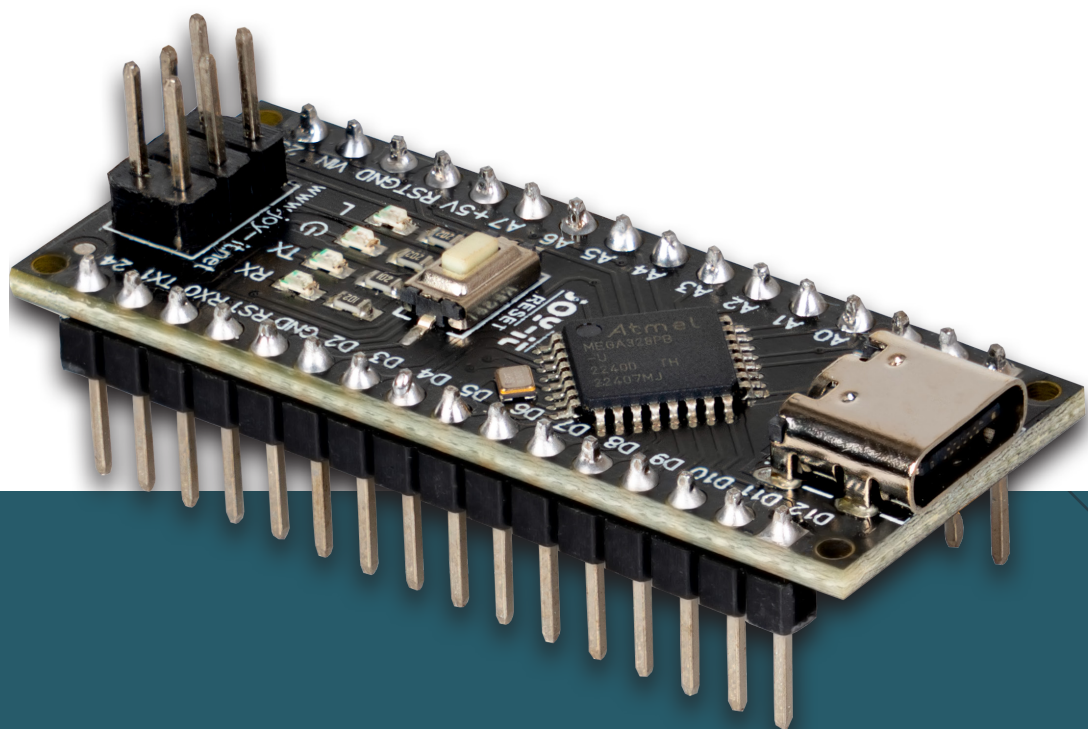




NANO V4 MINICORE

ARD-NanoV4-MC

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 NanoV4-MC 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.

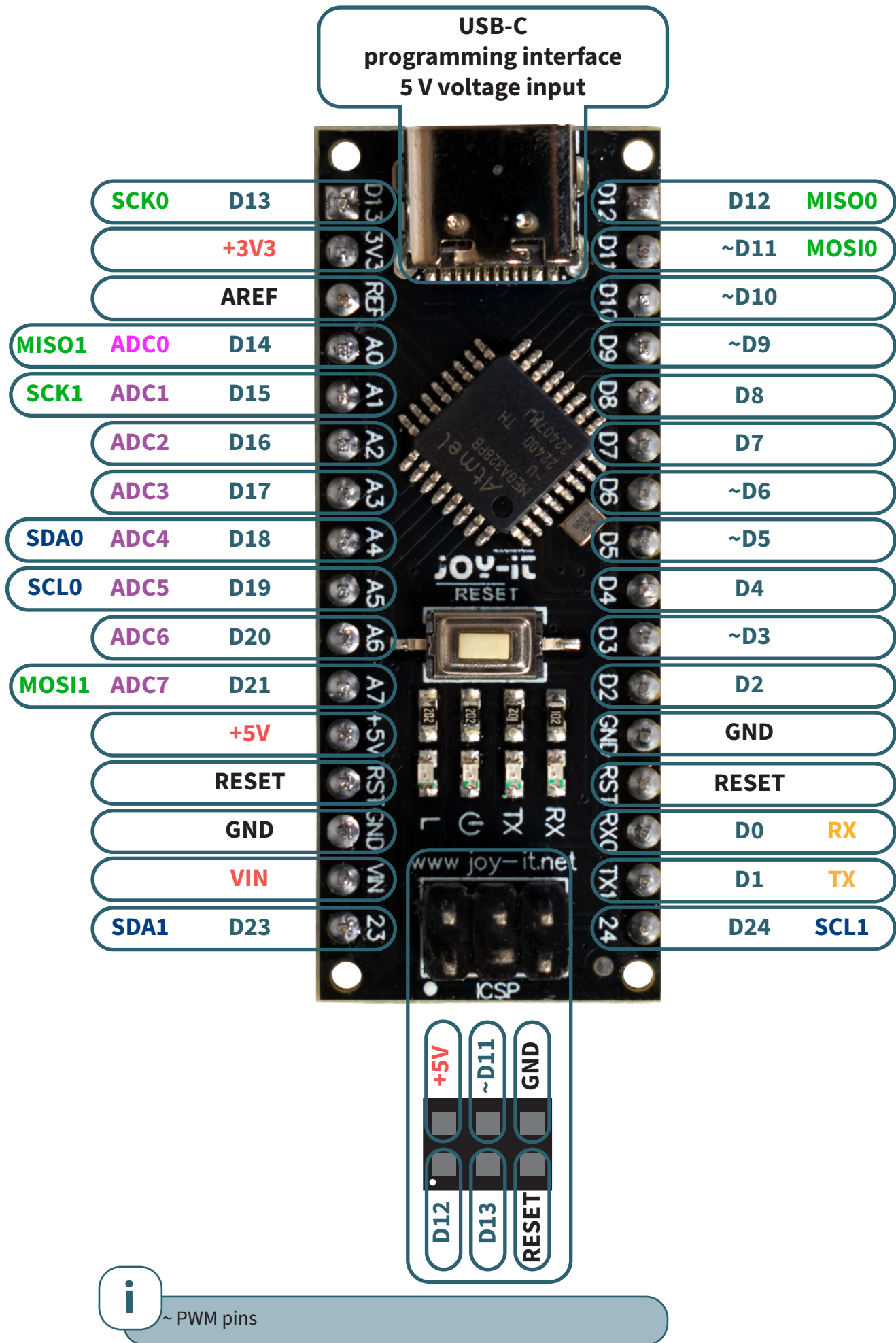
The integrated USB Type-C interface can be used to supply the circuit and board with power and to transfer programs to the microcontroller.

Compared to the NANO-V3, the NanoV4-MC has 2 additional IO pins and an additional hardware I2C and SPI interface in addition to the USB-C interface. The bootloader used is compatible with most existing Arduino libraries.



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



3. SOFTWARE SETUP

The Arduino IDE is usually used to program the board.

You can download them here:

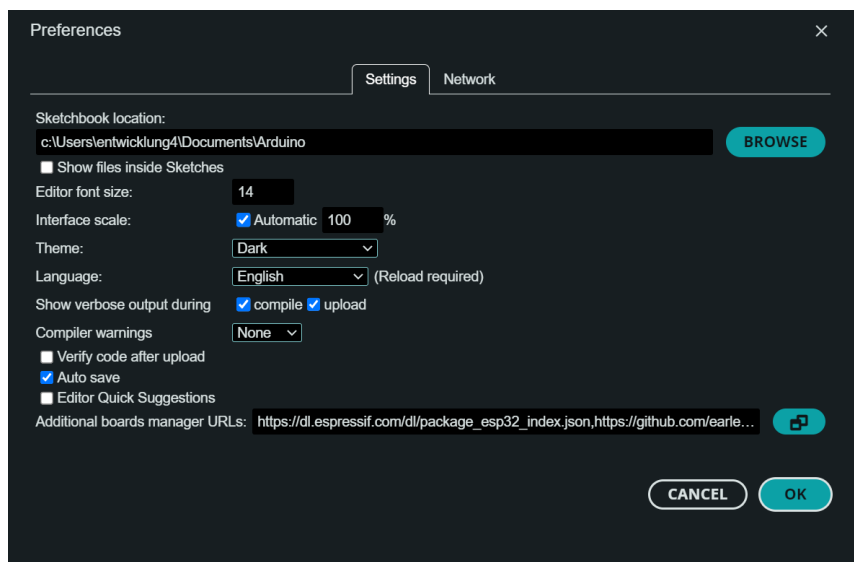
<https://www.arduino.cc/en/software>

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

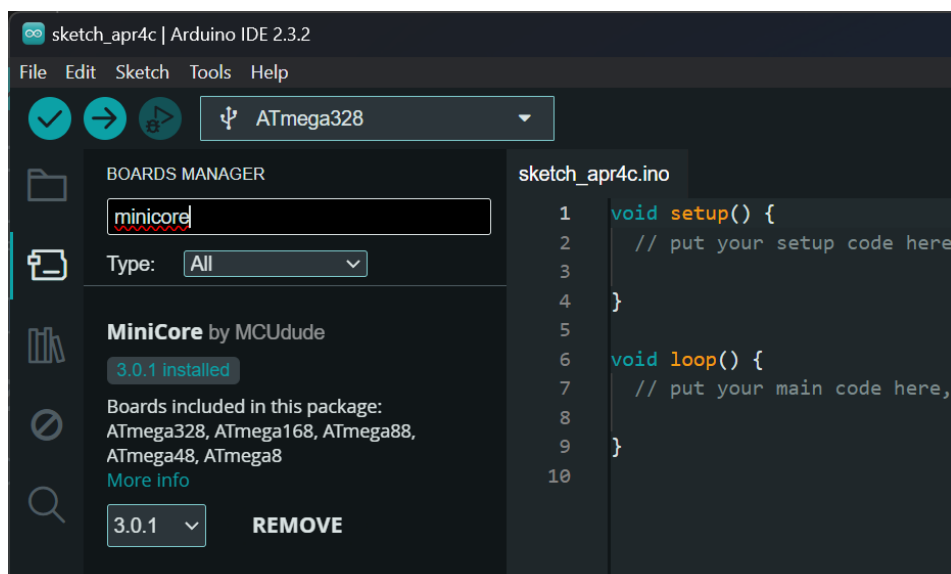
Before you can load a sketch, you need to make a few settings for the board.

First add this additional board manager URL under **File** → **Preferences**:

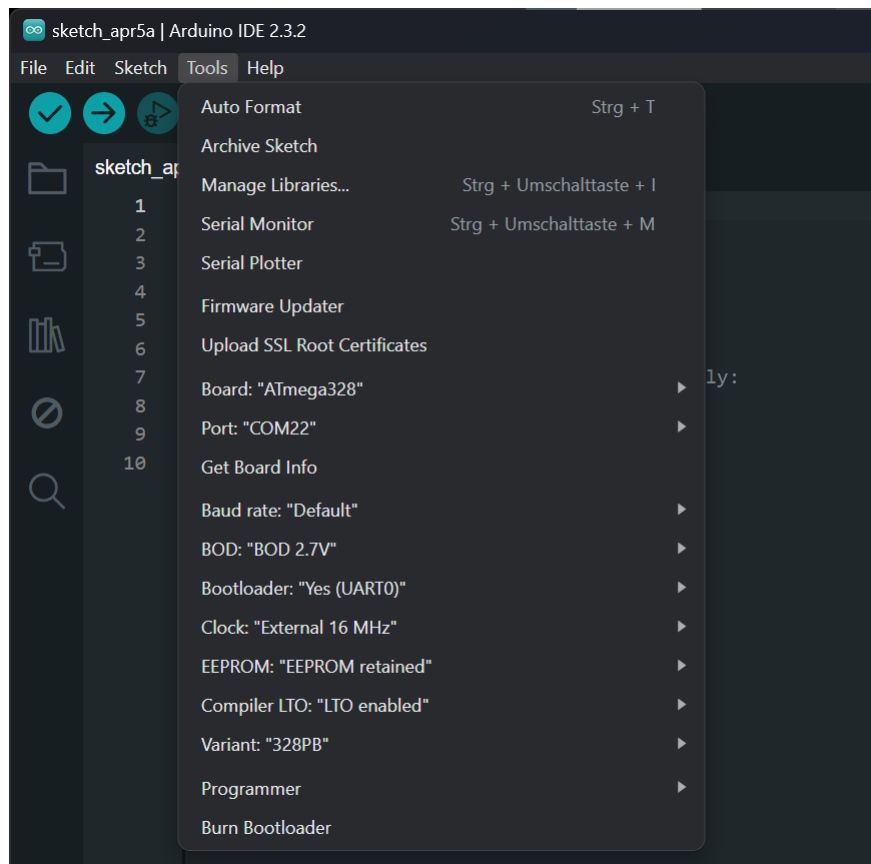
https://mcudude.github.io/MiniCore/package_MCUdude_MiniCore_index.json



Now you can search for minicore under **Tools** → **Board** → **Boards Manager...** and install the **MiniCore** board manager from **MCUdude**.



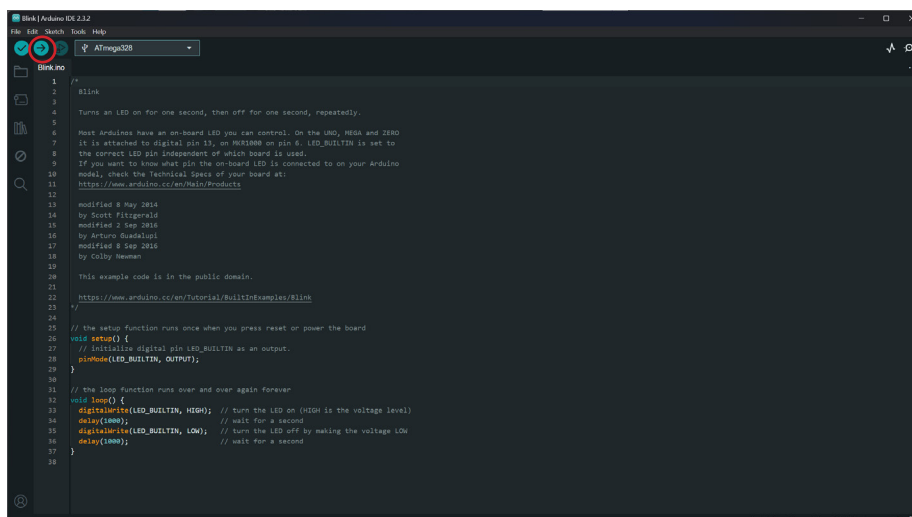
Now select the appropriate board: **Tools** → **Board** → **Minicore** → **ATmega328**
At **Tools** → **Port**, select the port to which your device is connected.
At **Tools** → **Variant**, select **328PB**. And at **Tools** → **Programmer** select **AVRISP mkII**



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**.



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 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

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

Phone: +49 (0)2845 9360 - 50

For further information, please visit our website:

www.joy-it.net