Mbps</td> <td>-91dBm @ 6Mbps</td> </tr> <tr> <td>18dBm @ 54Mbps</td> <td>-90dBm @ 12Mbps</td> </tr> <tr> <td>24/23dBm @ MCS0 (HT20/40)</td> <td>-75dBm @ 54Mbps</td> </tr> <tr> <td>22/21dBm @ MCS7 (HT20/40)</td> <td>-92/-90dBm @ MCS0 (HT20/40)</td> </tr> <tr> <td></td> <td>-76/-73dBm @ MCS7 (HT20/40)</td> </tr> </table>	20dBm @ 1~11Mbps	-90dBm @ 1~11Mbps	21dBm @ 6~24Mbps	-91dBm @ 6Mbps	18dBm @ 54Mbps	-90dBm @ 12Mbps	24/23dBm @ MCS0 (HT20/40)	-75dBm @ 54Mbps	22/21dBm @ MCS7 (HT20/40)	-92/-90dBm @ MCS0 (HT20/40)		-76/-73dBm @ MCS7 (HT20/40)				
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Antenna Interface	U.FL x2 for 2T2R																
Dimension	26.75 (L) mm X 29.79 (W) mm																
Operating Voltage	3.3V +/- 5%																
Operating Temperature	Operating Temperature Range: -20°C to 70°C Storage Temperature Range: -40°C to +80°C Operating Humidity (non-condensing): 10% ~ 90% Storage Humidity (non-condensing): 5% to 90%																

Product quick glance

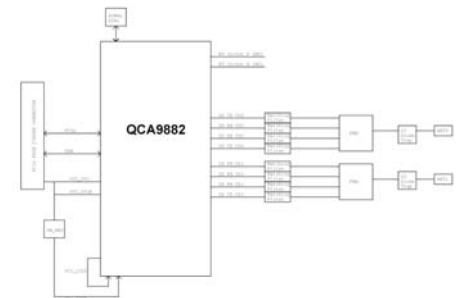


ME Drawing/placement

PCB Dimension



Block Diagram



Ordering Information

PART NUMBER	DESCRIPTION
TFGA-CPE102A0-11	Finished non packing, Bointec, CPE102A
T.CPE102A	CPE102A, Single packed
T.CPE102A-DK	CPE102A-DK, development kit packed



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