

### **JOY-IT BOARD R3 DIP**

Mikrocontrollerboard with ATmega328 (Arduino UNO-compatible)



Dear customer,

thank you for choosing a Joy-IT product. Our board is a high quality replica and compatible to the Arduino UNO but it is not an orginal Arduino.

This product 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 ATMega328 microcontroller offers you enough performance for your ideas and projects. It is 68 x 53 mm in size and has more connections than others with 14 digital in- / outputs and 6 analog inputs.

### 2. PIN ASSIGNMENT



### 3. TECHNICAL SPECIFICATIONS

Article number	ARD_R3DIP
EAN	425023681109
Mikrocontroller	ATmega328P
Input voltage	7 - 12 V DC IN
	5 V (USB)
Digital IO	14 of this 6 PWM
Analog IO	6
DC current IO	20 mA
DC current 3.3 V	50 mA
Storage	32 KB
RAM	2 KB
EEPROM	1 KB
Clock Speed	16 MHz
Dimensions	68,2 x 53,4

### 4. SOFTWARE-INSTALLATION

If you start programming the Joy-IT ARD\_R3DIP, you must install a

development environment and the drivers for the associated operating

system on your computer which is going to be used for the 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 due to concept and structure at beginners. It is compatible to the Joy-IT ARD\_R3DIP 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-SET UP

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] to choose "Arduino Uno"

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	Bootloader brennen		Arduino Uno
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### 2. Select [Tools -> Port] to choose the port, marked with "(Arduino Uno)".

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	Platine	>	
	Port	>	Serial ports
	Programmer		COM1
	Bootloader brennen	1	COM3 (Arduino Uno)

#### 6. DECLARATION OF CONFORMITY

The manufacturer

Simac Electronics GmbH Pascalstr. 8 D-47506 Neukirchen - Vluyn

confirms that the product "ARD\_R3DIP" fulfils the requirements of the following guidelines, if used as intended:

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

The following norms have been used to assess this device:

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

EMV requirements part 1 general requirements

Date: 14 Name: Xu Position in business: CE Signature: V

14.08.2015 Xu Lu CEO

### 7. 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 bin 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 E. H. 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 via telephone at 02845 93 60 -23.

### 8. SUPPORT

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

Email: service@joy-it.net Ticket-System: http://support.joy-it.net Telephone: +49 (0)2845 98469 – 66 (10 - 17 clock)

For more information visit our website: <u>www.joy-it.net</u>

> www.joy-it.net Simac Electronics GmbH Pascalstr. 8, 47506 Neukirchen-Vluyn