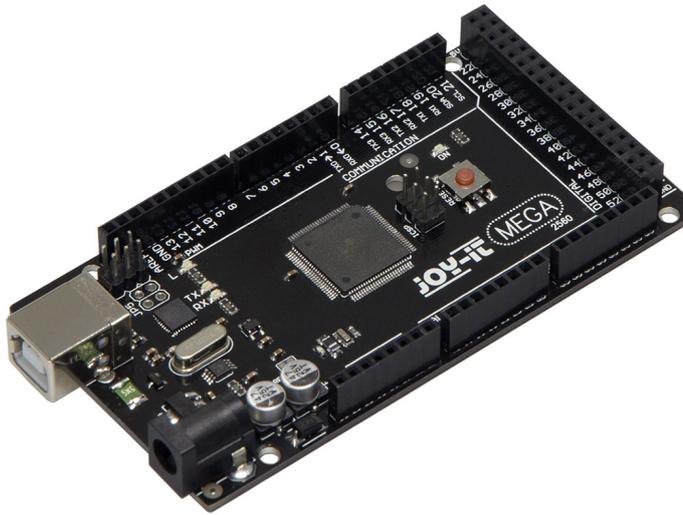# ARD_MEGA2560R3
Arduino Mega 2560 compatible microcontroller, not an original Arduino

1. GENERAL INFORMATION & SAFETY INSTRUCTIONS

Dear customer,
thank you for choosing a Joy-IT product. Our board is a high quality replica and compatible to the Arduino Mega 2560 but it is not an original Arduino. The „Mega Board" is the right microcontroller board for those who want to get quickly and easily into the world of programming.

On the internet, you will find a variety of tutorials and manuals for this microcontroller board that will give you an easy introduction to the world of programming.

The ATMega2560 microcontroller offers you enough performance for your ideas and projects. It is 101.52 x 53.3 mm in size and has more connections than others with 54 digital in- / outputs and 16 analog inputs.

2. TECHNICAL SPECIFICATIONS

Model	ARD_Mega2560R3
EAN	4250236812366
Microcontroller	ATmega2560
Input voltage	7 - 12 V
Input voltage (max.)	6 - 20 V
Digital IO	54 of which 14 PWM
Analog IO	16
DC current IO	20 mA
DC current 3.3 V	50 mA
Storage	256 KB (8 KB for Bootloader)
SRAM	8 KB
EEPROM	4 KB
Clock Speed	16 MHz
Dimensions	101,52 x 53,3 mm

3. PINOUT
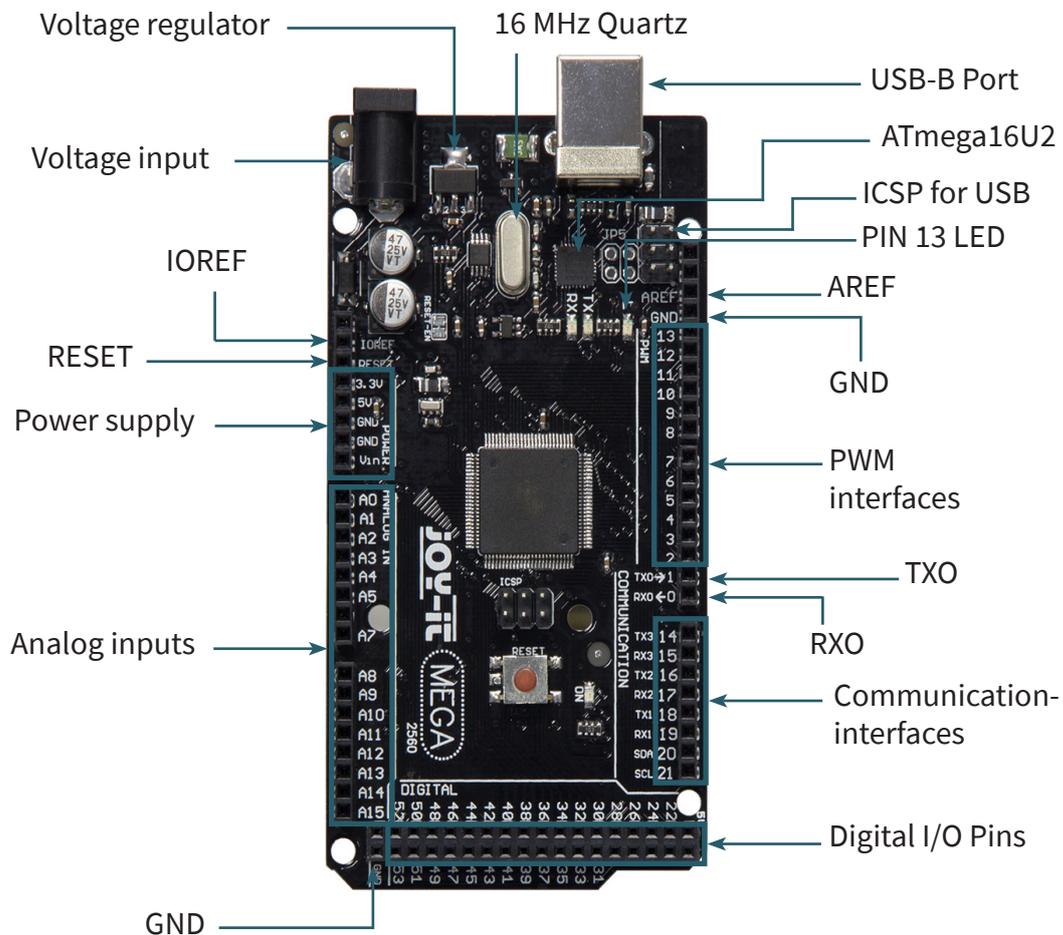
4. SOFTWARE-INSTALLATION

If you start programming the Joy-IT ARD_Mega2560R3, you have to install a development environment and the drivers for the associated operating system on your computer which is going to be used for programming.

The recommended development environment is the "Arduino IDE" which is released by the Arduino manufacturer as an open source software. This software is aimed at beginners, due to concept and structure. It is compatible to the Joy-IT ARD_Mega2560R3 and has next to the development environment also the required drivers which make it possible to start immediately.

The download for this software can be found with the following link:
https://www.arduino.cc/en/Main/Software

5. SOFTWARE SETUP

After installing the software, the appropriate microcontroller board must be set up in the programming environment. To do this follow the next two steps.

1.   Select [Tools → Board] choose "Arduino / Genuino Mega or Mega 2560"
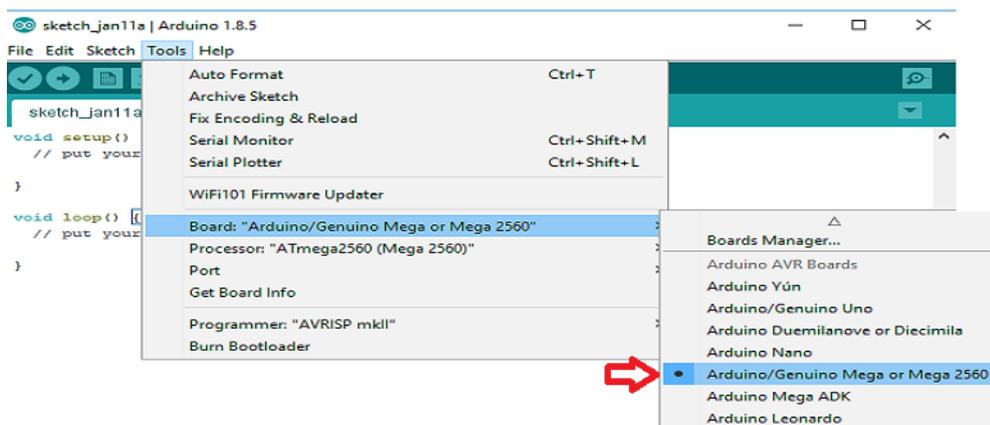
2.   Select [Tools → Port] choose the port marked with „(Arduino / Genuino Mega or Mega 2560)