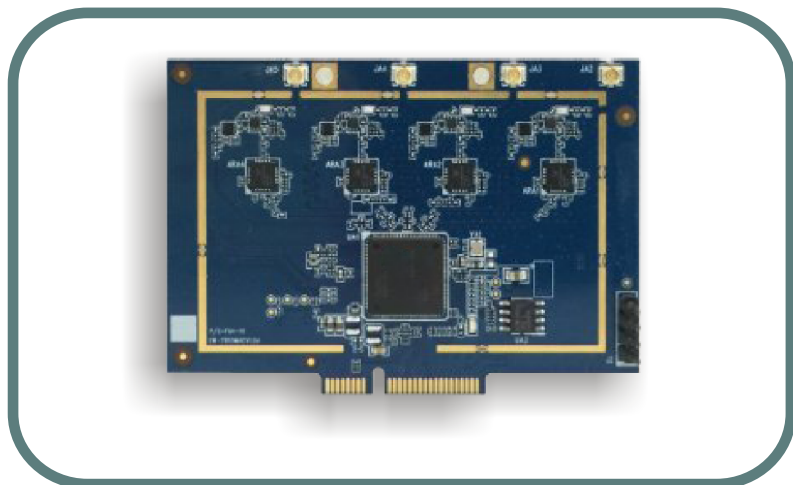




CPE106A

IEEE 802.11an/AC 4T4R miniPCIe Module



802.11an/AC 4X4 ,miniPCIe module



CPE160A

Introduction of Products

Bointec CPE106A is an 802.11ac/a/n 5GHz Single-Band Mini PCI express module based on Qualcomm Atheros QCA9984 chipset and Skyworks power amplifier. It supports 4T4R (4x4) technology, which runs up to 1.73Gbps (11ac VHT80 MCS9). The CPE106A supports 20/40/80MHz and 256-QAM to maximize bandwidth efficiency.

Product Highlight

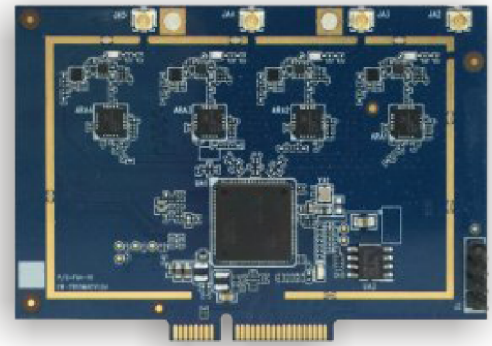
- Qualcomm Atheros QCA9984
- CUS239 Reference Design
- IEEE 802.11ac compliant & backward compatible with 802.11a/n, up to 1.73Gbps
- 2 spatial streams (2SS) MIMO 160MHz and 80+80MHz bandwidth support
- 4 spatial streams (4SS) Multi-user MIMO (MU-MIMO)
- 802.11ac explicit transmit beamforming (TxBF) and legacy implicit TxBF for both beamformer and bformee
- MiniPCI Express 2.0 interface
- 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, j, k, r, u, v time stamp, w, and z standards
- Supports Dynamic Frequency Selection (DFS)
- Designed for High Bandwidth Enterprise Wireless Access Points



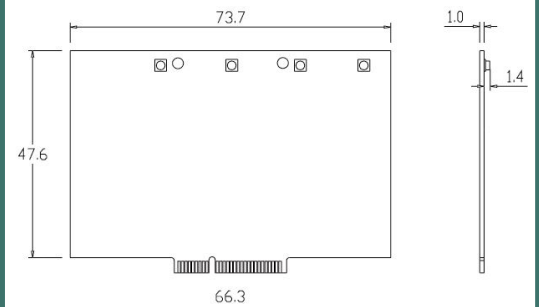
Specification

Standard	802.11ac/a/n		
Chipset	Qualcomm Atheros QCA9984		
Host Interface	Mini PCIe		
Data Rates	802.11a: 6-54Mbps / 802.11n : MCS0-31 / 802.11ac : VHT80 MCS0-9		
Amplifiers	4x 5GHz High power PA (SKY85405)		
Operating Voltage	DC 5V		
Antenna Connectors	4x I-PEX Connectors reserved for 5GHz Antenna		
Power Consumption	Continue TX : 8.84W Continue RX : 4.5W		
PCB dimensions	48mm x 73 mm		
Operating Temperature	Commercial Grade :0°C to + 50 °C (Operating temperature) Commercial Grade:-20°C to + 70 °C (Storing Temperature)		
Wireless Standard	IEEE 802.11 ac/a/n		
Operating Frequency	ISM band: 5.150~5.825(GHz) *subject to local regulations		
Operation Channels	5GHz : Country dependent for the following ranges: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 149, 153, 157, 161, 165		
	Transmit Power	Receiver Sensitivity	
	(The max. power may be different depending on local regulations)	(Typical)	
	802.11a	802.11a	
	23dBm @ 6Mbps	-91dBm@6Mbps	
	23dBm @ 9Mbps	-91dBm@9Mbps	
	22dBm @ 12Mbps	-89dBm@12Mbps	
	22dBm @ 18Mbps	-84dBm@18Mbps	
	21dBm @ 24Mbps	-83dBm@24Mbps	
	21dBm @ 36Mbps	-80dBm@36Mbps	
	20dBm @ 48Mbps	-77dBm@48Mbps	
	20dBm @ 54Mbps	-75dBm@54Mbps	
	802.11a/n(5G)	802.11n(5G)	
	23dBm@MCS0 (HT20/40)	-91dBm@MCS0 (HT20)	-89dBm@MCS0 (HT40)
	23dBm@MCS1 (HT20/40)	-89dBm@MCS1 (HT20)	-86dBm@MCS1 (HT40)
	22dBm@MCS2 (HT20/40)	-88dBm@MCS2 (HT20)	-85dBm@MCS2 (HT40)
	22dBm@MCS3 (HT20/40)	-83dBm@MCS3 (HT20)	-81dBm@MCS3 (HT40)
	21dBm@MCS4 (HT20/40)	-78dBm@MCS4 (HT20)	-79dBm@MCS4 (HT40)
	21dBm@MCS5 (HT20/40)	-77dBm@MCS5 (HT20)	-75dBm@MCS5 (HT40)
	20dBm@MCS6 (HT20/40)	-76dBm@MCS6 (HT20)	-74dBm@MCS6 (HT40)
	20dBm@MCS7 (HT20/40)	-75dBm@MCS7 (HT40)	-73dBm@MCS7 (HT40)
	802.11ac	802.11ac	
	23dBm@MCS0 (VHT20/40)	22dBm@MCS0 (VHT160)	-91dBm@MCS0 (VHT20)
	23dBm@MCS1 (VHT20/40)	22dBm@MCS1 (VHT160)	-89dBm@MCS1 (VHT20)
	22dBm@MCS2 (VHT20/40)	21dBm@MCS2 (VHT160)	-87dBm@MCS2 (VHT20)
	22dBm@MCS3 (VHT20/40)	21dBm@MCS3 (VHT160)	-82dBm@MCS3 (VHT20)
	21dBm@MCS4 (VHT20/40)	20dBm@MCS4 (VHT160)	-78dBm@MCS4 (VHT20)
	21dBm@MCS5 (VHT20/40)	20dBm@MCS5 (VHT160)	-77dBm@MCS5 (VHT20)
	20dBm@MCS6 (VHT20/40)	19dBm@MCS6 (VHT160)	-76dBm@MCS6 (VHT20)
	20dBm@MCS7 (VHT20/40)	19dBm@MCS7 (VHT160)	-75dBm@MCS7 (VHT20)
	23dBm@MCS0 (VHT80)	18dBm@MCS8 (VHT160)	-89dBm@MCS0 (VHT40)
	23dBm@MCS1 (VHT80)	17dBm@MCS9 (VHT160)	-87dBm@MCS1 (VHT40)
	22dBm@MCS2 (VHT80)		-82dBm@MCS2 (VHT40)
	22dBm@MCS3 (VHT80)		-78dBm@MCS3 (VHT40)
	21dBm@MCS4 (VHT80)		-77dBm@MCS4 (VHT40)
	21dBm@MCS5 (VHT80)		-76dBm@MCS5 (VHT40)
	20dBm@MCS6 (VHT80)		-75dBm@MCS6 (VHT40)
	20dBm@MCS7 (VHT80)		-71dBm@MCS7 (VHT40)
	19dBm@MCS8 (VHT80)		-89dBm@MCS0 (VHT80)
	18dBm@MCS9 (VHT80)		-87dBm@MCS1 (VHT80)
			-64dBm@MCS9 (VHT160)

Product quick glance



ME Drawing/placement



Application



Ordering Information

PART NUMBER	DESCRIPTION



We are Your Partner more than Business



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