

RELAY click

MIKROE-1370

Weight: 45 g



RELAY click can control various devices with up to 5A, 250V AC/30V DC loads. It features two <u>G6D1AASI-5DC</u> power PCB relay modules. The click is designed to run on 5V power supply only. RELAY click communicates with the target microcontroller via mikroBUS™ PWM (RL1) and CS (RL2) pins.

RELAY click is a compact and easy solution for adding a relay to your design. The two screw terminals onboard allow seamless connectivity.



DO NOT TOUCH THE BOARD WHILE THE EXTERNAL POWER SUPPLY IS ON!

Note: RELAY click has exposed pins/pads. To stay safe take precaution when applying high voltage to the click. The click is to be used by trained personnel only when applying high voltage.

G6D1AASI-5DC power PCB relay

The maximum contact resistance of the G6D1AASI-5DC relay is 100 m Ω .

Communication lines

Communication lines voltage level can be in range between 3.3V and 5V. On-board transistors are used to drive relays by current sinking.

Relay information

A relay is an electrical switch used to terminate or establish a circuit using a low power signal from a microcontroller. It provides complete electrical isolation between microcontroller and controlled circuits. Use the RELAY click™ board with its two G6D1AASI-5DC relays to control various devices with up to 5A, 250V AC/30V DC loads.

Key features

- On-board screw terminals
- G6D1AASI-5DC power PCB relay
- \circ Contact resistance: 100 m Ω max.
- Max. switching voltage 250 VAC, 30 VDC
- Max. switching current 5 A
- Interface: PWM and CS pins
- 5V power supply

Specifications

Туре	Relay
Applications	Board can be used for turning on/off lights, motors and other high power consumers within the maximum supported voltage/current levels
On-board modules	G6D1AASI-5DC power PCB relay
Key Features	Control up to 5A, 250V AC/30V DC loads
Key Benefits	Screw terminals allow seamless connectivity
Interface	GPIO
Input Voltage	5V,5V
Compatibility	mikroBUS
Click board size	L (57.15 x 25.4 mm)

Pinout diagram

This table shows how the pinout on **RELAY click** corresponds to the pinout on the mikroBUS $^{\text{\tiny M}}$ socket (the latter shown in the two middle columns).

Notes	Pin		mikre	DBUS tm	Pin	Notes	
Not connected	NC	1	AN	PWM	16	PWM	RL1
Not connected	NC	2	RST	INT	15	NC	Not connected
RL2	CS	3	CS	TX	14	NC	Not connected
Not connected	NC	4	SCK	RX	13	NC	Not connected
Not connected	NC	5	MISO	SCL	12	NC	Not connected
Not connected	NC	6	MOSI	SDA	11	NC	Not connected
Not connected	NC	7	3.3V	5V	10	+5V	Power supply
Ground	GND	8	GND	GND	9	GND	Ground