

1. PRODUCT INTRODUCTION

Standard	IEEE802.11ac/a/b/g/n, Bluetooth V4.1,V4.0 LE, V3.0+HS, V2.1+EDR
Chipset solution	QCA6174A-5
Radio stream [Note1]	2T2R (Support WiFi/BT co-existence)
Antenna Type / con.	IPEX MHF4 connector
Bus Interface	WiFi: PCI Express BT: USB
Form Factor	M.2 2230
Data Rate	WiFi: 802.11b: 11, 5.5, 2, 1 Mbps; 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11a: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11n: MCS 0 to 15 for HT20MHz MCS 0 to 15 for HT40MHz 802.11ac: MCS 0 to 9 for VHT20MHz MCS 0 to 9 for VHT40MHz MCS 0 to 9 for VHT80MHz BT: 1 Mbps, 2Mbps and Up to 3Mbps EDR
Spreading /Modulation Techniques	WiFi: 802.11a: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11g: OFDM (BPSK,QPSK,16-QAM,64-QAM) 802.11n: OFDM (BPSK,QPSK,16-QAM,64-QAM) 802.11ac: OFDM (BPSK,QPSK,16-QAM,64-QAM, 256-QAM) BT: Header: GFSK Payload 2M: 4-DQPSK Payload 3M: 8-DPSK
Frequency Range [Note2]	WiFi: 11b/g/n: 2.412GHz ~ 2.484GHz 11ac/a/n: 5.15GHz ~ 5.85GHz BT: 2.402GHz ~ 2.480 GHz

Transmit Output Power (Tolerance: +/-2dBm)	<p>WiFi:</p> <p>802.11a: 11dBm@54Mbps</p> <p>802.11b: 19dBm@11Mbps</p> <p>802.11g: 16dBm@54Mbps</p> <p>802.11gn HT20: 16dBm@MCS7</p> <p>802.11gn HT40: 15dBm@MCS7</p> <p>802.11an HT20: 9dBm@MCS7</p> <p>802.11an HT40: 9dBm@MCS7</p> <p>802.11ac VHT80: 7dBm@MCS9</p> <p>BT: (Class 2 Device)</p> <p>0 ≤ Output Power ≤ +4 dBm</p>
Receiver Sensitivity	<p>WiFi:</p> <p>802.11b: ≤-81dBm@11Mbps</p> <p>802.11g: ≤-66dBm@54Mbps</p> <p>802.11a: ≤-66dBm@54Mbps</p> <p>802.11gn HT20: ≤-65dBm@MCS7</p> <p>802.11gn HT40: ≤-61dBm@MCS7</p> <p>802.11an HT20: ≤-65dBm@MCS7</p> <p>802.11an HT40: ≤-61dBm@MCS7</p> <p>802.11ac VHT80: ≤-56dBm@MCS9</p> <p>BT:</p> <p>< 0.1% BER at -70dBm</p>
Operating Voltage	DC 3.3V
Power Consumption	<p>TX Mode: 405 mA</p> <p>RX Mode: 200 mA</p>
Temperature Range	-10°~+70°C (Operating), -40°~+85°C (Storing) [Note3]
Humidity (non-condensing)	5~90%(Operating), 5~90 % (Storing) [Note3]
Security	WEP / WPA / WPA2,802.1X
OS supported	Win7/Win8.1/Win10

Note:

1. For Radio stream with diversity or MIMO design, all RF connectors on the module must be fitting antennas in order to guarantee the module performance.
2. The frequency range is subject to local regulations.
3. The storing condition is only for product functionality, no included for parts appearance.

2. HARDWARE SPECIFICATION

2.1 Hardware Dimension

Dimension(L x W x H): 22 mm X 30 mm x 2.0 mm (Tolerance:±0.5mm)

