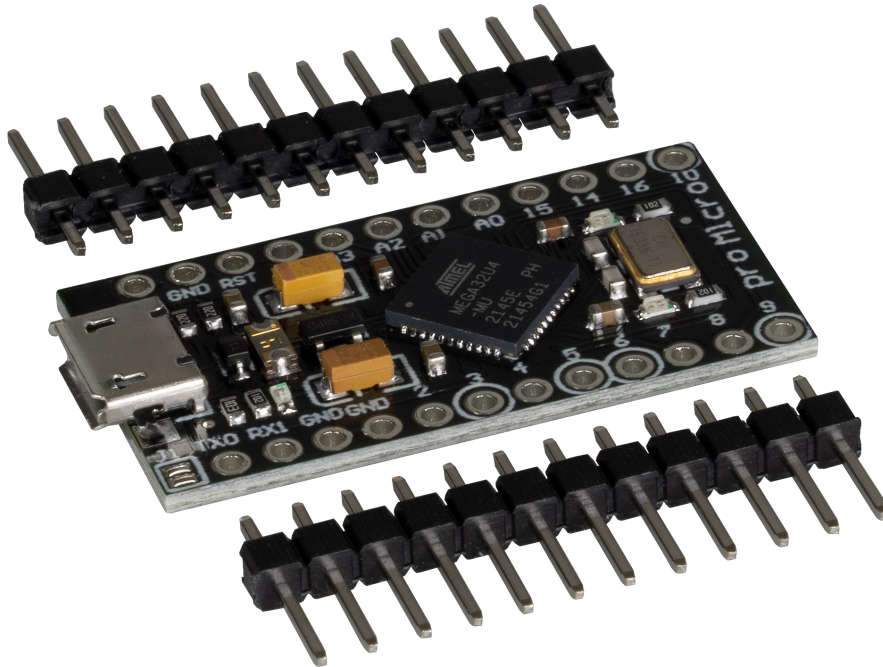


PRO MICRO

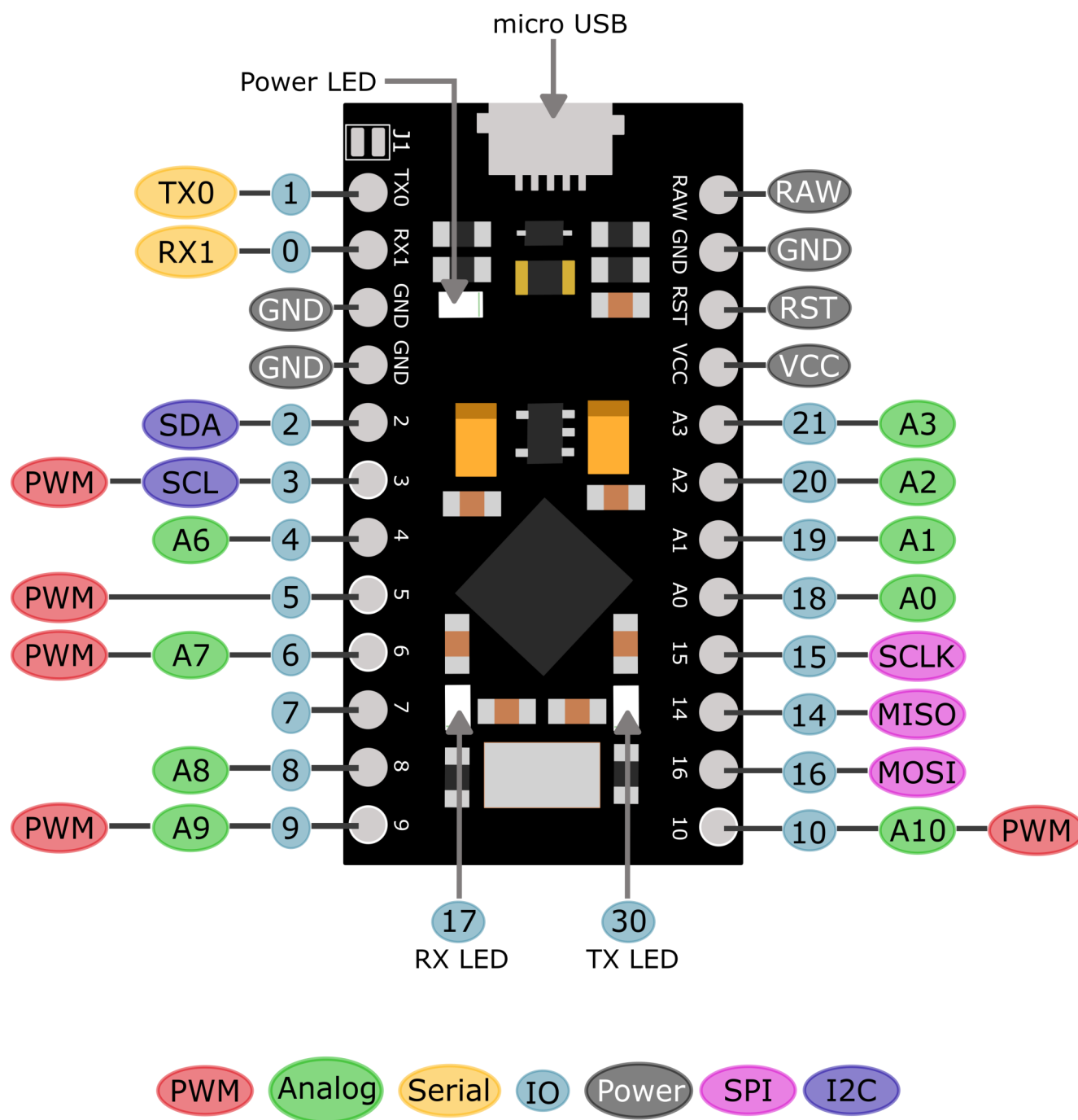
Arduino compatible Microcontroller



1. GENERAL INFORMATION

Dear customer,
thank you very much for choosing our product.
In following, we will introduce you to what to observe while starting up
and using this product.
Should you encounter any unexpected problems during use, please do
not hesitate to contact us.

2. PINOUT



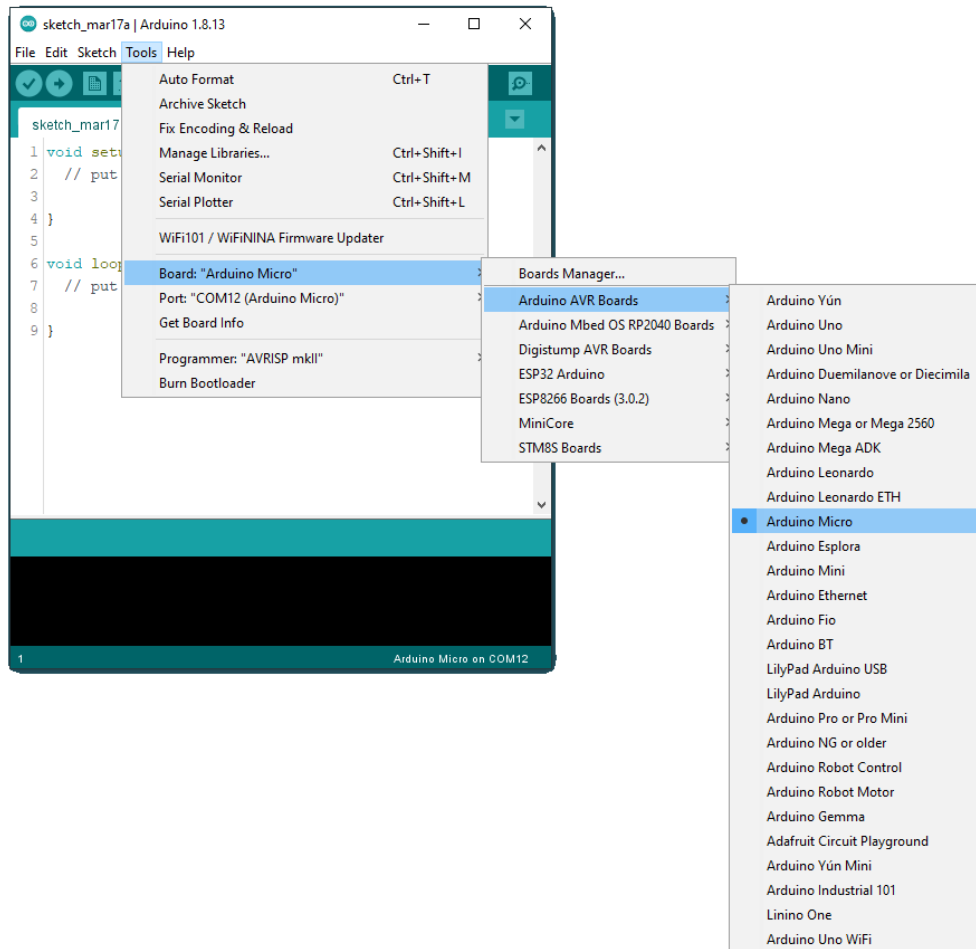
By closing the solder bridge **J1**, the voltage converter on the board is bypassed and the board is directly supplied via the microUSB voltage or the VCC pin. This also allows the operation from as low as 2.7 V. The logic level of the module then also corresponds to the supply voltage.

Attention!!! With closed solder bridge the module may only be supplied with max. 5.5 V!!!

3. SETUP OF THE DEVELOPMENT ENVIRONMENT

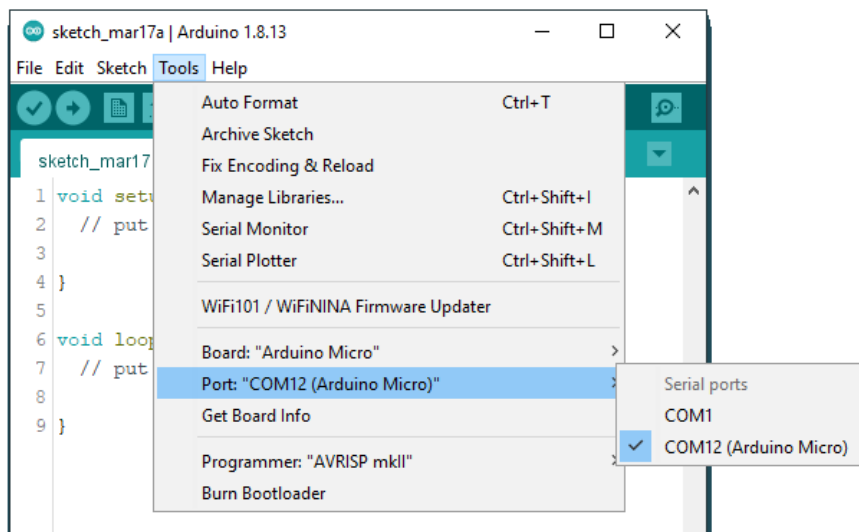
To program your Pro Micro you can use the Arduino IDE, which you can [download here](#).

Now you can set your development environment, for this select under **Tools -> Board -> Arduino AVR Boards -> Arduino Micro**.



Finally, you need to set the correct port to which your Pro Micro is connected.

You can select this under **Tools -> Port**.



Note that the port will probably be different for you.

4. CODE EXAMPLE

Now you can copy the following sample code into your IDE and upload it to your Pro Micro.

The program makes the two built-in LEDs on the RX and TX line blink alternately.

```
/* the setup function runs once when you press reset or  
power the board*/  
void setup() {  
  /* initialize digital pin LED_BUILTIN as an output.*/  
  pinMode(17, OUTPUT);  
  pinMode(30, OUTPUT);  
}  
  
/* the loop function runs over and over again forever*/  
void loop() {  
  digitalWrite(17, HIGH);    // turn the LED on  
  digitalWrite(30, LOW);    // turn the LED off  
  delay(1000);              // wait for a second  
  digitalWrite(17, LOW);    // turn the LED off  
  digitalWrite(30, HIGH);   // turn the on  
  delay(1000);              // wait for a second  
}
```

5. ADDITIONAL INFORMATION

Our information and take-back obligations according to the Electrical and Electronic Equipment Act (ElektroG)

Symbol on electrical and electronic equipment:



This crossed-out dustbin means that electrical and electronic appliances do not belong in the household waste. You must return the old appliances to a collection point.

Before handing over waste batteries and accumulators that are not enclosed by waste equipment must be separated from it.

Return options:

As an end user, you can return your old device (which essentially fulfils the same function as the new device purchased from us) free of charge for disposal when you purchase a new device.

Small appliances with no external dimensions greater than 25 cm can be disposed of in normal household quantities independently of the purchase of a new appliance.

Possibility of return at our company location during opening hours:

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

Possibility of return in your area:

We will send you a parcel stamp with which you can return the device to us free of charge. Please contact us by email at Service@joy-it.net or by telephone.

Information on packaging:

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

If there are still any issues pending or problems arising after your purchase, we will support you by e-mail, telephone and with our ticket support system.

Email: service@joy-it.net

Ticket system: <http://support.joy-it.net>

Telephone: +49 (0)2845 9360-50 (10-17 o'clock)

For further information please visit our website:

www.joy-it.net