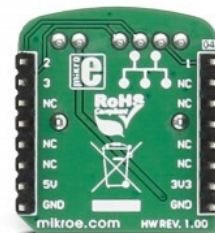


## Keylock Click



PID: MIKROE-2564

**Keylock click** carries a processed sealed key lock mechanism that can be set in three different positions. The click is designed to run on either 3.3V or 5V power supply. It communicates with the target microcontroller over the PWM, INT, and AN pin on the mikroBUS™ line.

The click board™ comes with two keys and a protective cap for the mechanism.

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ISO 9001: 2015 certification of quality management system (QMS).

The key can be removed from the lock in any of the three positions. The package contains two keys and one protective cap.

## Keylock features

The contact mechanism provides unequalled logic-level reliability and smoother, positive detent actuation.


Detent mechanism, with its spring-operated steel ball, gives crisp, positive action for accurate switch setting.

## Specifications

Type	Pushbutton/Switches
Applications	Use the three different positions of the mechanism to turn applications on or off, for home security applications, for industrial equipment, etc.
On-board modules	Keylock switch with 3 positions
Key Features	Detent mechanism, with its spring-operated steel ball, gives crisp, positive action for accurate switch setting
Interface	GPIO
Feature	No ClickID
Compatibility	mikroBUS™
Click board size	S (28.6 x 25.4 mm)
Input Voltage	3.3V or 5V

## Pinout diagram

This table shows how the pinout on **Keylock click** corresponds to the pinout on the mikroBUS™ socket (the latter shown in the two middle columns).

Notes	Pin					Pin	Notes
Output position 1	<b>1</b>	1	AN	PWM	16	<b>2</b>	Output position 2
	NC	2	RST	INT	15	<b>3</b>	Output position 3
	NC	3	CS	TX	14	NC	
	NC	4	SCK	RX	13	NC	
	NC	5	MISO	SCL	12	NC	
	NC	6	MOSI	SDA	11	NC	
Power supply	<b>+3.3V</b>	7	3.3V	5V	10	<b>+5V</b>	Power supply
Ground	<b>GND</b>	8	GND	GND	9	<b>GND</b>	Ground

## Programming

Code examples for Keylock click, written for MikroElektronika hardware and compilers are

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available on Libstock.

## Code snippet

This is a simple example of how Keylock click works, depending on the state of the Keylock click the appropriate position will be detected.

```
01 uint8_t state;
02 char txt[20];
03
04 void systemInit()
05 {
06     ANCON0 = 0x00;
07     ANCON1 = 0x00;
08     ANCON2 = 0x00;
09     UART1_Init(9600);
10 }
11
12 void Keylock_Init()
13 {
14     KEYLOCK_STATE_1_Direction = 1;
15     KEYLOCK_STATE_2_Direction = 1;
16     KEYLOCK_STATE_3_Direction = 1;
17 }
18
19 void Keylock_Task()
20 {
21     state = KEYLOCK_STATE_1*1 + KEYLOCK_STATE_2*2 + KEYLOCK_STATE_3*3;
22     UART1_Write_text("Keylock is in state:");
23     IntToStr(state,txt) ;
24     UART1_Write_Text(txt);
25     UART1_Write_Text( "rn" );
26     delay_ms(500);
27 }
28
29 void main()
30 {
31     systemInit();
32     Keylock_Init();
33
34     while( 1 )
35     {
36         Keylock_Task();
37     }
38 }
```

## Resources

[mikroBUS™](#)

[Click board™ Catalog](#)

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[Click Boards™](#)

## Downloads

[Key lock mechanism specifications](#)

[Keylock click schematic](#)

[Keylock click example on Libstock](#)

[Keylock click 2D and 3D files](#)

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