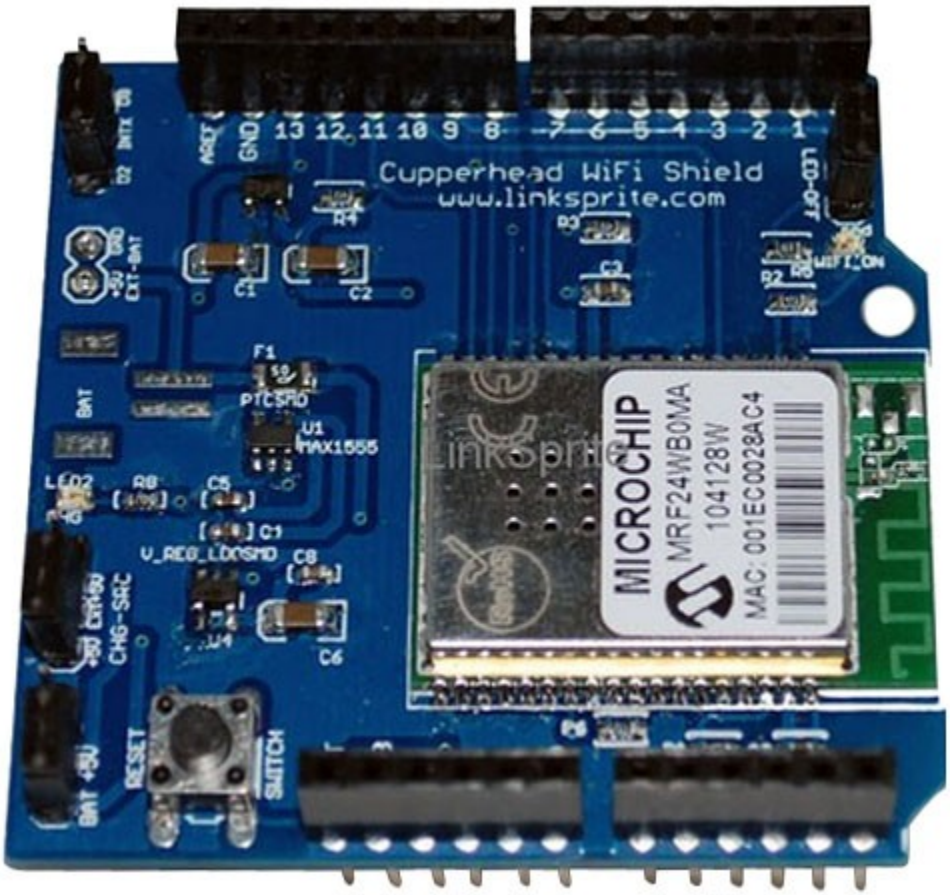
**RB-Lin-39**
**Cupperhead WiFi Shield for Arduino**




This is the shield you need to get Wi-Fi connectivity to your Arduino-based project! This shield provides 802.11b connectivity and is a direct drop-on plug-and-play solution to your Arduino Diecimila/Duemilanove/Uno.
Compatible with Asynclab wifi shield!

## Shield Features

Add-on shield built for Arduino Diecimila, Duemilanove and Uno
Dimensions, shape, even color match exactly!
True plug-n-play solution
Uses SPI for host communication (max speed 25MHz)
All Arduino headers brought out for easy access
Easy access reset button on-board
On-board PCB antenna
Switchable interrupt pin usage between INT0 and digital pin 8
Switchable LED on digital pin 9
Switchable CS pin for serial flash between digital pin 10 and digital pin 7[1]

## Wi-Fi Module Features

802.11b Wi-Fi certified
1Mbps and 2Mbps throughput speeds
Supports both infrastructure (BSS) and ad hoc (IBSS) wireless networks
Ability to create secured and unsecured networks
WEP (64-bit and 128-bit)
WPA/WPA2 (TKIP and AES) PSK
Low power usage
Sleep mode: 250µA
Transmit: 230mA
Receive: 85mA

## Pin Usage

SPI
Slave select (SS) : Arduino pin 10 (port B, pin 2)
Clock (SCK) : Arduino pin 13 (port B, pin 5)
Master in, slave out (MISO) : Arduino pin 12 (port B, pin 4)
Master out, slave in (MOSI) : Arduino pin 11 (port B, pin 3)
Interrupt (Uses only one of the following, depending on jumper setting)
INT0 : Arduino pin 2 (port D, pin 2)
DIG8 : Arduino pin 8 (port B, pin 0)
LED : Arduino pin 9 (port B, pin 1)
To regain use of this pin, remove the LED jumper cap
5V power
GND
If you setup the serial dataflash CS pin to use pin 10, then the WiFi module will not be usable. In order to use the dataflash and WiFi concurrently, the dataflash jumper CS pin must be set to pin 7.