

## ARDUINO NANO EVERY WITH HEADERS



## Turn your ideas into a reality quickly with the new Arduino Nano Every.

Estimate shipping date, end of July 2019

This small, robust and powerful board has the same classic Nano footprint loved worldwide.

It can be programmed with the easy to use Arduino IDE available offline and online. Get started in minutes with thousands of sketches available in open-source or write your own: it is the perfect choice for your everyday projects.

Based on the ATMega4809 AVR processor, the Arduino Nano Every is flexible to the requirements of your design. It can be used in a breadboard when mounting pin headers, or as a SMT directly soldered on a PCB thanks to its castellated pads. An SAMD11 ARM Cortex M0+ processor acts as a high performance USB to serial converter that can be re-

programmed by skilled users to expand further the applications of this board.

With headers mounted.

## TECH SPEC

This board is based on the ATMega4809 microcontroller.

Clock	20MHz
Flash	48KB
SRAM	6KB
EEPROM	256byte

A ATSAMD11D14A Processor takes care of the USB to SERIAL communication and it is connected to the following pins of the ATMega4809 microcontroller.

ATMega4809 Pin	ATMega4809 Acronym	SAMD11 Pin	SAMD11 Acronym	Description
9	PB05	15	PA22	SAMD11 TX -> ATMega4809 RX
8	PB04	16	PA23	ATMega4809 TX -> SAMD11 RX
41	UPDI	12	PA15	UPDI RX
		11	PA14	UPDI TX

The board has a two 15 pins connectors - one on each side -, pin to pin compatible with the original Arduino Nano.

Pin	Funcion	Туре	Description
1	D13	Digital	SPI SCK, GPIO
2	+3V3		Internally generated power output to external devices
3	AREF	Analog	Analog Reference; can be used as GPIO
4	A0/DAC0	Analog	ADC in/DAC out; can be used as GPIO
5	A1	Analog	ADC in; can be used as GPIO
6	A2	Analog	ADC in; can be used as GPIO
7	A3	Analog	ADC in; can be used as GPIO
8	A4/SDA	Analog	ADC in; I2C SDA; Can be used as GPIO

A5/SCL	A 1	
40/30L	Analog	ADC in; I2C SCL; Can be used as GPIO
46	Analog	ADC in; can be used as GPIO
λ7	Analog	ADC in; can be used as GPIO
F2V		Internally generated power output to external devices
RST	Digital In	Active low reset input (duplicate of pin 18)
GND	Power	Power Ground
/IN	Power In	Vin Power input
ГХ	Digital	USART TX; can be used as GPIO
RX	Digital	USART RX; can be used as GPIO
RST	Digital	Active low reset input (duplicate of pin 13)
GND	Power	Power Ground
02	Digital	GPIO
D3/PWM	Digital	GPIO; can be used as PWM
04	Digital	GPIO
D5/PWM	Digital	GPIO; can be used as PWM
D6/PWM	Digital	GPIO; can be used as PWM
70	Digital	GPIO
08	Digital	GPIO
D9/PWM	Digital	GPIO; can be used as PWM
D10/PWM	Digital	GPIO; can be used as PWM
D11/MOSI	Digital	SPI MOSI; can be used as GPIO
D12/MISO	Digital	SPI MISO; can be used as GPIO
	6 7 5V ST ND IN X X ST ND 2 3/PWM 0 5/PWM 0 6/PWM 0 6/PWM 0 7 0 8 0 9/PWM 0 10/PWM 0 10/PWM 0 10/PWM	6Analog7Analog7Analog5VPower5VDigital InSTDigital InSNDPower7INPower InXDigitalXDigitalSTDigitalSTDigitalSTDigitalSTDigitalSTDigitalSTDigitalSTDigitalO3/PWMDigital04Digital05/PWMDigital07Digital08Digital