



Arduino Nano Every

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

SKU: ABX00028

Overview

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.

Tech Specs

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	Type	Description
1	D13	Digital	SPI SCK, GPIO
2	+3V3	Power Out	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
9	A5/SCL	Analog	ADC in; I2C SCL; Can be used as GPIO
10	A6	Analog	ADC in; can be used as GPIO
11	A7	Analog	ADC in; can be used as GPIO
12	+5V	Power Out	Internally generated power output to external devices
13	RST	Digital In	Active low reset input (duplicate of pin 18)
14	GND	Power	Power Ground
15	VIN	Power In	Vin Power input
16	TX	Digital	USART TX; can be used as GPIO
17	RX	Digital	USART RX; can be used as GPIO
18	RST	Digital	Active low reset input (duplicate of pin 13)
19	GND	Power	Power Ground
20	D2	Digital	GPIO
21	D3/PWM	Digital	GPIO; can be used as PWM
22	D4	Digital	GPIO
23	D5/PWM	Digital	GPIO; can be used as PWM

24	D6/PWM	Digital	GPIO; can be used as PWM
25	D7	Digital	GPIO
26	D8	Digital	GPIO
27	D9/PWM	Digital	GPIO; can be used as PWM
28	D10/PWM	Digital	GPIO; can be used as PWM
29	D11/MOSI	Digital	SPI MOSI; can be used as GPIO
30	D12/MISO	Digital	SPI MISO; can be used as GPIO

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