

Wi-Fi 802.11b/g/n Wireless Combo Module

Dual Band Wi-Fi... Bluetooth... NFC... Small Footprint

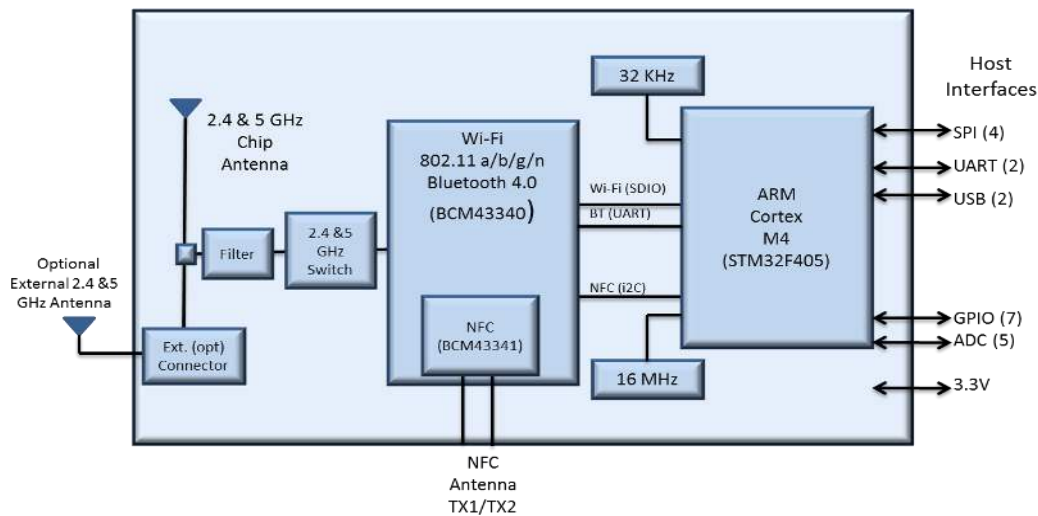
The ISM4334X-M4G-L44 is an embedded Serial to Wi-Fi module that operate in the 2.4 & 5 GHz spectrum. The Wi-Fi module hardware consists of a ARM M4 host processor with 1 MB flash, Broadcom BCM43340/1 Dual-Band (2.4 GHz / 5 GHz) 802.11 g/n MAC/Baseband/Radio with Integrated Bluetooth 4.0, and NFC including support for Bluetooth and Wi-Fi co-existence.



The module provides SPI and UART interfaces enabling easy connection to an embedded design. The Wi-Fi module requires no operating system and has a complete integrated TCP/IP Stack that only requires a simple AT command set (IWIN) to establish connectivity for your wireless product minimizing development time. The simple AT command, the low-cost, the small foot-print design (14.70 x 34.22 mm), and the ease of design-in makes it ideal for a wide range of embedded wireless applications.

Main Features

- ◆ 802.11 a/b/g/n Broadcom Radio device
- ◆ Bluetooth 4.0 & NFC
- ◆ Fully contained TCP/IP stack
- ◆ Configurable though simple AT commands
- ◆ FCC and Ce certified
- ◆ Soft Access Point for up to 3 clients for configuration and ad-hoc networks
- ◆ Host interfaces: UART, SPI up to 25 MHz.
- ◆ Network features ICMP (Ping), ARP, DHCP, TCP, UDP
- ◆ Low power operation 3.3V
- ◆ Secure Wi-Fi authentication WEP-128, WPA-PSK (TKIP), WPA2-PSK



Software Support

The family of eS-WiFi modules provide a simple serial-to-Wi-Fi connectivity to the internet. These modules are ideal for low cost IoT wireless connectivity and are enabled with the (IWIN) AT command set with support for cloud connectivity as well as the Broadcom Wireless Internet connectivity (WICED) SDK.



NETWORK STANDARD	IEEE 802.11b/g/n
RF FREQUENCY	2.4 & 5 GHz (Wi-Fi & BLE & Bluetooth 4.0) , 13.56 Mhz NFC
DATA RATES	802.11n: 6.5, 13, 19.5, 26, 39, 52, 58.5, 65 Mbps 802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11b: 1, 2, 5.5, 11 Mbps
MODULATION TECHNIQUES	802.11g/n: 64-QAM, 16-QAM, QPSK, BPSK 802.11b: CCK, DQPSK, DBPSK
WIRELESS SECURITY	WEP (64/128-bit), WPA™ (PSK, TKIP) / WPA2™ (AES, CCMP, 802.1x Authentication)
HOST INTERFACES	SPI, UART, USB (HID and VCP)
NETWORK PROTOCOLS	TCP, UDP, IPv4, ARP, ICMP, DHCP Client
WLAN FUNCTIONS	Power save modes, automatic roaming, auto-rate Ad-hoc and Infrastructure modes
CONFIGURATION	AT commands 3.1.2 or WICED SDK 3.1.2 or later
SUPPLY VOLTAGE	3.3V ± 5%
PACKAGE	44-pin LGA 0r 54-pin LGA 14.70 mm x 34.22 mm
OPERATING TEMPERATURE	-35°C to +80°C
CERTIFICATIONS	FCC and CE

Ordering Information

- ◆ ISM434X-M4G-L44-XXXX

Near Field Communications

- 0= NFC not included
- 1= NFC included

Apple Homekit

- Blank—Not Included
- H= Apple Homekit (License Required)

Additional GPIO's:

- Blank = No addition GPIO's
- 10= Additional GPIO's

Additional Flash Memory (2 MB)

- Blank = Not Included
- F= Flash Included

Antenna:

- C= Dual Band (2.4/5 GHz) Chip Antenna
- U= U.FL Connector for External Antenna

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