Item no.: 366942

Arduino® UNO R4 WiFi

from **26,85 EUR**

Item no.: 366942
shipping weight: 0.20 kg
Manufacturer: Arduino

Product Description

Let's explore what the UNO R4 WiFi has to offer:

Hardware compatibility with UNO form factor: The UNO R4 WiFi maintains the same form factor, pinout, and 5 V operating voltage as its predecessor, the UNO R3, ensuring a seamless transition for existing shields and projects.Expanded memory and faster clock: The UNO R4 WiFi boasts increased memory and a faster clock speed, enabling more precise calculations and effortless handling of complex projects.Extra on-board peripherals: The UNO R4 WiFi introduces a range of on-board peripherals, including a 12-bit DAC, CAN BUS, and OP AMP, providing expanded capabilities and design flexibility.Extended 24 V tolerance: The UNO R4 WiFi supports a wider input voltage range, allowing seamless integration with motors, LED strips, and other actuators using a single power source.HID support: With built-in HID support, the UNO R4 WiFi can simulate a mouse or keyboard when connected to a computer via USB, making it easy to send keystrokes and mouse movements.Wi-Fi® and Bluetooth®: The UNO R4 WiFi hosts an ESP32-S3 module, enabling makers to add wireless connectivity to their projects. Combined with the Arduino IoT Cloud, makers can monitor and control their projects remotely.Qwiic connector: The UNO R4 WiFi features a Qwiic I2C connector, allowing easy connection to nodes from the extensive Qwiic ecosystem. Adapter cables also enable compatibility with sensors and actuators based on other connectors.Support for battery-powered RTC: The UNO R4 WiFi includes additional pins, including an "OFF" pin to turn off the board and a "VRTC" pin to keep the internal Real-Time Clock powered and running.LED matrix: The UNO R4 WiFi incorporates a bright 12x8 red LED matrix, ideal for creative projects with animations or plotting sensor data, eliminating the need for additional hardware.Diagnostics for runtime errors: The UNO R4 WiFi includes an error-catching mechanism that detects runtime crashes and provides detailed explanations and hints about the code line causing the crash.With all these features packed into the well-known UNO form factor, now is the perfect time to upgrade your project or embark on your maker journey. The UNO R4 WiFi offers unparalleled versatility and possibilities for makers of all levels.

Board

Name:Arduino® UNO R4

WiFi:SKU ABX00087

Microcontroller Renesas: RA4M1 (Arm® Cortex®-M4)USB: USB-C®, Programming PortPins: Digital I/O Pins 14Pins: Analog input pins 6DAC: 1PWM pins: 6

Communication

UART: Yes, 1xI2C: Yes, 1xSPI: Yes, 1xCAN:Yes 1 CAN Bus

Power

Circuit operating voltage: 5 V (ESP32-S3 is 3.3 V)Input voltage (VIN): 6-24 VDC Current per I/O Pin: 8 mA

Clock speed

Main core: 48 MHzESP32-S3: up to 240 MHz

Memory

RA4M1: 256 kB Flash, 32 kB RAMESP32-S3: 384 kB ROM, 512 kB SRAM

Dimensions

Width 68.85 mmLength 53.34 mm

Specifications

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