seeed
The IoT Hardware Enabler

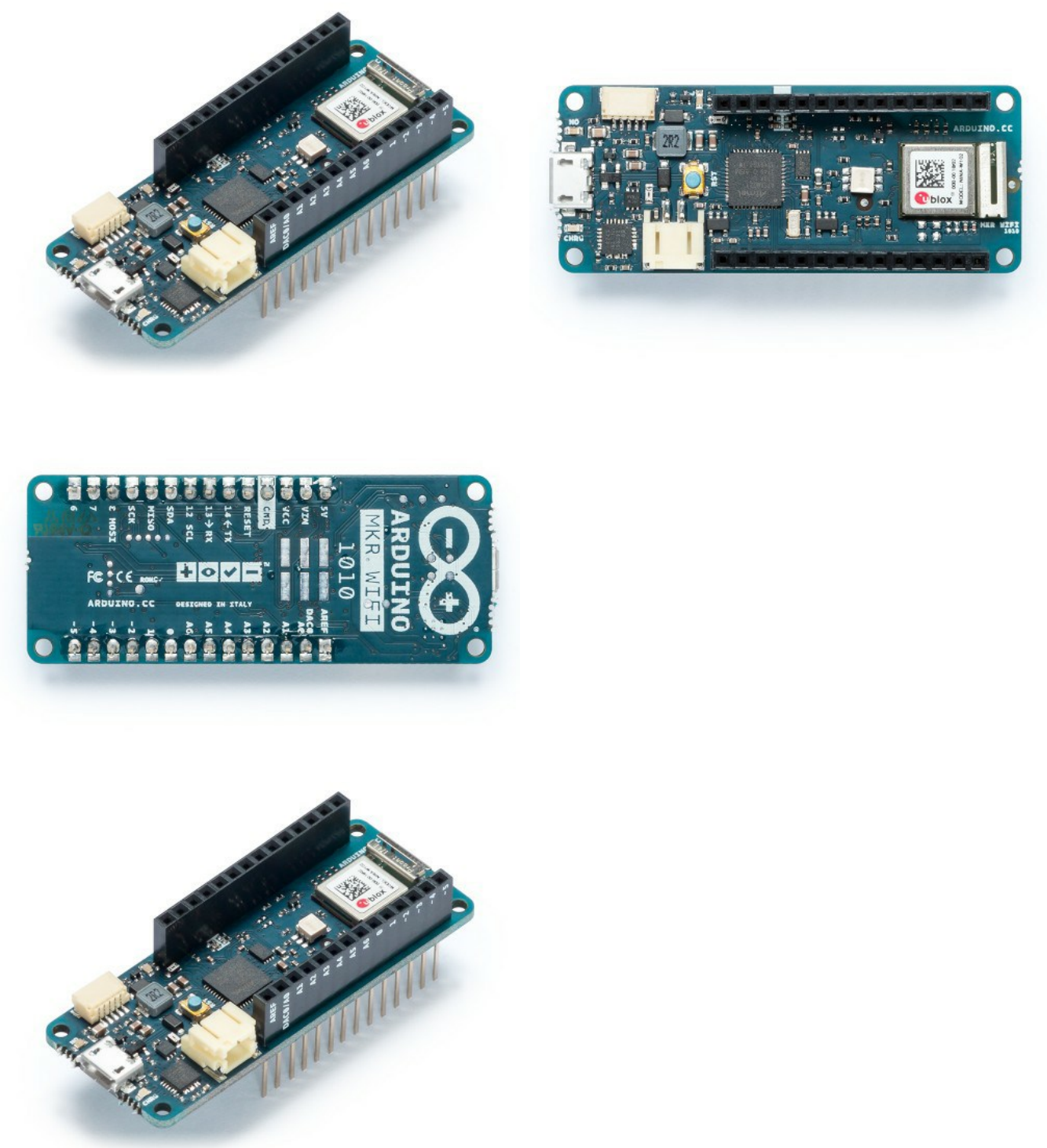Category   Fusion   Services   Community   What are you looking for?   Sign in

Bazaar / Arduino / ARDUINO MKR WiFi 1010

ARDUINO MKR WiFi 1010

SKU 102991139

1   PREORDER

Description

Want to add a WiFi interface to your devices? Get the MKR WIFI 1010. It connects easily to other Arduino products and is configurable using Arduino software — and you don't need to be a network expert. This is the newest version of the MKR 1000 WIFI, but with an ESP32 module on board made by U-BLOX.

The MKR WIFI 1010 is a significant improvement on the MKR 1000 WIFI. It's equipped with an ESP32 module made by U-BLOX. This board aims to speed up and simplify the prototyping of WiFi based IoT applications thanks to the flexibility of the ESP32 module and its low power consumption.

The board is composed of three main blocks:

SAMD21 Cortex-M0+ 32bit Low Power ARM MCU;

U-BLOX NINA-W10 Series Low Power 2.4GHz IEEE® 802.11 b/g/n Wi-Fi; and

The MKR WIFI 1010 includes 32-bit computational power, the usual rich set of I/O interfaces, and low power Wi-Fi with a Cryptochip for secure communication using SHA-256 encryption. Plus, it offers ease of use Arduino Software (IDE) for code development and programming. All of these features make this board the preferred choice for the emerging IoT battery-powered projects in a compact form.

Its USB port can be used to supply power (5V) to the board. It has a Li-Po charging circuit that allows the Arduino MKR WIFI 1010 to run on battery power or an external 5 volt source, charging the Li-Po battery while running on external power. Switching from one source to the other is done automatically.

Warning: Unlike most Arduino boards, the MKR WIFI 1010 runs at 3.3V. The maximum voltage that the I/O pins can tolerate is 3.3V. Applying voltages higher than 3.3V to any I/O pin could damage the board. While output to 5V digital devices is possible, bidirectional communication with 5V devices needs proper level shifting.

Technical Details

Dimensions62mm x 25mm x 11mm
Weight   G.W 32g
Battery   Exclude

Part List

ARDUINO MKR WIFI 10101

Microcontroller	SAMD21 Cortex-M0+ 32bit Low Power ARM MCU
Board Power Supply (USB/VIN)	5V
Supported Battery(*)	Li-Po Single Cell, 3.7V, 700mAh Minimum
Circuit Operating Voltage	3.3V
Digital I/O Pins	8
PWM Pins	12 (0, 1, 2, 3, 4, 5, 6, 7, 8, 10, A3 - or 18 -, A4 - or 19)
UART	1
SPI	1
I2C	1
I2S	1
Connectivity	WiFi
Analog Input Pins	7 (ADC 8/10/12 bit)
Analog Output Pins	1 (DAC 10 bit)
External Interrupts	8 (0, 1, 4, 5, 6, 7, 8, A1 -or 16-, A2 - or 17)
DC Current per I/O Pin	7 mA
Flash Memory	256 KB
SRAM	32 KB
EEPROM	No
Clock Speed	32.768 kHz (RTC), 48 MHz
LED_BUILTIN	6
Full-Speed USB Device and Embedded Host	Included
LED_BUILTIN	6
Length	61.5 mm
Width	25 mm
Weight	32 gr.

ECCN/HTS

ECCNNot Available

Documents

Doc.

Questions and Answers

Have a question about
this? Ask people who

ARDUINO MKR WiFi 1010

SKU 102991139 [f] [t] [G+] [p] [reddit]

Pre-Order
19 Available
Ships on November-14, 2018

1   ADD TO CART

Description
Technical Details
Questions and Answers

‹ ›
✖

✖
Notify me when it's back in stock

Please enter a valid email

SUBMIT

˄

POPULAR SEARCHES

| PCB Manufacturing | PCB Assembly | PCB Layout | 3D Printing | PCB Stencil | Lora | ReSpeaker | Grove | Lidar | GPS | Can-Bus | Arduino | Arduino Shield | Beaglebone |
| Raspberry Pi | FPGA | LinkIt ONE | Crazyflie 2.0 | Raspberry Pi 3 Model B | RF Explorer | DSO Nano v3 | HiKey | rplidar | raspberry pi relay | RPLIDAR A2 |

Company

About Seeed

Distributors

Careers

Contacts

Help Center

How to Get Help

FAQ

Technical Support

Shipping & Order

Warranty & Returns

Payment Information

Community

Project Hub

Forum

Blog

Wiki

Stay Tuned

Subscribe to our newsletter.

email address   >

Select Language

Contact Support