

## Wi-Fi Module

### Wi-Fi (Microchip ATWINC1500) Single Module

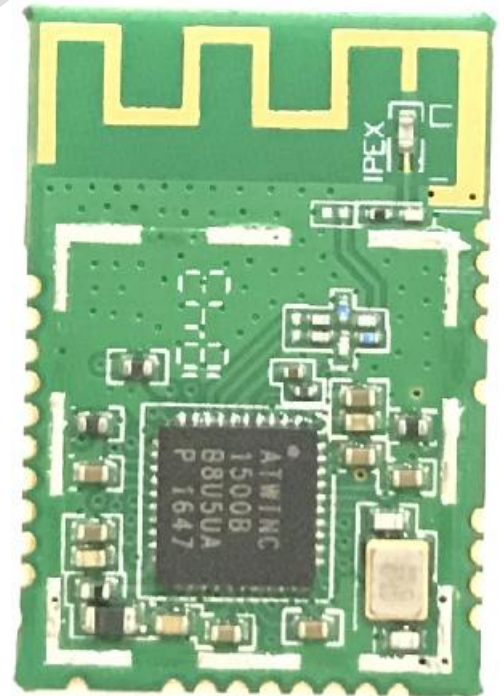
#### WFM-9150

The WFM-9150 is a low power consumption 802.11 b/g/n IoT (Internet of Things) module, specifically optimized for low power IoT applications. The module integrates Power Amplifier (PA), Low-Noise Amplifier (LNA), Switch, Power Management, and a printed antenna for an external antenna resulting in a small form factor (21.7 x 14.7 x 2.1 mm) design. It is interoperable with various vendors' 802.11 b/g/n access points. This module provides SPI ports to interface with a host controller.

#### Features

- IEEE 802.11 b/g/n 20 MHz (1x1) solution
- Single spatial stream in 2.4 GHz ISM band
- Integrated Transmit/Receive switch
- Integrated PCB antenna for external antenna
- Superior sensitivity and range via advanced PHY signal processing
- Advanced equalization and channel estimation
- Advanced carrier and timing synchronization
- Wi-Fi Direct (supported till firmware release 19.5.2)
- Soft-AP support
- Supports IEEE 802.11 WEP, WPA, WPA2 security
- Support Enterprise security with WPA/WPA2 (802.1X)
- On-chip memory management engine to reduce host load
- Integrated Flash memory for system software
- Power Save modes
- Fast Boot options
- On-chip Network stack to offload MCU
- Hardware accelerator for IP checksum
- Hardware accelerators for OTA security
- Small footprint host driver

#### Outline



#### Applications

- Cloud Connectivity
- Home Automation
- Home Appliances
- Access Control
- Security Systems
- Smart Energy
- Internet Gateway