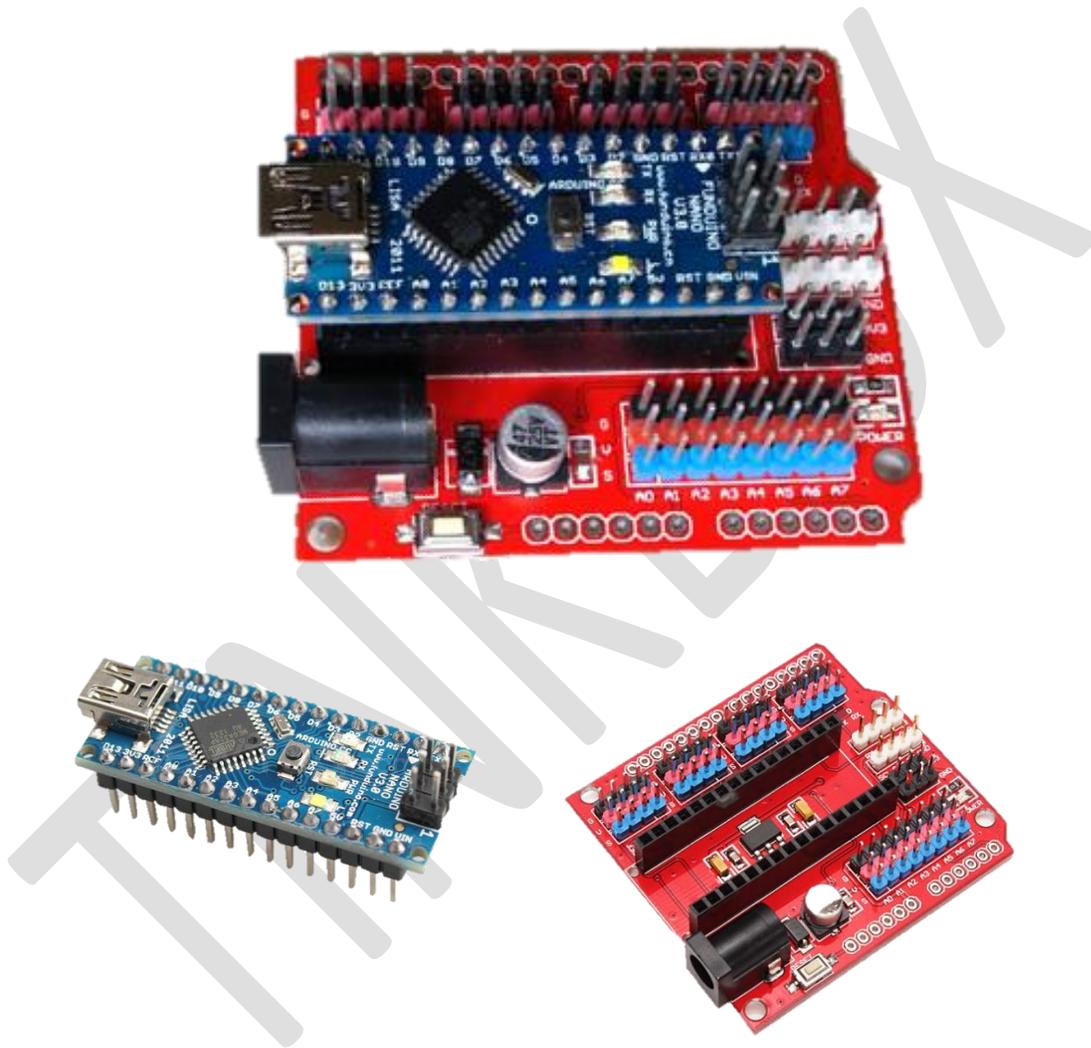


Keys

Funduino Nano V3 Shield

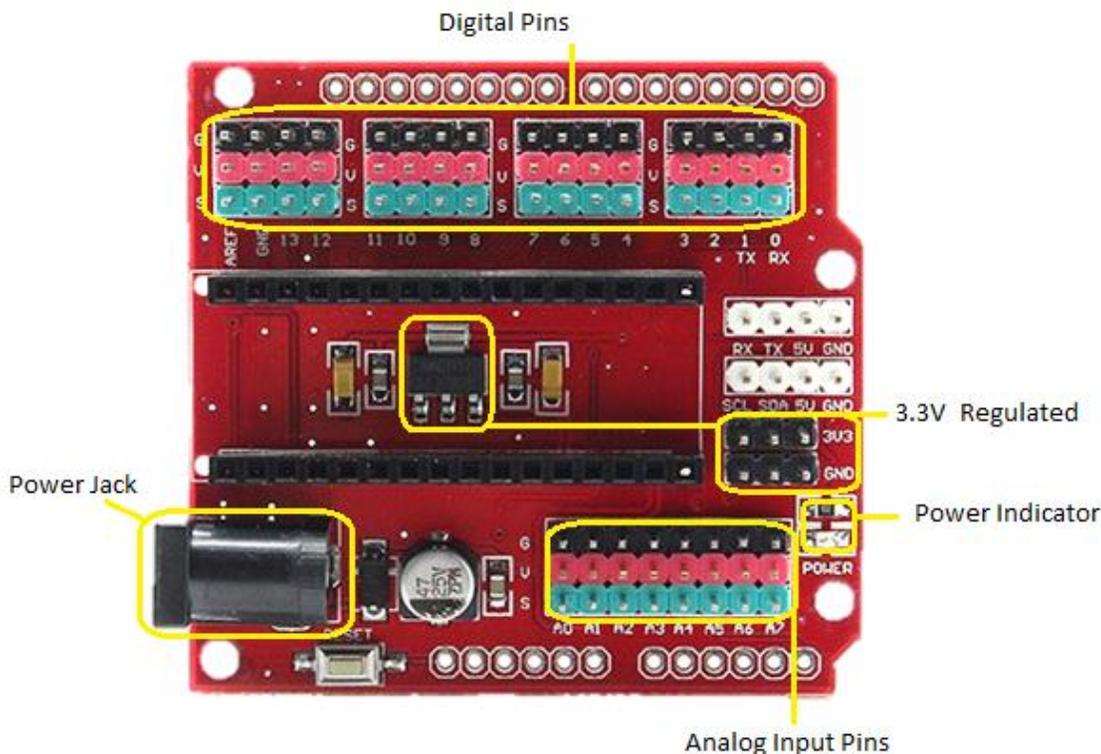


General Description

The Arduino Nano 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.

The Arduino Nano is a small, complete, and breadboard-friendly board based on the ATmega328 (Arduino Nano 3.0) or ATmega168 (Arduino Nano 2.x). It has more or less the same functionality of the Arduino Duemilanove, but in a different package. It lacks only a DC power jack, and works with a Mini-B USB cable instead of a standard one.

Shield Overview



Specifications

- Microcontroller: Atmel ATmega168 or ATmega328
- Operating Voltage (logic level): 5 V
- Input Voltage (recommended): 7-12 V
- Input Voltage (limits): 6-20 V
- 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 (ATmega328)

- SRAM: 2 KB (ATmega328)
- EEPROM: 512 bytes (ATmega168) or 1 KB (ATmega328)
- Clock Speed: 16 MHz
- Dimensions: 0.73" x 1.70"
- Length: 45 mm
- Width: 18 mm
- Weigth: 5 g

How to use with Tinkbit

What you need:

Tinkbit 3 Pin Connector

LDR Tinkbit

LED Tinkbit

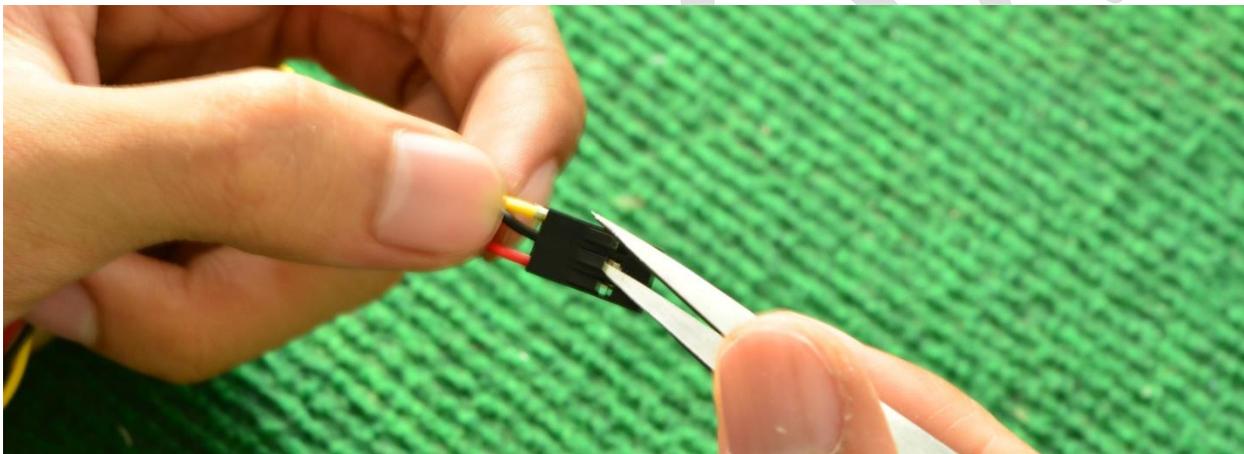
To use Tinkbit with Keyes Funduino Nano V3.0, we have to follow the correct wiring. You might receive a tinkbit where the headers are at the bottom. As you can notice, headers in the Funduino are arranged as S(data), +(Vcc), -(Gnd). We have to connect the tinkbit 3-pin connector properly to use it.



1. Check the tinkbit headers, if the headers are soldered at the upper part, follow the connections as shown in the figure above, that is {Data, Gnd Vcc}. At the lower part is {Gnd, Data, Vcc}.
2. 3 pin tinkbit connectors have Black(Gnd), Red(Vcc) and Yellow(Data) wires as shown in the figure:



3. Since the headers in Funduino are arranged as S, +, -, we have to match it to tinkbit. To do this, we can use tweezers to change the wire arrangement of one end of the 3 pin tinkbit connector.



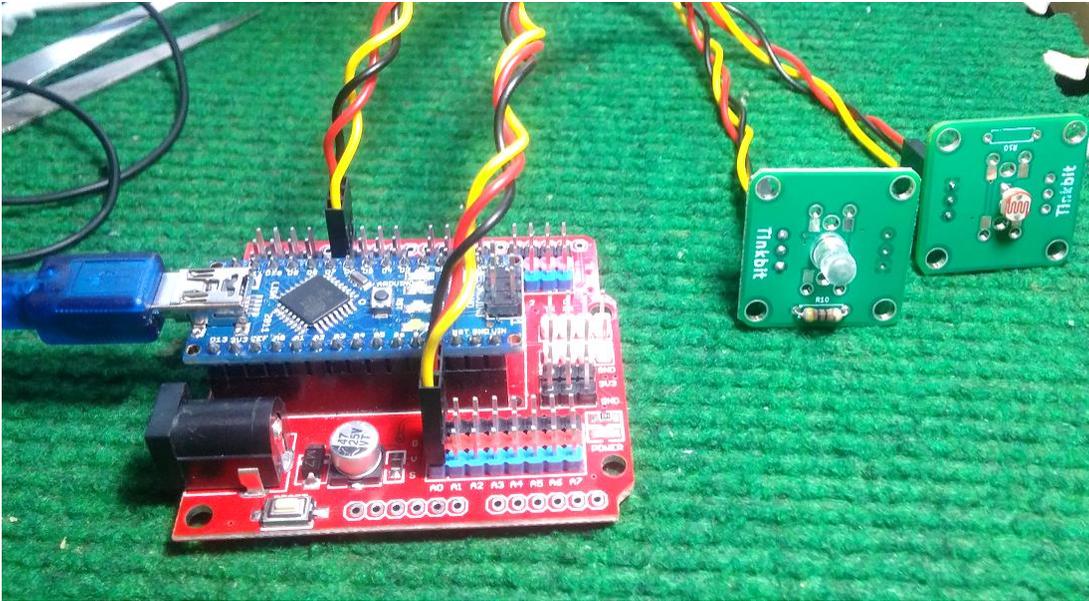
4. Change the board into Arduino Nano w/ ATmega 328 then upload a sketch to check, enter this sketch to your Arduino IDE:

```
int led = 11;

void setup() {
  // initialize the digital pin as an output.
  pinMode(led, OUTPUT);
  Serial.begin(9600);
}

// the loop routine runs over and over again forever:
void loop() {
  int sensorValue = analogRead(A0);
  Serial.println(sensorValue);
  digitalWrite(led, HIGH); // turn the LED on (HIGH is the
  voltage level)
  delay(500);
}
```

Actual Setup



Results

