



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

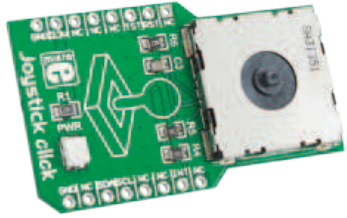
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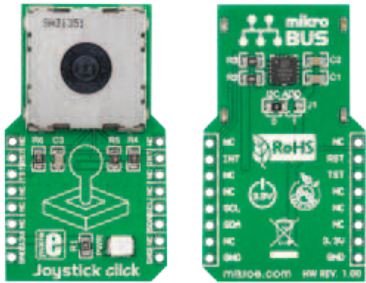






## Joystick click™

### 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™** I<sup>2</sup>C (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.



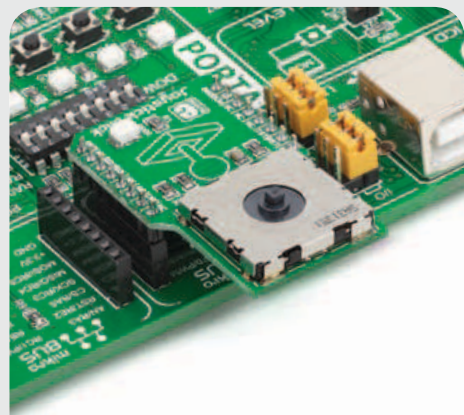
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Turn the board upside down so that bottom side is facing you upwards. Place shorter pins of the header into the appropriate soldering pads.



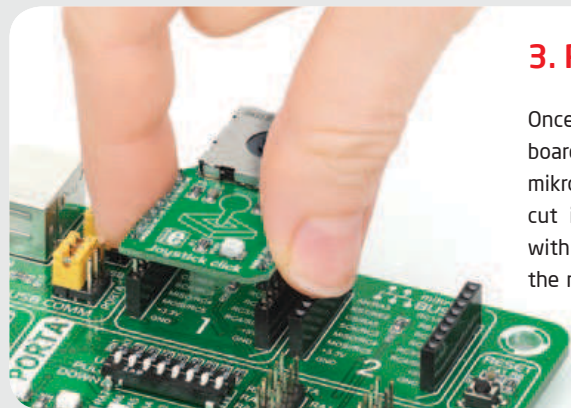
Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



### 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 I<sup>2</sup>C output. An integrated mechanical push button is also built in joystick.

### 3. Plugging the board in



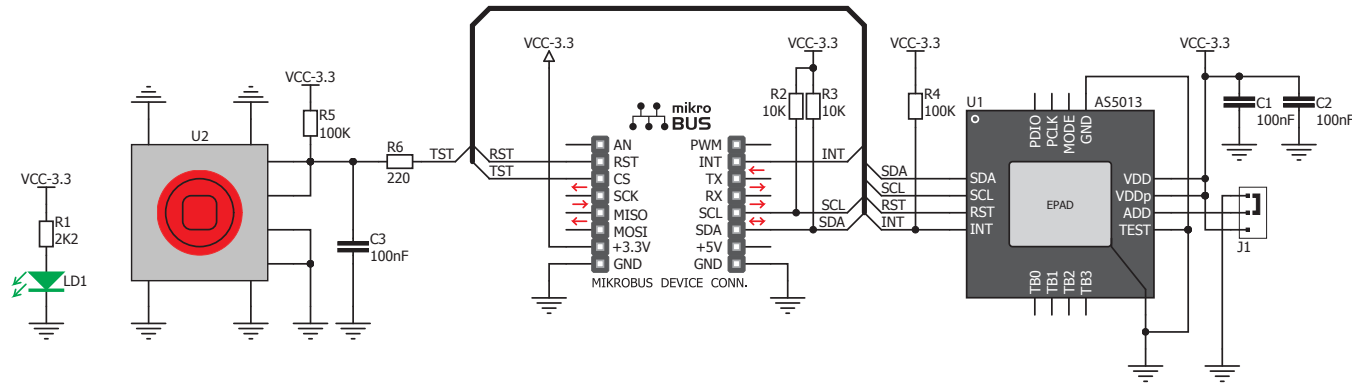
Once you have soldered the headers your board is ready to be placed into desired mikroBUS™ socket. Make sure to align the cut in the lower-right part of the board with the markings on the silkscreen at the mikroBUS™ socket. If all of the pins are aligned correctly, push the board all the way into the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

click™  
BOARD  
[www.mikroe.com](http://www.mikroe.com)

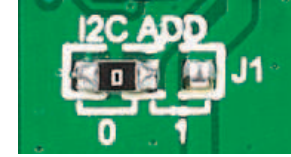
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## 5. Joystick click™ Board Schematic



## 6. SMD jumper



**J1** SMD jumper which is provided on the board is used to select the alternate address for I<sup>2</sup>C 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 click™ board up and running. We have provided the examples for mikroC™, mikroBasic™ and mikroPascal™ 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](http://www.mikroe.com/support)) until the end of product lifetime, so if something goes wrong, we are ready and willing to help!