

# NANO V4

ARD-NanoV4

## 1. GENERAL INFORMATION

Dear customer,  
thank you for purchasing our product. In the following we will show you what you need to bear in mind when commissioning and using.

Should you encounter any unexpected problems during use, please do not hesitate to contact us.

The ARD Nano V4 is a particularly small microcontroller and has been specially developed for working with plug-in boards thanks to the pin header that leads out at the bottom.

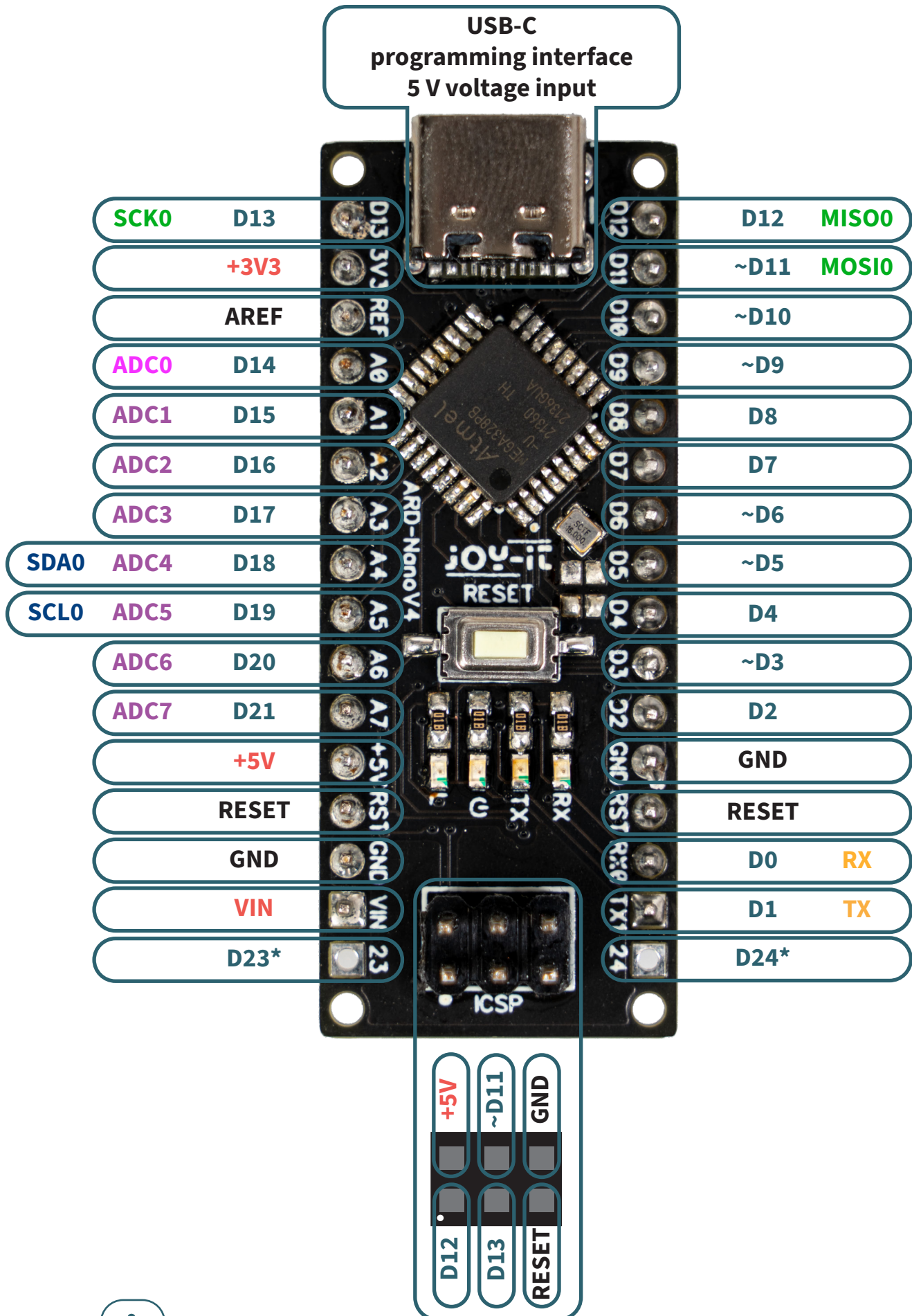
the integrated USB Type-C interface can be used to supply the circuit and board with power and to transfer programs to the microcontroller.

The NanoV4 is fully compatible with the Arduino Nano V3.



**Please make sure that you use the appropriate manual for your specific board - either ARD-NANOV4 or ARD-NANOV4-MC. Both boards are very similar, but require different configurations of the development environment. Using the wrong instructions will result in the board not working properly.**

## 2. DEVICE OVERVIEW



~ PWM pins

\* Can only be used with Minicore bootloader (ARD-NanoV4-MC)

### 3. SOFTWARE SETUP

The Arduino IDE is usually used to program the board.

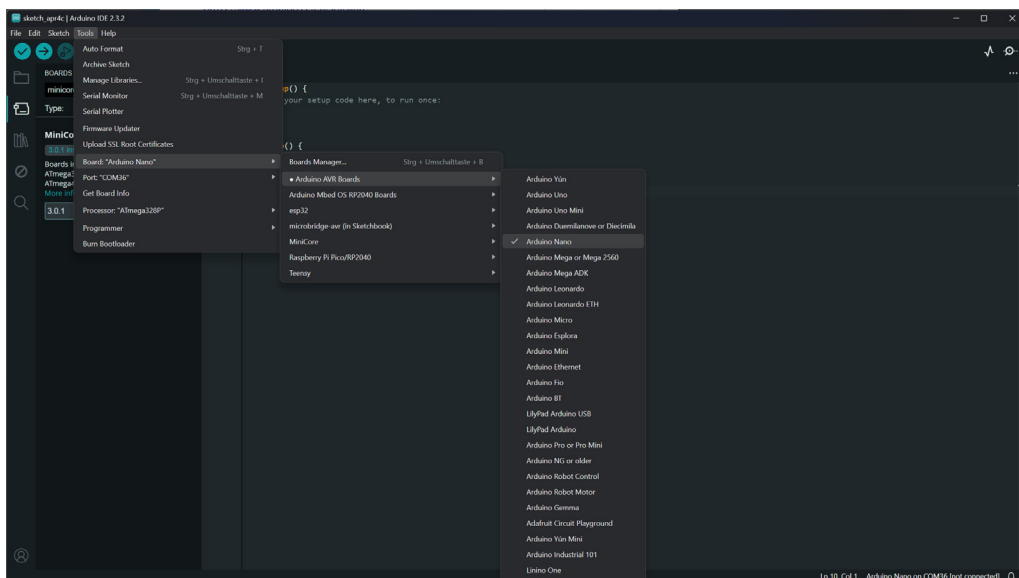
You can download them here:

<https://www.arduino.cc/en/software>

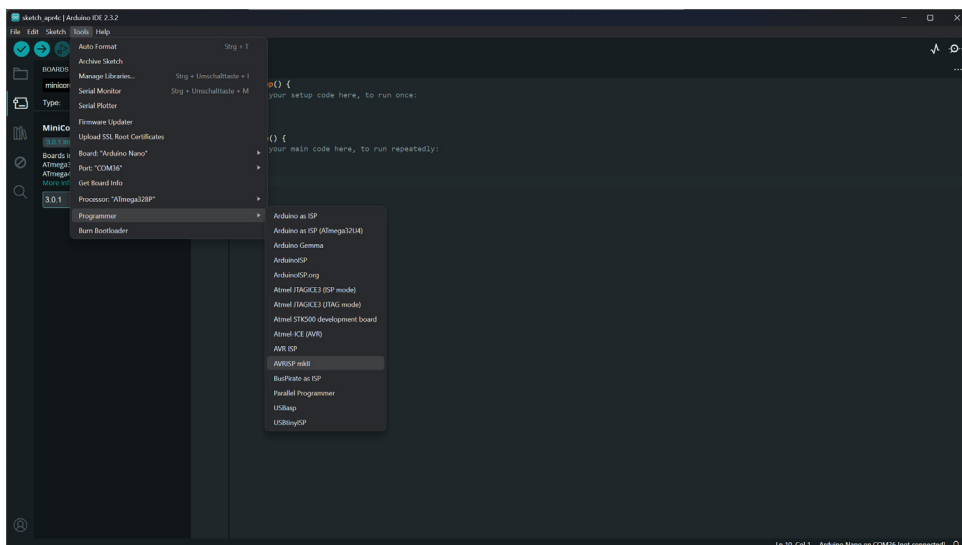
Once you have downloaded and installed the software, you can start it.

Before you can load a sketch, you need to make a few settings for the board.

Select **Tools** → **Board** → **Arduino AVR Boards** → **Arduino Nano**.

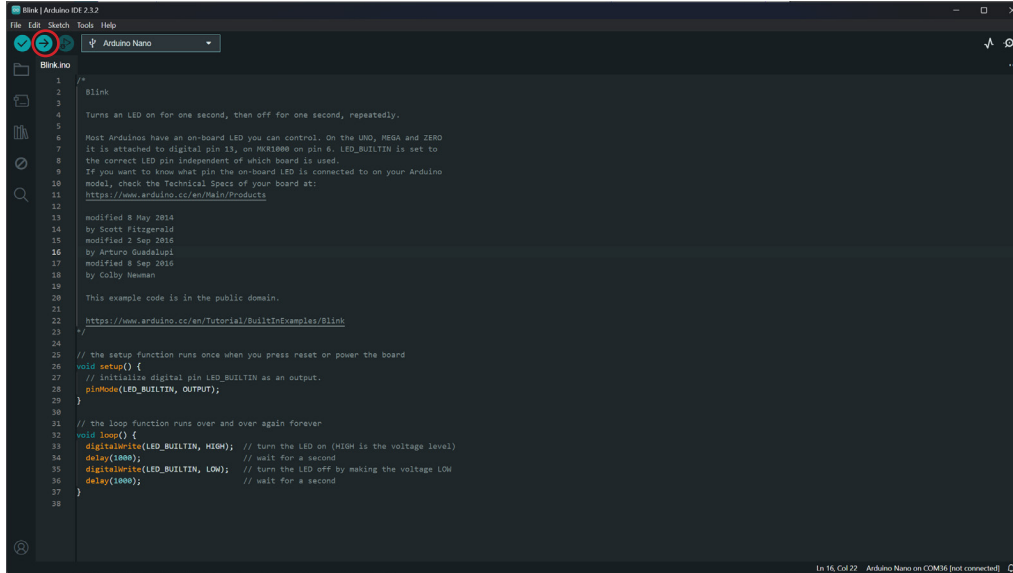


Also select **Tools** → **Processor** → **ATmega328P** and under **Tools** → **Port** the port to which the device is connected. Also Select **AVRISP mkII** as the **Programmer**.



## 4. CODE EXAMPLE

To test your configuration, you can run a simple code example on your NanoV4. To do this, open the file under **File** → **Examples** → **01.Basics** → **Blink**. Now upload the example by clicking on **Upload**.



```
1  // Blink
2  Blink
3
4  Turns an LED on for one second, then off for one second, repeatedly.
5
6  Most Arduinos have an on-board LED you can control. On the UNO, MEGA and ZERO
7  it is attached to digital pin 13, on MKR1000 on pin 6. LED_BUILTIN is set to
8  the correct LED pin independent of which board is used.
9  If you want to know what pin the on-board LED is connected to on your Arduino
10 model, check the Technical Specs of your board at:
11 https://www.arduino.cc/en/Main/Products
12
13 modified 8 May 2014
14 by Scott Fitzgerald
15 modified 2 Sep 2016
16 by Arturo Guadalupi
17 modified 8 Sep 2016
18 by Colby Newman
19
20 This example code is in the public domain.
21
22 https://www.arduino.cc/en/Tutorial/BuiltInExamples/Blink
23
24
25 // the setup function runs once when you press reset or power the board
26 void setup() {
27   // initialise digital pin LED_BUILTIN as an output.
28   pinMode(LED_BUILTIN, OUTPUT);
29 }
30
31 // the loop function runs over and over again forever
32 void loop() {
33   digitalWrite(LED_BUILTIN, HIGH); // turn the LED on (HIGH is the voltage level)
34   delay(1000); // wait for a second
35   digitalWrite(LED_BUILTIN, LOW); // turn the LED off by making the voltage LOW
36   delay(1000); // wait for a second
37 }
38
```

This example code makes the LED on the board flash.

## 5. INFORMATION & TAKE-BACK OBLIGATIONS

Our information and take-back obligations under the German Electrical and Electronic Equipment Act (ElektroG)



### **Symbol on electrical and electronic equipment:**

This crossed-out garbage can means that electrical and electronic appliances do not belong in household waste. You must hand in the old appliances at a collection point. Before handing them in, you must separate used batteries and accumulators that are not enclosed by the old appliance.

### **Return options:**

As an end user, you can hand in your old appliance (which essentially fulfills the same function as the new appliance purchased from us) for disposal free of charge when purchasing a new appliance. Small appliances with no external dimensions greater than 25 cm can be disposed of in normal household quantities regardless of whether you have purchased a new appliance.

### **Possibility of return at our company location during opening hours:**

SIMAC Electronics GmbH, Pascalstr. 8, D-47506 Neukirchen-Vluyn

### **Return option in your area:**

We will send you a parcel stamp with which you can return the device to us free of charge. To do so, please contact us by e-mail at [Service@joy-it.net](mailto:Service@joy-it.net) or by telephone.

### **Packaging information:**

Please pack your old appliance securely for transportation. If you do not have suitable packaging material or do not wish to use your own, please contact us and we will send you suitable packaging.

## 6. SUPPORT

We are also there for you after your purchase. If you still have any questions or problems arise, we are also available by e-mail, telephone and ticket support system.

E-Mail: [service@joy-it.net](mailto:service@joy-it.net)

Ticket-System: <https://support.joy-it.net>

Phone: +49 (0)2845 9360 - 50

For further information, please visit our website:

[www.joy-it.net](http://www.joy-it.net)