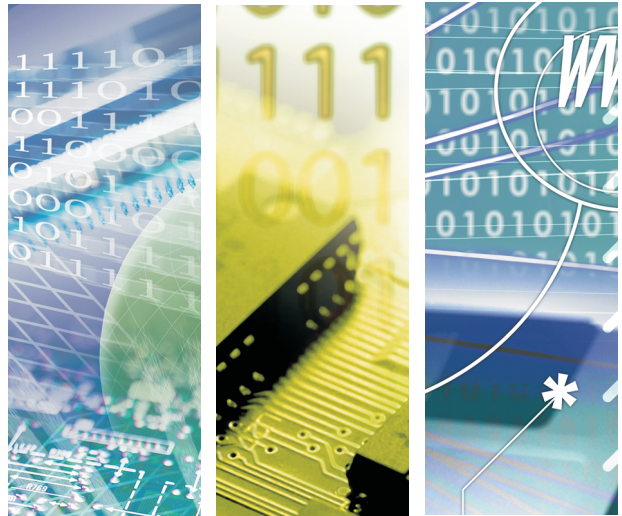
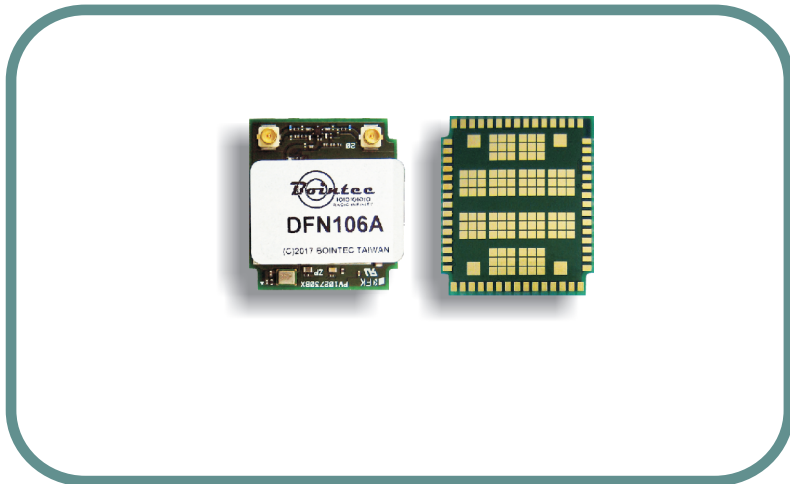




# DFN106A

IEEE 802.11abgn/AC BT4.1 SMT(Industrial)



DFN106A

802.11abgn/AC 1x1 ,Bluetooth4.1 SDIO SMT module, industrial grade

## Introduction of Products

The Bointec DFN106A is a dual-band IEEE802.11a/b/g/n/ac WLAN plus Bluetooth 4.1+HS EDR/BLE “Smart Ready”SDIO module based on the Qualcomm Atheros System-on-Chip (SoC). It integrates a QCA9377 SoC with MAC, Baseband, RF, RF front end, and peripheral circuitry (power management unit, a 48 MHz reference clock crystal etc.).

DFN106A operates on a single regulated 3.3V power supply. The DFN106A has a 50 ohm U.FL connector as a connection interface for an external antenna.

DFN106A supports 802.11ac multi-user MIMO (Wave 2) feature which can increase the overall WLAN system performance. DFN106A provides an SDIO 3.0 interface for WLAN and a hi-speed UART interface for BT.

## Product Highlight

- Main Chip:QCA9377-3
- Low Power Dual-Band 1x1 Module for Wi-Fi & BT
- 802.11 a/b/g/n/ac Wave 2 MU-MIMO
- Bluetooth 4.1 BR/EDR/LE(Class 2), and backward compatibility with BT 1.x, BT2.x, BT3.x, and BT4.0
- SDIO 3.0 as the Wireless LAN Host Interface and UART as the BT host interface
- Support 20MHz/40MHz at 2.4GHz and supports 20MHz,40MHz, and 80MHz at 5GHz
- Supports UART as the host IF of Bluetooth
- Calibrated Tx Power per module
- +3.3V main power supply and selectable +1.8V/3.3V IO power supply (VDD\_GPIO)
- FCC/IC/ETSI/TELEC modular certification
- Connector mount and surface mount versions



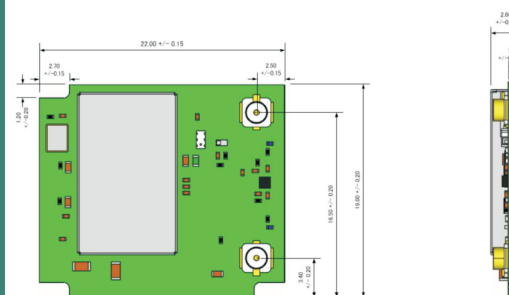
# Specification

WiFi General Specifications				
Items	Specifications	Units	Remarks	
Main Chip	QCA9377-3	-		
Frequency Band	2.4GHz/5GHz	-		
Connector Type	SMT:60 pins direct solder pads	-		
Antenna Port	MHF Connector x2	pcs	Chip antenna	
Antenna Port Impedance	50 +/-20%	$\Omega$	MHF Connector VSWR < 2.6	
Device Interfaces	SDIO v3.0	-	For Wireless LAN	
	UART	-	For Bluetooth, up to 4Mbps	
RF Interface	IEEE802.11a/b/g/n/ac	-	IEEE802.11-2012	
		-	IEEE802.11ac-2013	
	Bluetooth 4.1 BR/EDR/LE	-	Max antenna gain +5dBi@2.4GHz	
Weight	1.4	g	Typ.	
Dimensions	W x H x D	19.0x22.0x2.6	m	
Bluetooth General Specifications				
Items	Specifications	Units	Remarks	
Chipset	QCA9377-3 (Qualcomm Atheros)	-		
Core Specification	Bluetooth 4.1	-		
Operating Frequency Range	Mode	Min	Max	
	BR/EDR/LE	2402	2480	MHz
Frequency Step	BR/EDR	1		MHz Ch.1-Ch.79
	LE	2		MHz Ch.0-Ch.39
Modulation Type	GFSK(1Mbps), $\pi/4$ DQPSK(2Mbps),8DQPSK(3Mbps)	-		
Packet Type	Common	NULL,POLL,FHS		-
		DM1,DM3,DM5,AUX1,		
	ACL	DH1,DH3,DH5,2DH1,2DH3,2DH5		-
		3DH1,3DH3,3DH5		
Encryption	SCO	HV1,HV2,HV3,DV,EV3,2EV3		-
	E0	128		bits BR/EDR
	AES	128		bits LE

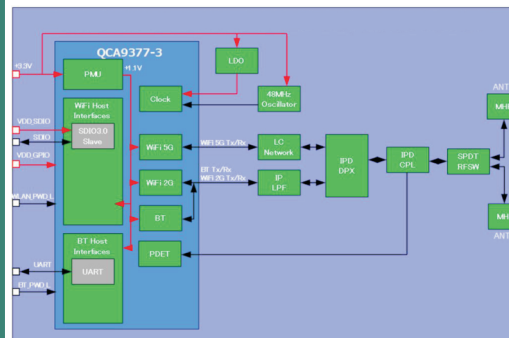
## Product quick glance



## ME Drawing/placement



## Block Diagram



## Ordering Information

PART NUMBER	DESCRIPTION

Bointec Authorized Distributer



**We are Your Partner more than Business**



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