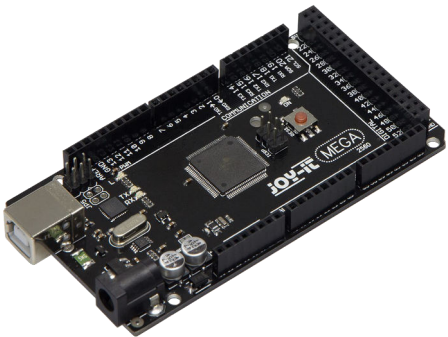



# ARD\_MEGA2560R3

(Arduino Mega 2560-compatible  
Microcontroller, no original Arduino)

## Manual





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.

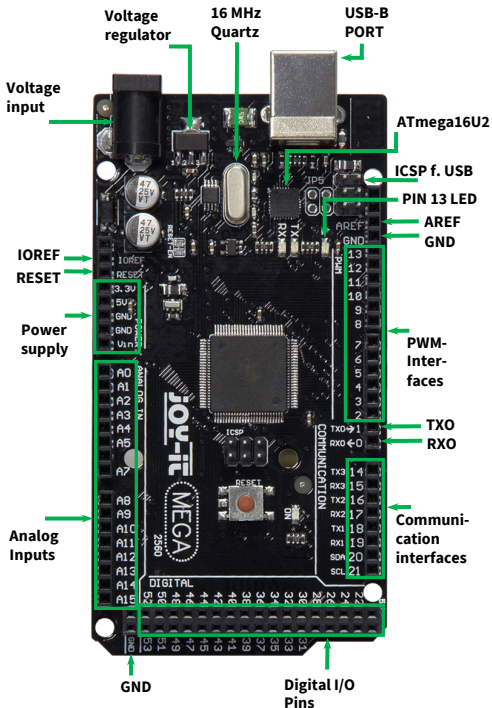
On the internet, you will find a variety of tutorials and manuals for this microcontroller board that will give you an easy introduction to the world of programming.

The ATmega2560 microcontroller offers you enough performance for your ideas and projects. It is 10 x 5 cm in size and has more connections than others with 54 digital in- / outputs and 16 analog inputs.

# 1. TECHNICAL SPECIFICATIONS

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

## 2. PIN ASSIGNMENT



### 3. 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.

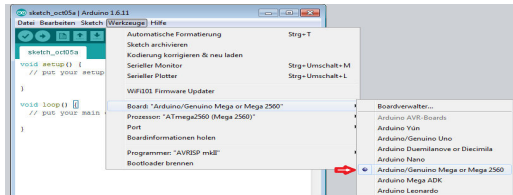
The download for this software can be found with the following link:

<https://www.arduino.cc/en/Main/Software>

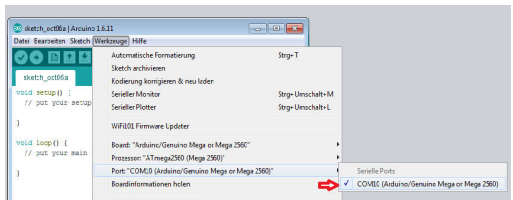
## 4. SOFTWARE SETUP

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 under [Tools->Board] „Arduino/Genuino Mega or Mega 2560“



### 2. Select under [Tools -> Port] the port, marked with „(Arduino/Genuino Mega or Mega 2560)“.



## 5. DECLARATION OF CONFORMITY

We the manufacturer,  
Simac Electronics GmbH

Pascalstr. 8

D-47506 Neukirchen-Vluyn

declare that the product „ARD\_Mega2560R3“

(Microcontroller board for experimental set-ups and prototypes)

fulfils the essential following guidelines, if used as intended:

2004/ 108/EG (EMV) & 2011/65/EU (Rohs)

The norms stipulated in following have been used to assess the device:

EN 61326-1: 2006 electrical equipment for measuring, control and laboratory devices

EMV requirements - Part 1 - General requirements

Date: 14.08.2015

Name: Xu Lu

Position in Business: CEO

Signature:



## 6. FURTHER INFORMATION

Our Information and Take-back obligations according to the Electrical and Electronic Equipment Act (ElektroG)



### **Symbol on Electric and Electronic Devices:**

This crossed-out dustbin means, that electric and electronic devices do **not** belong into household waste. You have to return the used device to a registration place. Before handing over, you must remove the waste (rechargeable) batteries which are not enclosed by the device.

### **Return Options:**

As end user, you can hand over the used device (which essentially serves for the same function as the new one bought with us) free of charge for disposal at purchase of the new device. Small devices which do not have outer dimensions bigger than 25 cm, can be handed over for disposal in normal household quantities independently of the purchase of a new device.

- **Option of return at our company site during our opening hours:**

Simac Electronics GmbH,



Pascalstr. 8, D-47506 Neukirchen-Vluyn

– **Option of return nearby:**

We will send you a parcel stamp with which you can send us your old device free of charge. For using this, please contact us via e-mail at [pickup@joy-it.net](mailto:pickup@joy-it.net) or via telephone at 02845 93 60 -23.

**Information on packaging:**

Please pack your old device safe for transport. If you do not have suitable packaging material or you do not want to use your own material, please contact us and we will send you an ap-

## 7. SUPPORT

We also support you after purchase, of course. Should you have any outstanding questions or problems, please contact us via e-mail, telephone and ticket-support-system.

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

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

Telephone: +49 (0)2845 98469 – 66 (10 - 17 o'clock)

For further information, please visit our website: [www.joy-it.net](http://www.joy-it.net)

## Recommended accessoires: Joy-IT SensorKit



Extensive sensor set with 40 sensors including analog-digital-converter and voltage converter

- High-quality, reliable sensors
- Universally applicable
- including detailed description with Programming examples for Arduino and Raspberry Pi