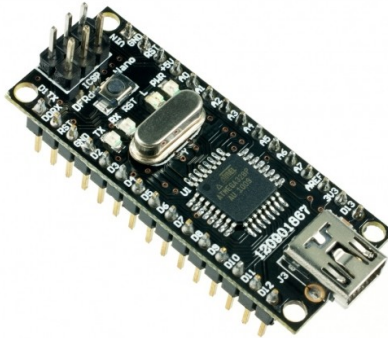# DFRobot
DFRduino Nano(Arduino Nano Compatible)
Product Code: DFR0010

Introduction

The DFRduino Nano USB Microcontroller V3 (ATMega 328) is a breadboard ready version of the Arduino mini with integrated USB. The Nano has everything that the Diecimila has (electronically) with more analog input pins and an on-board +5V AREF jumper. The Nano automatically senses and switches to the higher power supply, so there is no need for a power select jumper.

The nano's pin layout works well with the Mini or the Basic Stamp (TX, RX, ATN, GND on one top, power and ground on the other). The DFRobot DFRduino Nano USB Microcontroller V3 (ATMega 328) can be powered via the mini-B USB connection, 6-20V unregulated external power supply (pin 30), or 5V regulated external power supply (pin 27). The power source is automatically selected to the highest voltage source.

Features

- Automatic reset during program download
- Power OK blue LED on the bottom
- Green (TX), red (RX) and orange (L) LED
- +5V to AREF jumper
- Auto sensing/switching power input
- Small mini-B USB for programming and serial monitor (cable not included)
- ICSP header for direct program downloads
- Power OK blue LED on the bottom
- Standard 0.1" spacing DIP (breadboard friendly)
- Manual reset switch

Specification

Microcontroller: Atmel Atmega328-20AU

- Operating Voltage (logic level): 5V
- Input Voltage (recommended): 7-12V
- Input Voltage (limits): 6-20V
- Digital I/O Pins: 14 (of which 6 provide PWM output)
- Analog Input Pins: 8
- DC Current per I/O Pin: 40 mA
- Flash Memory: 32 KB (of which 2KB used by bootloader)
- SRAM: 2 KB
- EEPROM: 1 KB
- Clock Speed: 16 MHz

Documents

- [Manual](#)