# **ARDUINO Micro**



The Micro comes with a built-in USB which makes the Micro recognizable as a mouse or keyboard.

Rating: Not Rated Yet **Price** 29,00 €

Discount

3-5 Days

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Manufacturer Arduino

Description

#### **ARDUINO Micro**

The Micro is a microcontroller board based on the ATmega32U4 (<u>datasheet</u>), developed in conjunction with <u>Adafruit</u>. It has 20 digital input/output pins (of which 7 can be used as PWM outputs and 12 as analog inputs), a 16 MHz crystal oscillator, a micro USB connection, an ICSP header, and a reset button. It contains everything needed to support the microcontroller; simply connect it to a computer with a micro USB cable to get started. It has a form factor that enables it to be easily placed on a breadboard.

The Micro board is similar to the Arduino Leonardo in that the ATmega32U4 has built-in USB communication, eliminating the need for a secondary processor. This allows the Micro to appear to a connected computer as a mouse and keyboard, in addition to a virtual (CDC) serial / COM port.

### **Related Boards**

If you are looking at upgrading from previous Arduino designs, or if you are just interested in boards with similar functionality, at Arduino you can find:

- Arduino Leonardo
- Arduino Micro without headers
- Arduino Nano
- Arduino Nano 33 BLE
- Arduino Nano 33 BLE Sense
- 33 loT

### **Getting Started**

Find inspiration for your projects from our tutorial platform Project Hub.

You can find in the <u>Getting started with the Arduino Micro</u> section all the information you need to configure your board, use the <u>Arduino Software</u> (<u>IDE</u>), and start tinkering with coding and electronics.

From the <u>Tutorials</u> section you can find examples from libraries and built-in sketches as well other useful information to expand your knowledge of the Arduino hardware and software.

# **Technical Specifications**

Microcontroller	ATmega32U4
Operating Voltage	5V
Input Voltage (recommended)	7-12V
Input Voltage (limit)	6-20V
Digital I/O Pins	20
PWM Channels	7
Analog Input Channels	12
DC Current per I/O Pin	20 mA
DC Current for 3.3V Pin	50 mA
Flash Memory	32 KB (ATmega32U4) of which 4 KB used by bootloader
SRAM	2.5 KB (ATmega32U4)
EEPROM	1 KB (ATmega32U4)
Clock Speed	16 MHz
LED_BUILTIN	13
Length	48 mm
Width	18 mm
Weight	13 g

## **Documentation**

### **OSH:** Schematics, Reference Design, Board size

Arduino / Genuino Micro is open-source hardware! You can build your own board using the follwing files:

#### EAGLE FILES IN .ZIP

SCHEMATICS IN .PDF

BOARD SIZE IN .DXF

FRITZING IN .FZPZ

**Pinout Diagram** 

ARDUINO MICRO



				_				
	PC7	D13~				D12 A11	PD6	
		+3V3			Ğ.	~D11	PB7	
	AREF	AREF	-0		6	~D10 A10	PB6	
ADC[7]	PF7	A0 D18	-0		<b>O</b>	~D9 A9	PB5	
ADC[6]	PF6	A1 D19	-0 -	📭 😐	0	D8 A8	PB4	
ADC[5]	PF5	A2 D20	-0		<b>O</b>	D7	PE6	
ADC[4]	PF4	A3 D21	- O		6	~D6 A7	PD7	
ADC[1]	PF1	A4 D22	-0 🤇		6	~D5	PC6	
ADC[0]	PF0	A5 D23	-0 \	A AND A	6	D4 A6	PD4	
		NC	-0		C	~D3/SCL	PD0	
		NC	-0		C-	D2/SDA	PD1	
		+5V - (-			<b>C</b>	GND		
	RESET	RESET	-0"		<b>O</b>	RESET	RESET	
		GND	-0		<b>O</b>	D0/RX	PD2	
		VIN ->-	-0		<b>O</b>	D1/TX	PD3	
CIPO	PB3	CIPO/D14			0	D17/SS	PB0	SS
sck	PB1	SCK /D15			0	D16/COPI	PB2	COPI
						RX LED	PB0	
						TX LED	PD5	
							PC7	



Download the full pinout diagram as PDF here.

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