

Joystick click™

1. Introduction



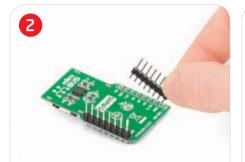


Joystick click[™] is an accessory board in **mikroBUS**[™] form factor. It's a compact and easy solution for adding joystick to your design. It features **AS5013** Hall IC as well as **N50P105** miniature magnetic joystick module. Joystick click[™] communicates with the target board microcontroller via **mikroBUS**[™] I²C (SDA, SCL), INT, RST and CS lines. The board is designed to use 3.3V power supply only. LED diode (GREEN) indicates the presence of power supply.

2. Soldering the headers

Before using your click[™] board, make sure to solder 1x8 male headers to both left and right side of the board. Two 1x8 male headers are included with the board in the package.





Turn the board upside down so that bottom side is facing you upwards. Place shorter pins of the header into the appropriate soldering pads.



Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



4. Essential features

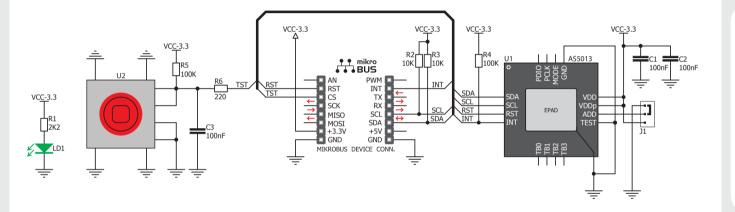
Joystick click" with its **AS5013** IC and **N50P105** represents smart navigation key concept based on contactless, magnetic movement detection. The **AS5013** includes five integrated Hall sensing elements which are monitoring the movement of the magnet, incorporated into the joystick, and provides directly the x and y coordinates via I²C output. An integrated mechanical push button is also built in joystick.

3. Plugging the board in

Once you have soldered the headers your board is ready to be placed into desired mikroBUS^m socket. Make sure to align the cut in the lower-right part of the board with the markings on the silkscreen at the mikroBUS^m socket. If all of the pins are aligned correctly, push the board all the way into the socket.



5. Joystick click Board Schematic



6. SMD jumper



J1 SMD jumper which is provided on the board is used to select the alternate address for I²C interface. It is soldered to position 0 by default.

7. Code Examples

Once you have done all the necessary preparations, it's time to get your click¹⁷⁰ board up and running. We have provided the examples for mikroC¹⁷⁰, mikroBasic¹⁷⁰ and mikroPascal¹⁷⁰ compilers on our **Libstock** website. Just download them and you are ready to start.



8. Support

MikroElektronika offers **Free Tech Support** (www.mikroe.com/support) until the end of product lifetime, so if something goes wrong, we are ready and willing to help!

