

# EXPLORER BOARD

Discovery board for quick and easy experimentation for Raspberry Pi Pico

ART-NO.: RB-P-XPLR

Joy-IT powered by SIMAC Electronics GmbH - Pascalstr. 8 - 47506 Neukirchen-Vluyn - [www.joy-it.net](http://www.joy-it.net)

**joy-it**

## 1. GENERAL INFORMATION

Dear Customer,

Thank you for choosing our product. In the following, we will show you what you should pay attention to during commissioning and use.

Should you encounter any unexpected problems during use, please feel free to contact us.

## 2. OVERVIEW

Our Explorer Board is the easy and efficient way to develop your Raspberry Pi Pico projects.

Since the most important components are already integrated, you save time and effort when wiring. The Explorer Board has a wide range of interface connectors so you can connect your projects to a variety of modules and devices. With the integrated breadboard, you can quickly build and implement your own projects.

Thanks to the possibility to connect or disconnect all modules individually, you can use your pins, which are additionally led separately to the outside, for other projects or experiment on the integrated breadboard at any time.



All installed components can be switched off via the respective switch if they are not needed. This way, the corresponding pins can be used for other components, if necessary.

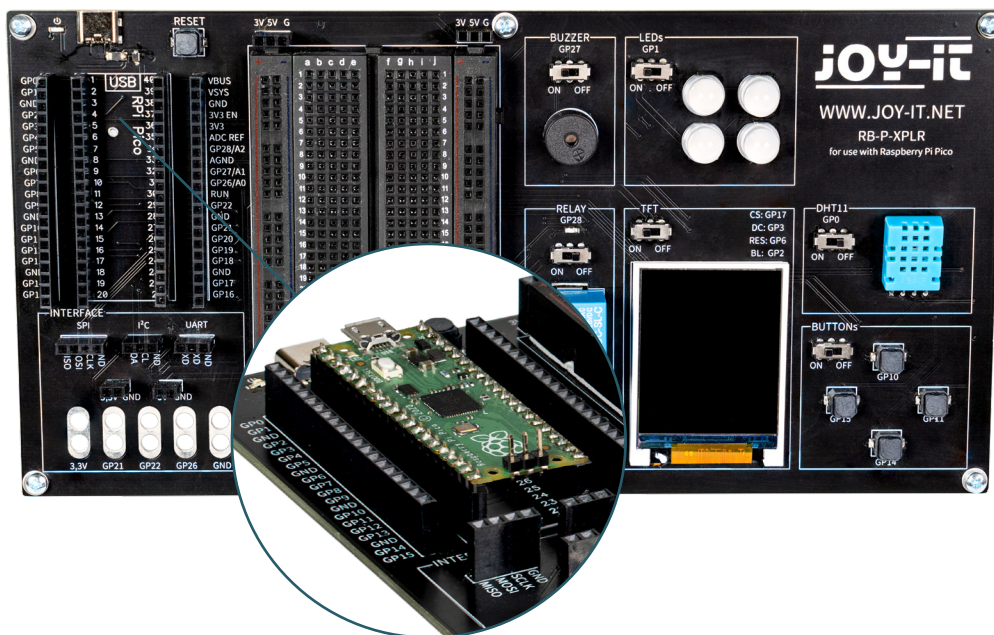
On the left and right side of the Raspberry Pi Pico all pins are additionally implemented. Here, components can be connected directly or via additional cables to the integrated breadboard.

## MODULE OVERVIEW

Buzzer	GP27
LEDs	GP1
Relay	GP28
1,8" TFT Display	CS: GP17, DC: GP3 RES: GP6, BL: GP2
DHT11	GP0
Buttons	GP10, GP11, GP14 & GP15
Servos	GP7, GP8, GP9 & GP20
UART	RXD: GP13, TXD: GP12
I2C	SDA: GP4, SCL: GP5
SPI	MISO: GP16, MOSI: GP19, SCLK: GP18

## 3. USAGE

First, insert your Raspberry Pi Pico into the appropriate slot.



Now connect a Micro-USB cable to your computer and to the Raspberry Pi Pico for programming.

**ATTENTION!** The USB-C connector on the explorer board is only used for power supply. No data will be transferred to the Raspberry Pi.

To transfer our sample program, you can use a suitable development program of your choice. We recommend the [Thonny Python IDE](#) here.

You can download our sample program [here](#). After unpacking the program, open it and transfer it completely to your Raspberry Pi Pico using your development environment. Both the **main.py** file and the entire **lib** folder are necessary to run the sample program.

After the successful transfer, the Raspberry Pi Pico will automatically execute the sample code after a reboot.

## 4. INFORMATION & TAKE-BACK OBLIGATIONS

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



### **Symbol on electrical and electronic equipment**

This crossed-out trash can means that electrical and electronic equipment does not belong in the household trash. You must hand in the old equipment at a collection point. Before dropping off, you must separate used batteries and accumulators that are not enclosed in the old device from the old device.

### **Return options:**

As an end user, when you purchase a new appliance, you can return your old appliance (which performs essentially the same function as the new one purchased from us) for disposal free of charge. Small appliances with no external dimensions larger than 25 cm can be returned in normal household quantities, regardless of the purchase of a new appliance.

### **Possibility return to our company location during opening hours:**

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

### **Possibility return in your area:**

We will send you a parcel stamp with which you can return the device to us free of charge. To do this, please contact us by e-mail at [service@joy-it.net](mailto:service@joy-it.net) or by phone.

### **Packaging information:**

Please pack your old device securely for transport. 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.

## 5. SUPPORT

We are also there for you after the purchase. If you have any questions or problems arise, we are also available by 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>

Phone: +49 (0)2845 9360 – 50 (9:30 - 17:15 o'clock)

For more information, visit our website: