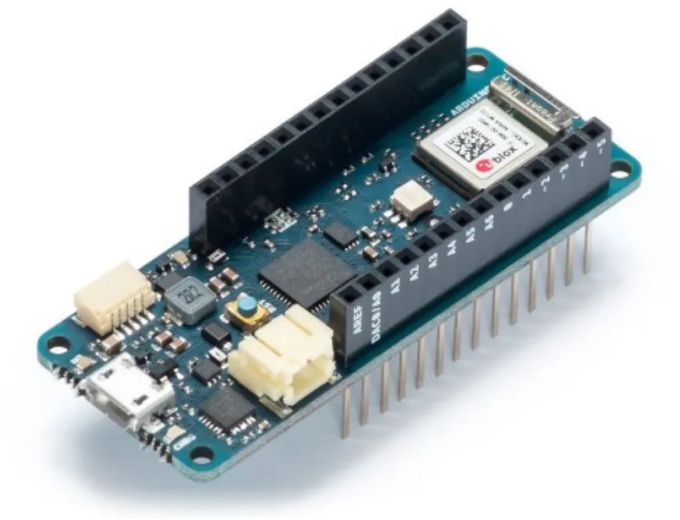
Item no.: 326462

ABX00023 - Arduino MKR WiFi 1010

from **33,50 EUR**

Item no.: 326462
shipping weight: 0.10 kg
Manufacturer: Arduino



Product Description

Arduino MKR WiFi 1010

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+ 32 bit Low Power ARM MCU;
- U-BLOX NINA-W10 Series Low Power 2.4 GHz IEEE(R) 802.11 b/g/n Wi-Fi; and
- ECC508 Crypto Authentication.

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 (5 V) 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 3.3 V. The maximum voltage that the I/O pins can tolerate is 3.3 V. Applying voltages higher than 3.3 V to any I/O pin could damage the board. While output to 5 V digital devices is possible, bidirectional communication with 5 V devices needs proper level shifting.

- Microcontroller: SAMD21 Cortex-M0+ 32 bit low power ARM MCU
- Board power supply (USB/VIN): 5 V
- Supported battery(*): Li-Po single cell, 3.7 V, 700 mAh minimum
- Circuit operating voltage: 3.3 V
- 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: Wi-Fi
- 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
- Built-in LEDs: 6
- Full-speed USB device and embedded host included
- Length: 61.5 mm
- Width: 25 mm
- Weight: 32 gr.

Specifications

Scan this QR code to view the product
All details, up-to-date prices and availability