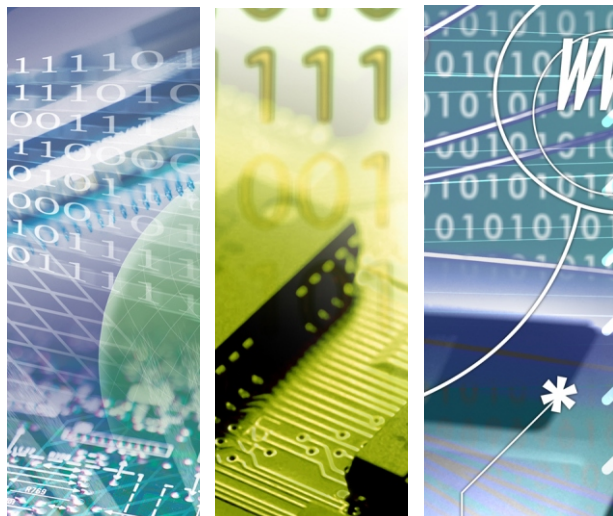
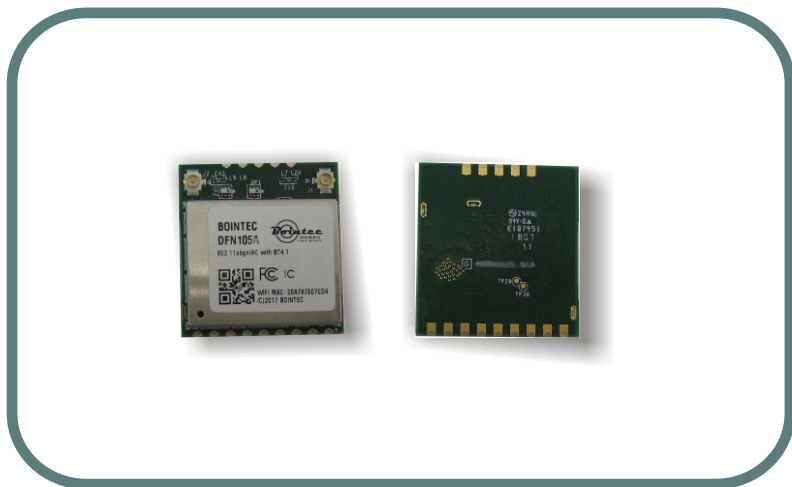




DFN105A

IEEE 802.11abgn/AC BT4.1 SMT USB



DFN105A

802.11abgn/AC 2x2 ,Bluetooth4.1 USB SMT module

Introduction of Products

Bointec DFN105A is an dual band 802.11ac/b/g/n Dual-Band WiFi + Bluetooth USB Interface. It is a 2T2R (WiFi/BT co-existence supported) technology, with Enterprise level security supporting: WPA, WPA2. Bointec DFN105A lets you move at the speed of life with faster speeds (up to 867 Mbps, 1~3Mbps EDR for Bluetooth), higher capacity, broader coverage and longer battery life. Dramatically reshapes your connected experience.

Higher throughput wireless networking-- adopting the latest 802.11ac solution, Bointec DFN105A is ideal for next-generation high throughput enterprise networking solution.

Bointec DFN105A incorporated with advanced security encryption, such as WPA, WPA2, and 802.1x for secure wireless connection.

Product Highlight

BT Feature:

- Bluetooth V4.1LE, V4.0 LE, V3.0+HS, Bluetooth V2.1+EDR system, backwards compatible with BT version of 1.1, 1.2 and 2.0
- Support Class I or class2 transmitter operation
- BT transmission speed including 1M, 2M and 3Mbps EDR operations
- Support for Simple Pairing (SP) and Enhanced Inquiry Response (EIR) function
- Support for SCATTERNET and PICONET
- HCI USB interface to work with Windows upper layer stack

Wi-Fi Feature:

- Operate at ISM frequency Band(2.4/ 5 GHz)
- IEEE Standards Support802.11ac, 802.11a, 802.11b, 802.11g and 802.11n
- Wi-Fi using USB interface
- Enterprise level security supporting: WPA, WPA2
- Support 2 transmission and 2 receiving, transmission rate can up to 867Mbps(Physical Rate) in downstream and upstream

Common Feature:

- Wake on WLAN/Bluetooth function
- Two RF connector for external antenna
- Form Factor: SMT solder down Single-side process (stamp module)
- Support for BT & WLAN Co-existence
- 14 pins I/O stamp module
- WLAN / Bluetooth RF interface
- USB interface (USB 2.0 for WLAN, and USB 1.1 for Bluetooth)
- 3.3V/1.5A power supply required
- RoHS Compliance -Halogen Free Compliance



Specification

Item	Key specifications
Main chipset	QCAQCA9378-7
TX/RX	2T2R
Frequency range	2.400 ~ 2.497GHz, 5.15GHz ~ 5.85GHz
Modulation technique	<ul style="list-style-type: none"> > 802.11 a/b/g DSSS (DBPSK, DQPSK, CCK) OFDM (BPSK, QPSK, 16-QAM, 64-QAM) DSSS (Direct Sequence Spread Spectrum) with DBPSK (Differential Binary Phase Shift Keying 1Mbps), DQPSK (Differential Quaternary Phase Shift Keying 2Mbps), and CCK (Complementary Code Keying 5.5&11Mbps), and OFDM (Orthogonal Frequency Division Multiplexing with BPSK for 6.9Mbps, QPSK for 12,18Mbps, 16QAM for 24,36Mbps, 64QAM for 48,54Mbps) > 802.11n a/g OFDM (BPSK, QPSK, 16-QAM, 64-QAM) > 802.11 ac OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)
Host interface	> USB 2.0

Operation	> 3.3 V DC +/-5% (including voltage ripple)			
Current consumption @3.3V, 25°C	Mode	Average	Peak	
		2.4 GHz	5 GHz	5 GHz
	WLAN Tx	850 mA	1080 mA	1260 mA
	Driver disable	110 mA	220 mA	
	Standby	100 mA	200 mA	
	WLAN+BT			
	*WLAN Tx/Rx means continuous Tx/Rx			
	**Current consumption, measured on PC platform.			

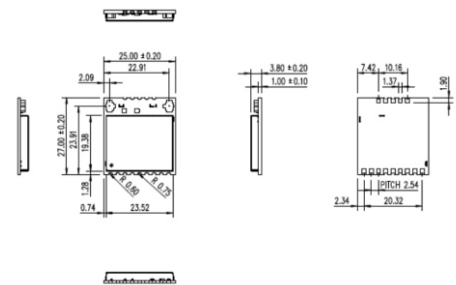
Item	Key specifications		
Main chipset	> QCAQCA9378-7		
Compliance	> Bluetooth v4.1 LE		
Frequency	> 2402 ~ 2480 MHz		
Initial carrier frequency	> +/- 20 kHz (typical)		
Modulation	> Frequency hopping, 1600 hops/sec		
Channel	> 1MHz		
Channels	> 79 channels for Bluetooth, 40 channels for BLE		
Operation	> 3.3V +/- 5% (including voltage ripple)		
Current consumption @3.3V, 25°C		Avg (mA)	Max (mA)
	Idle mode	160	310
	Continuous DH5 TX	220	370
	Continuous 2DH5 TX	220	370
	Continuous 3DH5 TX	220	370

Output power (dBm)	> Class 1, BT output power is adjusted by E _W .
Sensitivity	> -80 dBm (typ.) for pi/4-DQPSK, 0.1% BER
Operation	> -10°C ~ 60°C
Storage	> -35°C ~ 70°C, R.H.: 90%
RF port	> 1 RF connector (co-used with WLAN ANT-0) for external antenna
PID/VID	> PID: 3004, VID: 0CF3

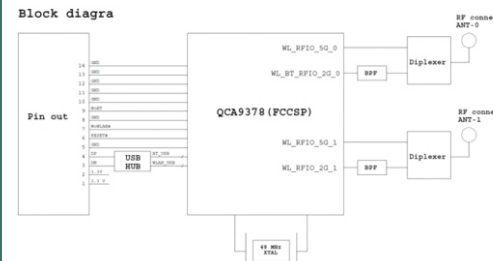
Product quick glance



ME Drawing/placement



Block Diagram



Ordering Information

PART NUMBER	DESCRIPTION

Bointec Authorized Distributer



We are Your Partner more than Business



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