

USER MANUAL_V1

The device is a fully self-contained small form-factor, single stream, 802.11 b/g/n wifi module, which provides a wireless interface to any equipment with a UART interface for data transfer. It supports AP and STA wireless networking and support WIFI Direct mode. It integrates MAC, baseband processor, RF transceiver with power amplifier in hardware and all wifi protocol and configuration functionality and networking stack, in embedded firmware to make a fully self-contained 802.11 b/g/n wifi solution for a variety of applications.

Device Features

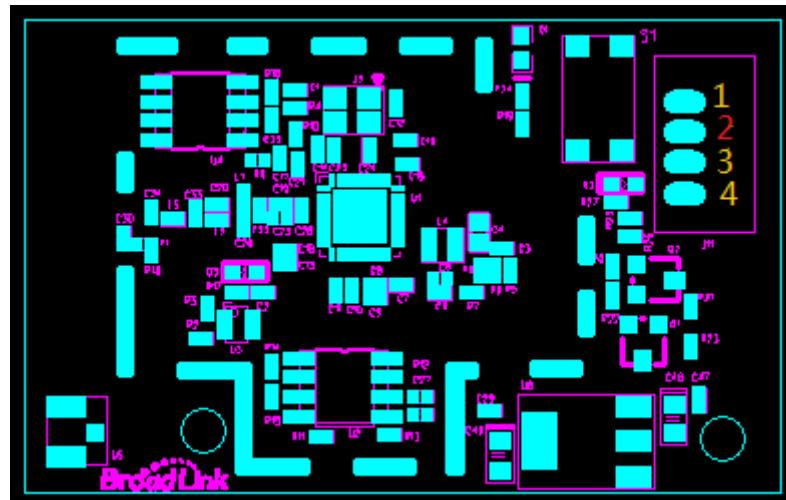
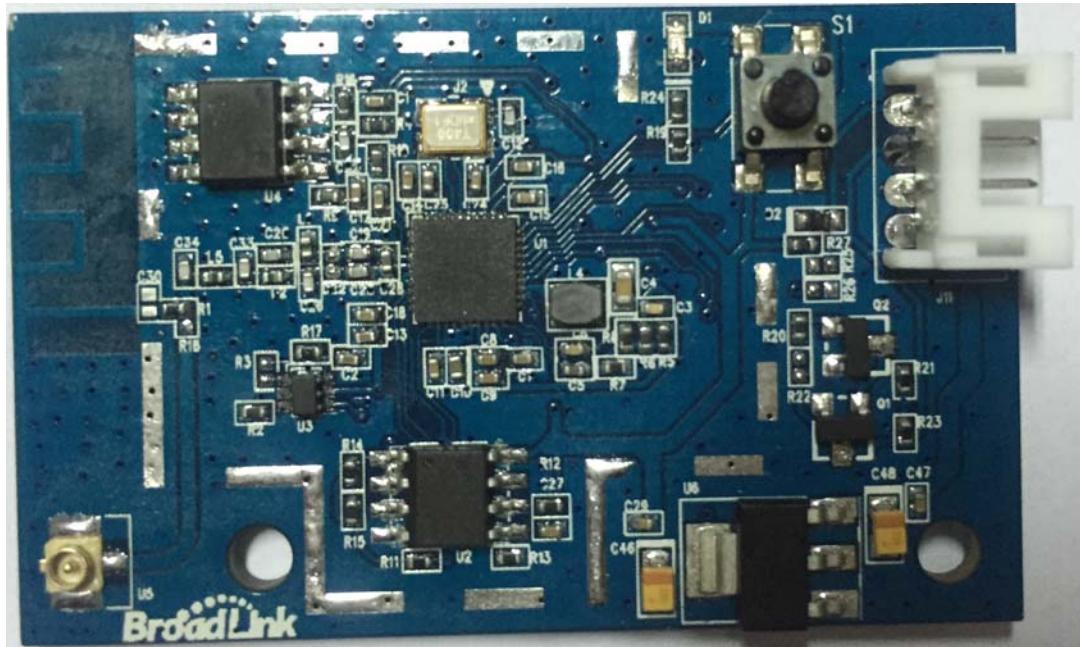
Single stream WIFI @2.4G with support for WEP security mode as well as WPA/WPA2
Fully self-contained serial-to-wireless functionality
Support IEEE802.11 b/g/n wireless standards
Support work as STA/AP
Support smart configuration
Support PCB/External antenna option
Small size:49.6mm x 31mm x 4mm

Device parameters

Class	Item	Parameters
Wireless	Wireless standard	802.11 b/g/n
	Frequency range	2.412GHz~2.472GHz For CE 2.412GHz~2.462GHz For FCC
	Transmit Power	802.11b:16dBm 802.11g:14dBm 802.11n:13dBm
	Receiver Sensitivity	802.11b<-78dBm 802.11g<-68dBm 802.11n<-66dBm
	PCB antenna gain	2dB
Hardware	Operating voltage	5V
	Operating current	Max(tx):~240mA
	OPERATING temp	-10~70 °C
	size	49.6mm x 31mm x 4mm
	VIL	≤0.3VCC
	VIH	≥0.7VCC
	ESD(Human Body Model)	2kv@25 °C
	ESD(Charged Device Model)	500v@25 °C
software	Network type	STA/AP
	Security mechanisms	WEP/WPA/WAP2
	Encryption	WEP64/WEP128/TKIP/AES
	Reserved resource	

	Network protocol	IPv4,TCP/UDP/DNS/DHCP
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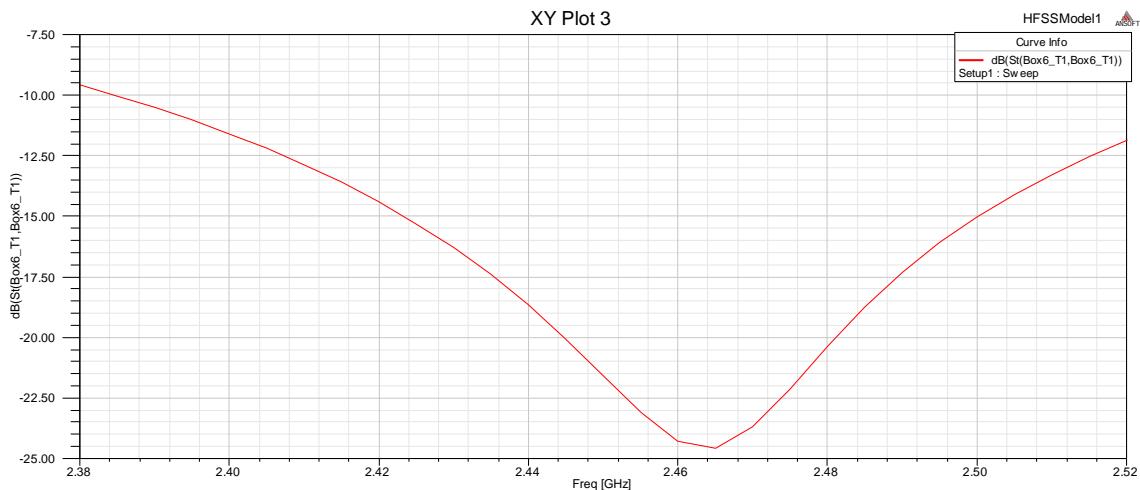
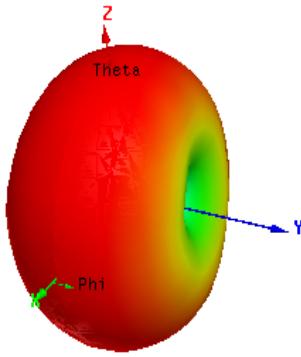
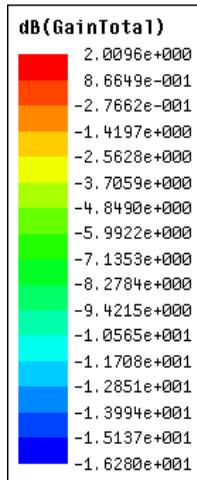
Hardware



(Unit: mm)

Pin assignment

Pin	Pin name	Description	Type	Note
Pin4	VDD	VCC 5V	POWER	UART0 Only for Passthrough
Pin3	GND	GND	POWER	
Pin2	UART0_TX	UART0_TX	O	
Pin1	UART0_RX	UART0_RX	I	



The device also supports external antenna. The parameters required are as followed:

Frequency range	2.4G~2.5G
Impedance	50Ohm
VSWR	<2
Return loss	<-10dB
Connector type	IPEX

Information to be supplied to the end user by the OEM or Integrator

The following regulatory and safety notices must be published in documentation supplied to the end user of the product or system incorporating the Inter® wireless adapter, In compliance with local regulations. Host system must be labeled with “Contains FCC ID: 2ACDZ-WT1HBS05”, FCC ID displayed on label.

Warning

1. This device complies with part 15 of the FCC Rules.
Operation is subject to the following two conditions:
 - (1) This device may not cause harmful interference, and
 - (2) this device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
3. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. It must be used at least 20cm away from the body of the user.