

Arduino Nano

Microcontrollers / Classic / 5 V

A breadboard-friendly pin reference for the classic ATmega328P Nano.

01 Pin map

Digital

D0-D13 plus A0-A5 as digital I/O. A6 and A7 are analog-only.

PWM ~

D3, D5, D6, D9, D10, D11.

ADC

A0-A7; 10-bit readings, 0-1023.

02 Bus connections

I2C

SDA A4 / SCL A5.

SPI

MOSI D11 / MISO D12 / SCK D13 / typical CS D10.

UART

RX D0 / TX D1; shared with the USB serial converter.

03 Power

Inputs

Mini USB or recommended 7-12 V at VIN. Regulated 5 V only at 5V.

Logic

5 V ATmega328P; not the Nano 33, Nano ESP32 or Nano Every pin reference.

Orientation

Use printed pin labels and the official pinout; clone layouts and USB chips vary.

Before you power on

A6/A7 cannot drive outputs. Check the exact Nano model before applying power.

Datasheets & further reading

Arduino Nano documentation

<https://docs.arduino.cc/hardware/nano>