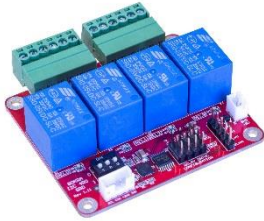


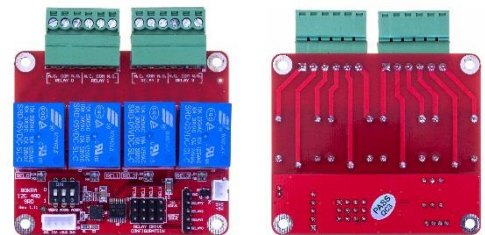
I2C 4RO SRD



The **BOKRA I2C 4RO SRD** module has four [SRD-05VDC-SL-C](#) relays. Rated resistive load: 7A at a voltage of 240 VAC or 28 VDC. Contact form - SPDT. The galvanic isolation is individual. The dielectric strength of the insulation is 1,5 kV AC (for one minute between the coil and the contacts) and 1 kV AC (for one minute between the contacts of the same polarity).

There is an indication of the status of relays.

The **BOKRA I2C 4RO SRD** module is controlled via the I²C interface using the [MCP23008](#) chip. An alternative control method is directly via signals via an auxiliary connector. These control methods allow you to use the module with almost any type of microcontroller.



The main areas of application of the **BOKRA I2C 4RO SRD** module:

- Industry
- Consumer electronics and devices
- Data acquisition systems (DAS) and PLC
- Lighting
- Heating, Ventilation, & Air Conditioning (HVAC)
- Equipment
- Smart home
- DC motor control
- Power On / Off
-

BOKRA I2C 4RO SRD features

- MCP23008 I2C chip
- Support 100kHz and 400kHz I2C bus frequency
- Microswitch addressing to use eight addresses on the I²C bus
- Grove connectors for I²C
- Compatible with most microcontrollers
- 4 SPDT type relays
- The consumption of each relay is less than 90mA
- Characteristics for resistive load ($\cos\Phi=1$):
 - 7A 28VDC
 - 10A 125VAC
 - 7A 240VAC
- Characteristics for inductive load ($\cos\Phi=0.4$ L/R=7msec):
 - 3A 120VAC
 - 3A 28VDC
- Insulation Strength:
 - 4 kV AC for 1 minute between coil and contacts
 - 1 kV AC for 1 minute between the contacts of the same polarity
- Relay status indication
- The **BOKRA I2C 4RO SRD** module size 65 x 56 mm. The format of the module corresponds to the popular format of the Raspberry Pi 3A+, which greatly simplifies its use with the Raspberry Pi.

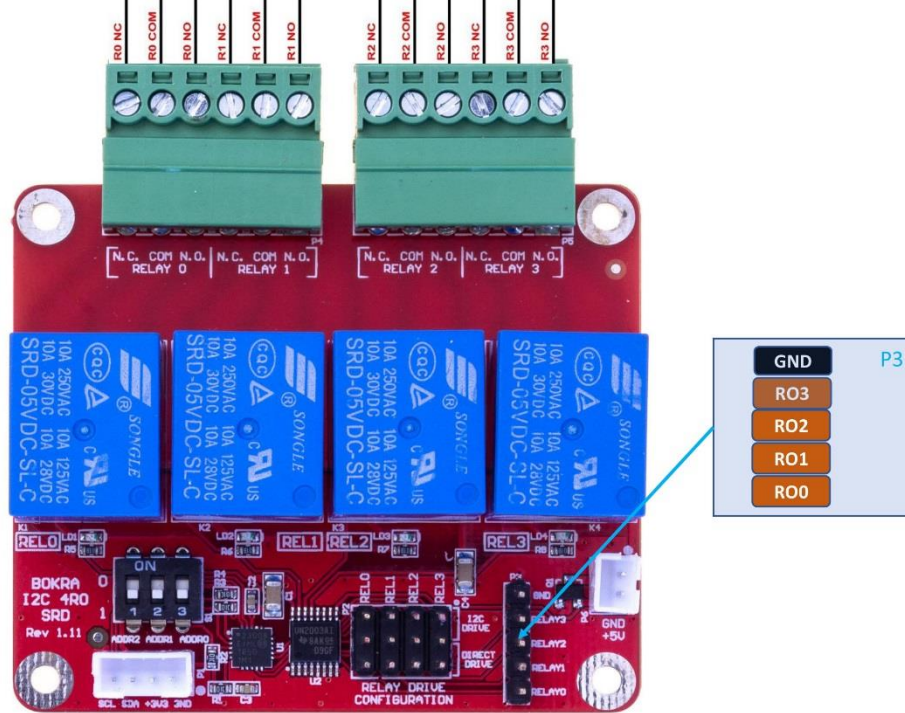
MCP23008 is controlled via I²C connector.

Microswitch is used to select the address MCP23008 on mikroBUS.

Power supply - 5 VDC. 3.3VDC power supply - via I²C connector.

Using the P3 connector, external signals RO0, RO1, RO2 and RO3 are applied to the module. How to connect a relay to an external module or to the MCP23008 is determined on the corresponding jumpers.

The following figure shows the **location of elements on the BOKRA I2C 4RO SRD module.**



BOKRA I2C 4RO SRD schematic:

