

COMPONENT COMPARISON

Comparison: MKR WiFi 1010 vs. Uno R4 WiFi vs. Nano 33 IoT

Feature	MKR WiFi 1010	Uno R4 WiFi	Nano 33 IoT
Size	Compact (61.5 x 25 mm).	Larger (75 x 53.4 mm).	Very compact (45 x 18 mm).
Wi-Fi Module	u-blox NINA-W102.	ESP32-S3 (faster and more robust).	u-blox NINA-W102.
Bluetooth Version	Bluetooth 4.2 (BLE).	Bluetooth 5.0 (BLE).	Bluetooth 4.2 (BLE).
Microcontroller	SAMD21 Cortex-M0+ (32-bit).	RA4M1 (Renesas, 32-bit).	SAMD21 Cortex-M0+ (32-bit).
Memory	256 KB Flash, 32 KB SRAM.	256 KB Flash, 32 KB SRAM.	256 KB Flash, 32 KB SRAM.
Power Options	USB or Li-Po battery.	USB or external power.	USB or external power.
I/O Pin Count	8 digital, 7 analog, 1 DAC.	14 digital, 6 analog.	14 digital, 8 analog.
Operating Voltage	3.3V.	5V.	3.3V.
Cloud Compatibility	Fully supported.	Fully supported.	Fully supported.
Indian Price	₹3,800–₹4,500.	↓ ₹4,500–₹5,000.	₹3,500–₹4,000.

All these 3 boards supports Arduino iot cloud and has built-in wifi modules

1.ARDUINO NANO 33 IOT

Specifications :-

Model Type	Nano 33 IOT
Microcontroller	SAMD21 Cortex-M0+ 32bit low power ARM
Radio module	u-blox NINA-W102
Secure Element	ATECC608A
IMU	LSM6DS3
Operating Voltage (VDC)	3.3
Analog I/O Pins	Input Pins 8 : (ADC 8/10/12 bit) Output Pins : 1 (DAC 10 bit)
Digital I/O Pins	14
PWM Output Pins	11 (2, 3, 5, 6, 9, 10, 11, 12, 16 / A2, 17 / A3, 19 / A5)
Clock Speed	48MHz
DC Current per I/O Pin (mA)	7
Flash Memory	256 KB
EEPROM	None
SRAM	32
Length (mm)	45
Width (mm)	18
Height (mm)	5
Weight (gm)	5



Original Arduino Nano 33 IOT

Product Code: EC-9346

Availability: 2

Rs.2425.00

(Excluding 18% GST)

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2.Arduino MKR WiFi 1010

Features:

1. Digital I/O Pins: 8
2. PWM Pins: 12
3. Flash Memory: 256 KB
4. SRAM: 32 KB
5. Microcontroller: SAMD21 Cortex-M0+ 32-bit low-power ARM MCU
6. Board Power Supply (USB/VIN): 5V
7. Full-speed USB device and embedded host
8. Pre-mounted headers with pin-out



Original Arduino MKR Wifi 1010 Board

Product Code: EC-5014

Availability: 12

Rs.3559.00

(Excluding 18% GST)

3.Arduino Uno R4 WiFi

Features:

- 1. The UNO R4 is now a 32-bit Microcontroller board, being previously based on 8-bit AVR
- 2. The board features 14 digital I/O ports, 6 analog channels
- 3. Dedicated pins for I2C, SPI and UART connections.
- 4. It has a significantly larger memory:
 - 1. 8 times more flash memory (256 kB)
 - 2. 16 times more SRAM (32 kB).
- 5. Fastest 48 MHz clock Speed. It is 3x faster than its predecessors.
- 6. Onboard ESP32-S3 module for Wi-Fi & Bluetooth connectivity,
- 7. Onboard 128 LED matrix
 - 1. Making one of the most visually unique Arduino boards to date.
 - 2. The LED matrix is fully programmable, where you can load anything from still frames to custom animations.

Note: For Detailed technical specifications go through the Datasheet in the attachment Section



Arduino UNO R4 WiFi

Product Code: EC-20455

Availability: 57

Rs.1803.00

(Excluding 18% GST)

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4.Arduino Mega 2560 Rev3.

Features:

1. ATmega16U2 instead 8U2 as USB to serial converter
2. 1.0 pinout
3. Stronger RESET circuit
4. 5V operating voltage
5. Input voltage (recommended) range from 7V to 12V
6. Input voltage (limit) range from 6V to 20V
7. 40mA DC current per I/O pin
8. 256KB flash memory of which 8KB used by bootloader
9. 8KB SRAM
10. 4KB EEPROM

Package Includes:

1 x Original Arduino Mega 2560 ATmega2560 MCU Development Board

Additional information

Model	Mega 2560
Processor IC	ATmega16U2
Operating Voltage	5VDC
Current per I/O pin	40mA DC
Memory	256KB flash memory of which 8KB used by bootloader 8KB SRAM 4KB EEPROM
Input voltage (recommended)	range from 7V to 12V

Original Arduino Mega 2560 ATmega2560 MCU Rev3

Product Code: EC-5016

Availability: 1

Rs.3199.00

(Excluding 18% GST)