Arduino Nano Every

Add digital intelligence to small devices with Arduino's tiniest form factor.

SKU: ABX00028

Country of origin: IT

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EECN: EAR-99

HTS: 8542310001

Getting Started: https://www.arduino.cc/en/Guide/NANOEvery

Overview

The Nano Every is Arduino's 5V compatible board in the smallest available form factor: 45x18mm!

The Arduino Nano is the preferred board for many projects requiring a small and easy to use microcontroller board. The small footprint and low price, make the Nano Every particularly suited for wearable inventions, low cost robotics, electronic musical instruments, and general use to control smaller parts of a larger projects.

The Arduino Nano Every is an evolution of the traditional Arduino Nano board, but features a lot more powerful processor, the ATMega4809. This will allow you to make larger programs than with the Arduino Uno (it has 50% more program memory), and with a lot more variables (the RAM is 200% bigger).

An Improved Arduino Nano

If you used Arduino Nano in your projects in the past, the Nano Every is a pin-equivalent substitute. Your code will still work, and you will NOT need to re-wire those motors you planned in your original design. The main differences are: a better processor, and a micro-USB connector.

The board comes in two options: with or without headers, allowing you to embed the Nano Every inside any kind of inventions, including wearables. The board comes with tessellated connectors and no components on the B-side. These features allow you to solder the board directly onto your own design, minimizing the height of your whole prototype.

Oh, and did we mention the improved price? Thanks to a revised manufacturing process, the Arduino Nano Every costs a fraction of the original Nano … what are you waiting for? Upgrade now!

Get Many Nanos at Once

If you are in the situation of needing many boards for your classroom, or if you need to present a complex prototype with many functional blocks, there is also the possibility of getting an Arduino Nano Every pack with a discounted pack price, saving on the unit price of each board.

The pack is available in two sizes containing either 3 or 6 boards, and the boards can be ordered with or without headers. Whether you want to minimize the size of your prototypes or share the joy of electronics with your friends, this is the best option you will find.

Get to Know More

To know more about the history of the Nano Every don't miss the interview with Dario Pennisi, Arduino's hardware and firmware development manager, who led the development of this board.

Getting Started

The Getting Started section contains all the information you need to configure your board, use the Arduino Software (IDE), and start tinkering with coding and electronics.

Need Help?

Check the Arduino Forum for questions about the Arduino Language, or how to make your own Projects with Arduino. Need any help with your Nano Every board please get in touch with the official Arduino User Support as explained in our Contact Us page.

Warranty

You can find here your board warranty information.

Tech Specs

The Arduino Nano Every is based on the ATMega4809 microcontroller.

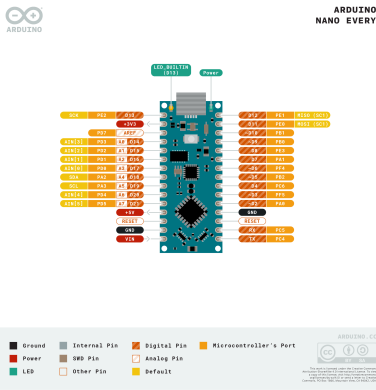|	
Microcontroller	ATMega4809 (datasheet)
Operating Voltage	5V
Input Voltage (limit)	21V
DC Current per I/O Pin	20 mA
DC Current for 3.3V Pin	50 mA
Clock Speed	20MHz
CPU Flash Memory	48KB (ATMega4809)
SRAM	6KB (ATMega4809)
EEPROM	256byte (ATMega4809)
PWM Pins	5 (D3, D5, D6, D9, D10)
UART	1
SPI	1
I2C	1
Analog Input Pins	8 (ADC 10 bit)
Analog Output Pins	Only through PWM (no DAC)
External Interrupts	all digital pins
LED_BUILTIN	13
USB	Uses the ATSAMD11D14A (datasheet)
Length	45 mm
Width	18 mm
Weight	5 gr (with headers)

Documentation

OSH: Schematics

The Arduino Nano Every is open-source hardware! You can build your own board using the following files:

EAGLE FILES IN .ZIP SCHEMATICS IN .PDF

Pinout Diagram

Download the full pinout diagram as PDF here.