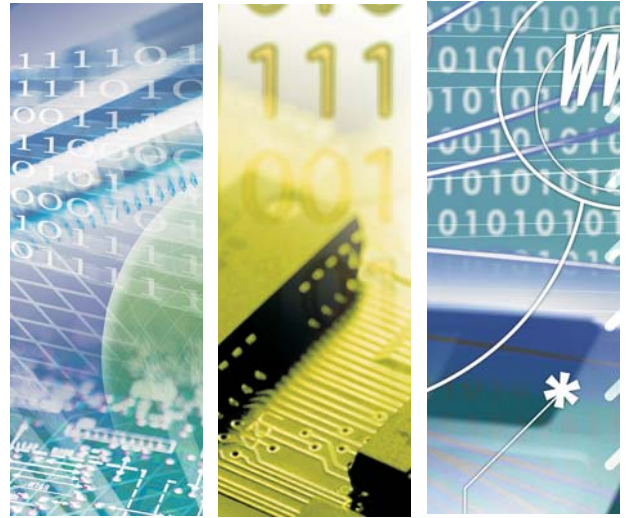
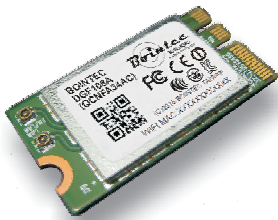




# DGF108A

802.11ac/abgn WiFi with BT4.1 Combo NGFF Card



DGF108A

Complete Solution for WiFi and Bluetooth.

## Introduction of Products

Bointec DGF108A is an dual band 802.11ac/a/b/g/n Dual-Band WiFi + Bluetooth NGFF adapter. It is a 2T2R (WiFi/BT co-existence supported) technology, with 20/40/80MHz and 256-QAM to maximize bandwidth.

Bointec DGF108A 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 DGF108A is ideal for next-generation high throughput enterprise networking solution.

As usual DGF108A incorporated with advanced security encryption, such as WEP, WPA, WPA2, and 802.1x for secure wireless connection.

## Product Highlight

BT Feature:

- Bluetooth V4.1, V4.0 LE, V3.0+HS, V2.1+EDR system, backwards compatible
- Support Class I
- BT transmission speed including 1M, 2M and 3Mbps EDR operations
- Support for Simple Pairing (SP) and Enhanced Inquiry Response (EIR)function-Support for SCATTERNETandPICONET
- HCI USB interfaceto 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, 802.11gand 802.11n
- Enterprise levelsecurity supporting: WPA, WPA2-Support 2transmission and 2receiving,up to 867Mbps(Physical Rate)in downstream and upstream



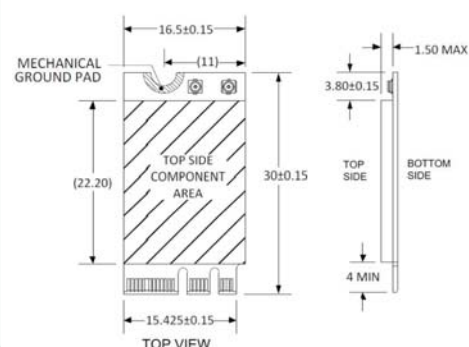
# Specification

General	
Bluetooth	
Standard	Bluetooth V4.1, V4.0LE, V3.0+HS, V2.1+EDR,
Bus Interface	USB1.1
Data Rate	1 Mbps, 2Mbps and Up to 3Mbps
Modulation Scheme	GFSK, $\pi/4$ -DQPSK and 8-DPSK
Frequency Range	2.402~2.480 GHz
Transmit Output Power	0 ≤ Output Power ≤ +10; Class 1 Device
Receiver Sensitivity	< 0.1% BER at -70dBm
Software	Bluetooth Suite
WiFi	
Standard	IEEE802.11ac, IEEE802.11a, IEEE802.11b, IEEE 802.11g, IEEE 802.11n
Bus Interface	PCI Express
Data Rate	802.11a: 54, 48, 36, 24, 18, 12, 9, 6 Mbps
	802.11b: 11, 5.5, 2, 1 Mbps
	802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps
	802.11n: MCS 0 to 15
	802.11ac: MCS 0 to 9
Media Access Control	CSMA/CA with ACK
Modulation Techniques	802.11ac: 256QAM, 64QAM, 16QAM, QPSK, BPSK
	802.11a: 64QAM, 16QAM, QPSK, BPSK
	802.11b: CCK, DQPSK, DBPSK
	802.11g: 64QAM, 16QAM, QPSK, BPSK
	802.11n: BPSK, QPSK, 16QAM, 64QAM
Network Architecture	Ad-hoc mode (Peer-to-Peer )
	Infrastructure mode
Operation Channel	5GHz
	12: – United States
	19: – Europe
	8: – Japan
	2.4GHz
	11: (Ch. 1-11) – United States
	13: (Ch. 1-13) – Europe
	14: (Ch. 1-14) – Japan
Frequency Range	802.11a / ac: 5.15~5.85 GHz
	802.11bg :2.412 ~ 2.4835 GHz
Electronics characteristics	
Operating Voltage	3.3 V ±9% I/O supply voltage
OS Supported	Microsoft Windows
Antenna Type	Dual MHF4 Antenna Connectors
Operating Temperature	-10° ~ +70°C
Storage Temperature	-40° ~ +80°C
Operating Humidity	15%~95%, non-condensing
Storage Humidity	Max.95%, non-condensing

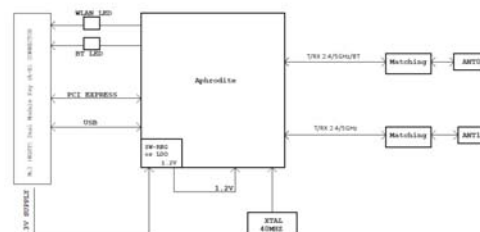
## Product quick glance



## ME Drawing/placement



## Block diagram



## Ordering Information

Part Number	System Description
T.DGF108A	DGF108A, Single packed
T.DGF108A-DK	DGF108A-DK, Single packed development kit packed
TFGA-DGF108AA-11	finished non packing, Bointec, DGF108A



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