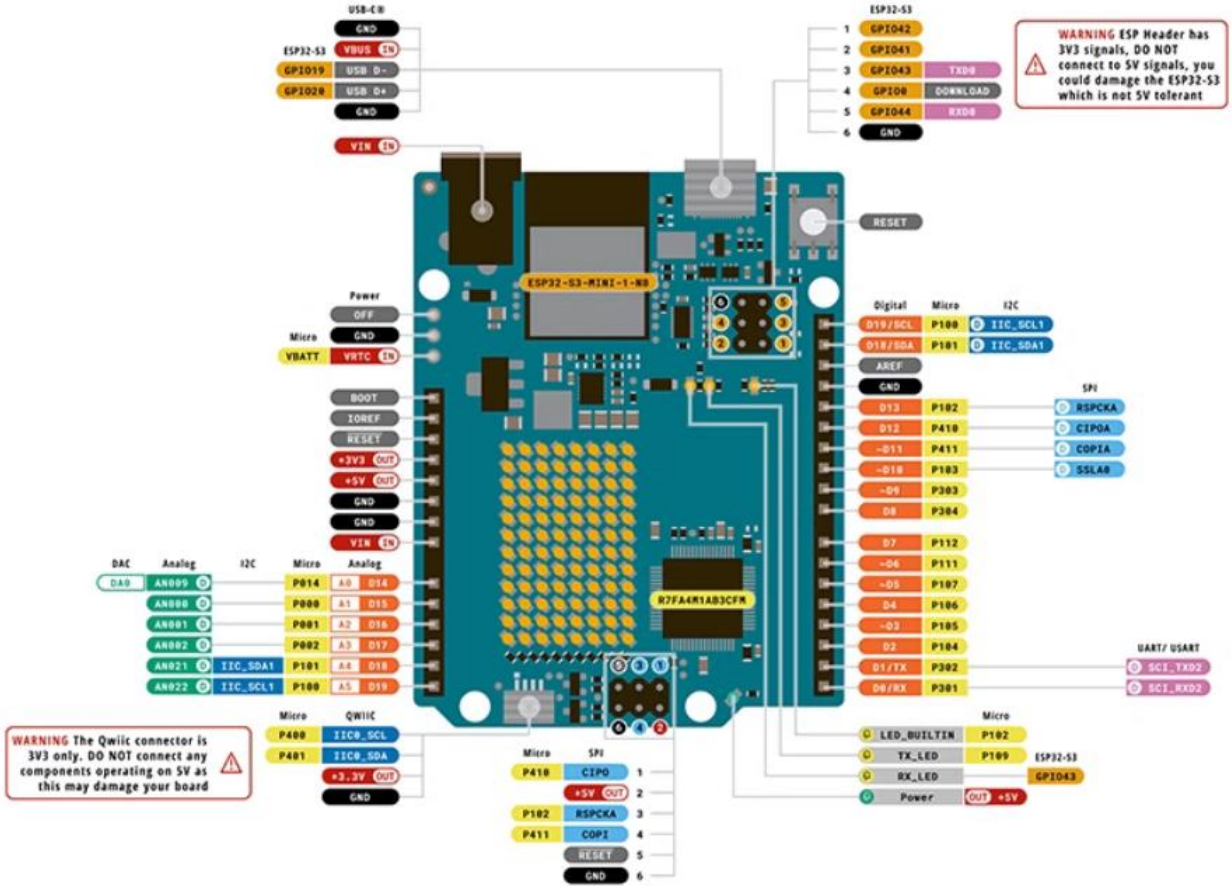
duino UNO R4 WiFi



Legend:	Digital	I2C	Other SERIAL
Power	Analog	SPI	Analog
Ground	Main Part	UART/USART	PWM/Timer

UNO R4 WiFi
SKU code: ABX00087
Pinout
Last update: 30 Jun, 2023

Features of UNO R4 WiFi

Equipped with WiFi and Bluetooth functions

Equipped with an ESP32-S3-MINI co-processor that enhances the functionality of the RA4M1 microcontroller. Features WiFi and Bluetooth connectivity, enabling developers to easily connect to the internet and create IoT projects.

On-board 12x8 LED Matrix

Onboard a bright 12x8 red LED matrix (total 96 pixels). This feature is ideal for creative projects using animation or drawing sensor data without any additional hardware.

Qwiic 2C Connector

Equipped with an industry-standard Qwiic 12C connector for convenient and rapid prototyping. Through I2C connection, various compatible modules can be connected, allowing makers to easily create custom projects and expand UNO R4 WiFi functionality.

Runtime Error Diagnosis

Features an integrated error detection mechanism that can detect operations that may cause board crashes, such as division by zero. When errors are detected, the board prints detailed error descriptions and causes on the serial monitor.

Battery-powered RTC Support

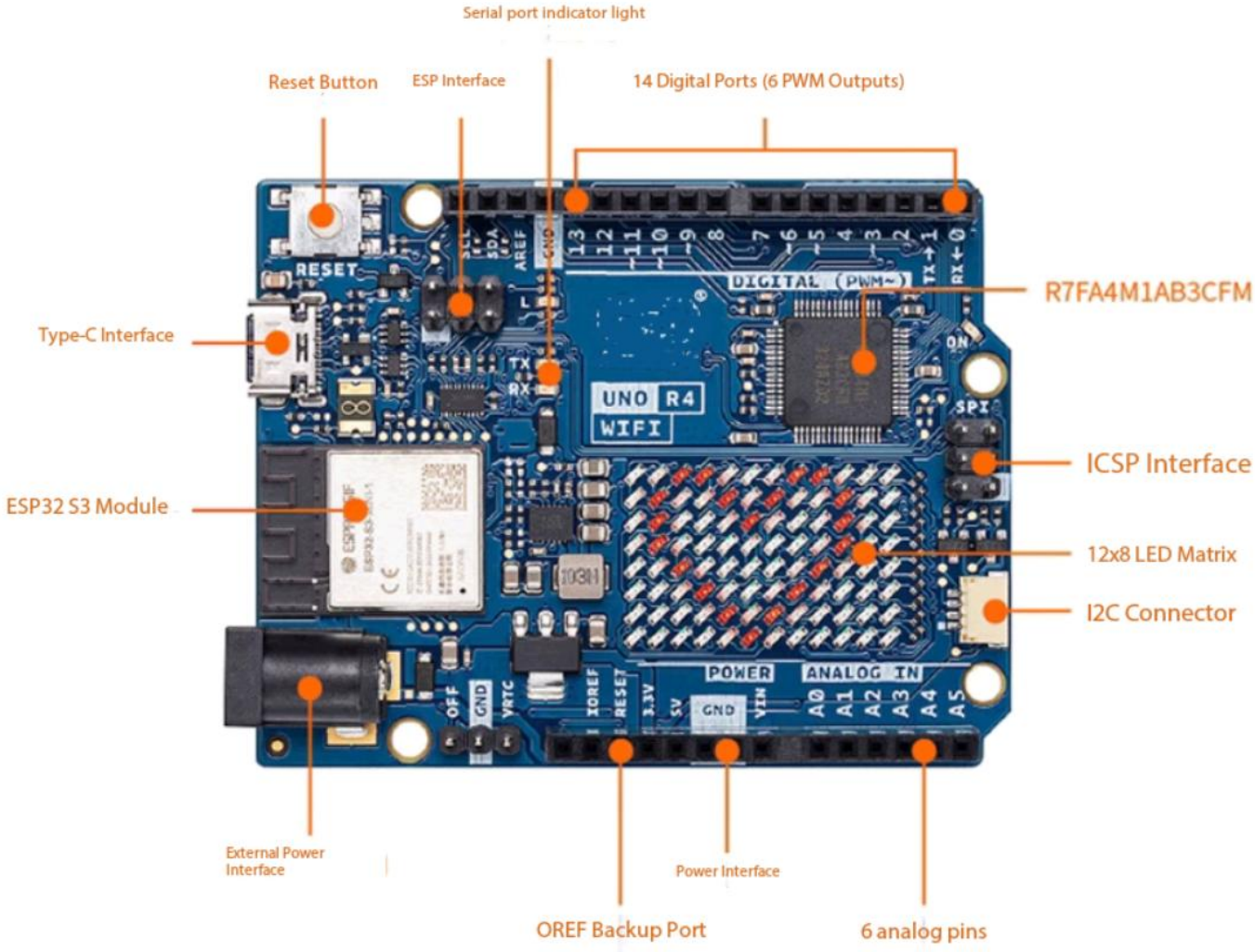
The UNO R4 has additional pins that can turn off the main microcontroller while keeping the internal RTC powered by an external battery.

Powerful and Affordable Price

The UNO R4 WiFi offers impressive performance at competitive prices. This board is an especially cost-effective choice that reinforces Arduino's commitment to making high-end technology accessible.

SWD pins for debugging

The on-board SWD port provides manufacturers with a simple and reliable way to connect third-party debug probes.


Serial port indicator light
Reset Button
ESP Interface
14 Digital Ports (6 PWM Outputs)
R7FA4M1AB3CFM
Type-C Interface
ICSP Interface
ESP32 S3 Module
12x8 LED Matrix
I2C Connector
External Power Interface
Power Interface
OREF Backup Port
6 analog pins
RESET
DIGITAL (PWM~)
UNO R4
WIFI
POWER
ANALOG IN
SPI