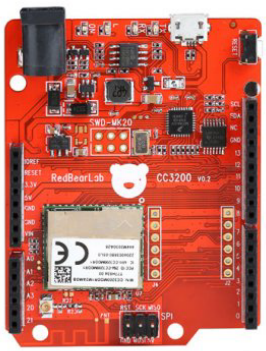


(images/product/113110002 1.jpg)

RedBearLab CC3200 WiFi board

SKU: 113110002

Description

RedBearLab CC3200 WiFi board, is based on CC3200 module that is provided by Texas Instruments (TI). The target MCU is TI CC3200, the industry's first single-chip ARM Cortext-M4 core microcontroller unit (MCU) with built-in WiFi connectivity. With on-chip WiFi, Internet, and robust security protocols, no prior WiFi experience is required for faster development. It is offered to make you quickly produce prototypes and demos target for not only Internet of Things (IoT) but also many other exciting and interesting projects, such as WiFi Camera, WiFi Audio, TFTP Client, TCP/IP or UDP Server/Client, Http Server, XMPP Client, mDNS, etc.

Features:

- RedBearLab CC3200 supports most Arduino compatible shields
- Easy jumperless operation, built-in USB interface using Freescale MK20, no jumper change is required when uploading sketch from Energia
- Hardware compatible with our BLE Shield, BLE Nano and BLE Mini board, we will release software libraries to control/interface with our BLE line of products
- The module is Wi-Fi Certified with Modular FCC, IC, and CE Certifications
- CC3200 Wi-Fi Consists of Applications Microcontroller, Wi-Fi Network Processor, and Power-Management Subsystems
- Applications Microcontroller Subsystem
- ARM Cortex-M4 Core at 80 MHz
- 256KB RAM, 1MB serial flash memory with file system for user
- Hardware Crypto Engine for Advanced Fast Security, Including AES, DES, 3DES, SHA2 MD5, CRC and Checksum

- Up to 27 individually programmable, multiplexed GPIO pins, including a fast parallel camera interface, I2S, SD/MMC, UART, SPI, I2C, and four-channel ADC.
- Wi-Fi Network Processor Subsystem
- Dedicated ARM MCU, completely offloads Wi-Fi and Internet Protocols from the Application Microcontroller
- 802.11 b/g/n Radio
- WPA2 Personal and Enterprise Security
- Station, Access Point, and Wi-Fi Direct Modes
- Powerful Crypto Engine for Fast, Secure Wi-Fi and Internet Connections with 256-Bit AES Encryption for TLS and SSL connections
- SmartConfig Technology, AP Mode and WPS2 for easy and flexible Wi-Fi provisioning
- The power-management subsystem includes integrated DC-DC converters supporting a wide range of supply voltages. This subsystem enables low-power consumption modes, such as the hibernate with RTC mode requiring less than 7 µA of current
- Easy to use SDK with full APIs with lots of examples for Energia, GCC, IAR System and Ti Code Composer Studio (CCS)

Specification:

Application Examples:

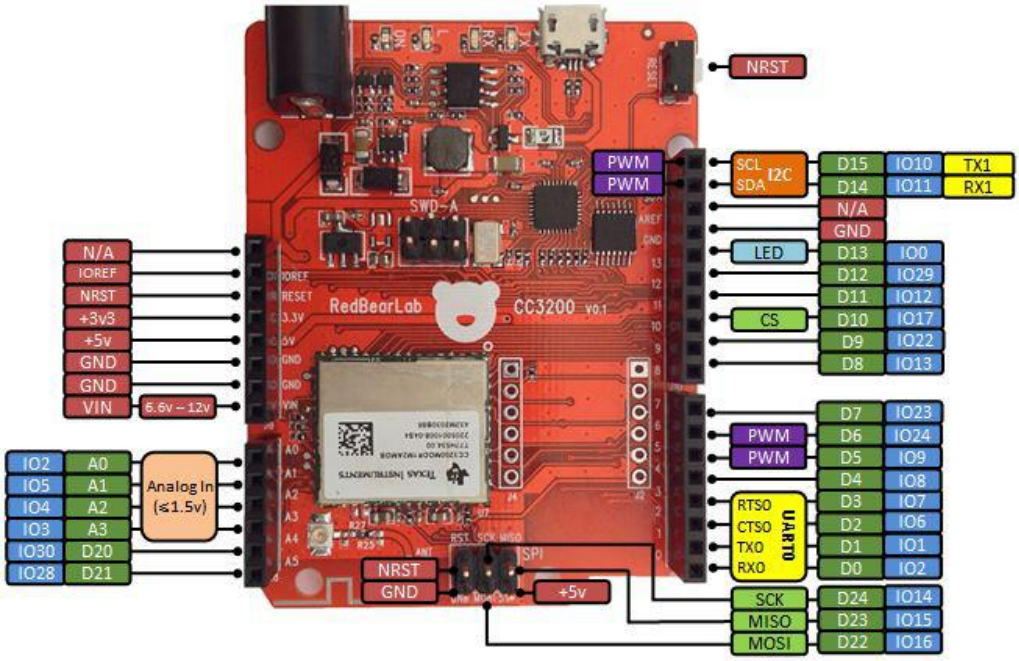
Energia examples (http://energia.nu/reference/wifi/)

- ConnectNoEncryption : Demonstrates how to connect to an open network
- ConnectWithWEP : Demonstrates how to connect to a network that is encrypted with WEP
- ConnectWithWPA : Demonstrates how to connect to a network that is encrypted with WPA2 Personal
- ScanNetworks : Displays all WiFi networks in range
- WiFiChatServer : Set up a simple chat server
- WiFiXivelyClient : connect to xively.com, a free datalogging site
- WiFiXivelyClientString: send strings to xively.com
- WiFiWebClient : Connect to a remote webserver
- WiFiWebClientRepeating : Make repeated HTTP calls to a webserver
- WiFiWebServer : Serve a webpage from the WiFi shield
- WiFiSendReceiveUDPString : Send and receive a UDP string
- UdpNTPClient : Query a Network Time Protocol (NTP) server using UDP

Dimension

73 x 54 x 15mm (Arduino form factor)

Pinout



For any technical support and suggestions, please visit our forum (http://www.seeedstudio.com/forum/viewforum.php?f=65&sid=26ade359a1cff929ba873dde31961152).