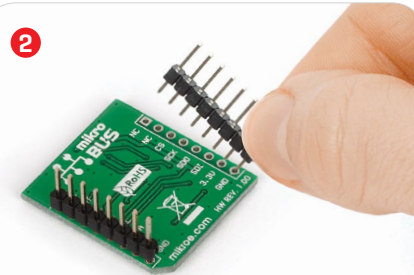
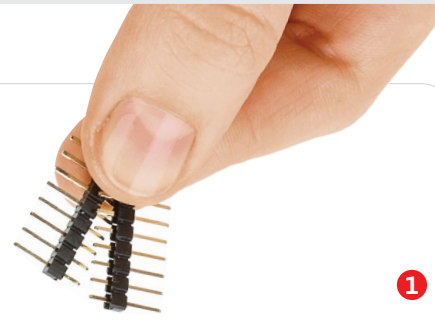


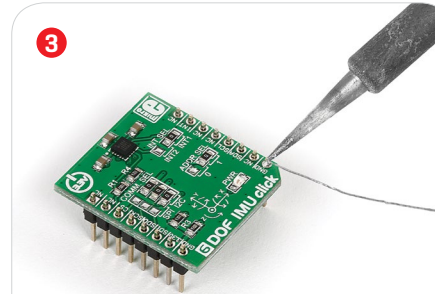
6DOF IMU click

2. Soldering the headers

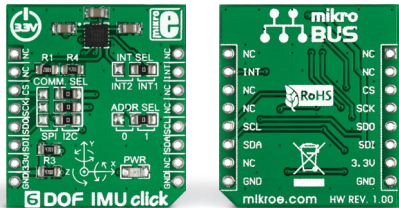
Before using your click board™, make sure to solder 1x8 male headers to both left and right side of the board. Two 1x8 male headers are included with the board in the package.



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

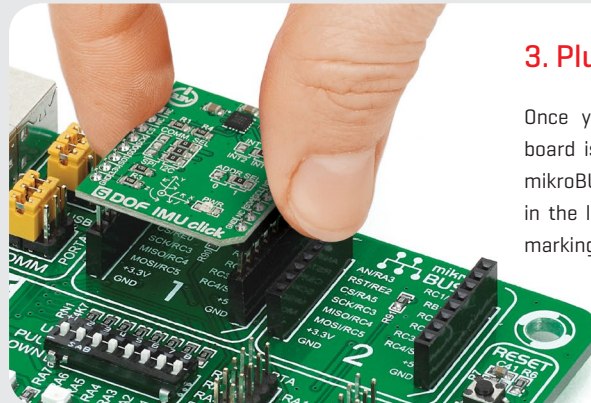


Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



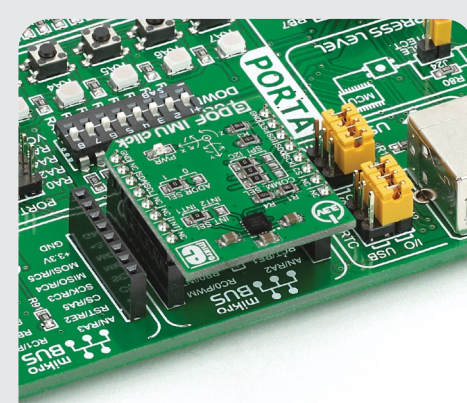
1. Introduction

6DOF IMU click carries Maxim's **MAX21105** **6-axis** inertial measurement unit comprising a 3-axis gyroscope and a 3-axis accelerometer. The chip is a highly accurate inertial measurement unit with long-term stable operation over a wide temperature range. The board communicates with the target MCU either through mikroBUS™ SPI [CS, SCK, MISO, MOSI pins] or I2C interfaces [SCL, SDA]. Additional INT pin also available. Uses 3.3V power supply only.



3. Plugging the board in

Once you have soldered the headers your board is ready to be placed into the 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 the pins are aligned correctly, push the board all the way into the socket.



4. Essential features

6DOF IMU click is suitable for designing platform stabilization systems, for example in cameras and drones. The MAX21105 IC has a low and linear gyroscope zero-rate level drift over temperature, and low gyroscope phase delay. 512-byte FIFO buffer saves resources of the target MCU. The gyroscope has a full-scale range of ± 250 , ± 500 , ± 1000 , ± 2000 dps. The accelerometer has a full-scale range of ± 2 , ± 4 , ± 8 , $\pm 16g$.

click
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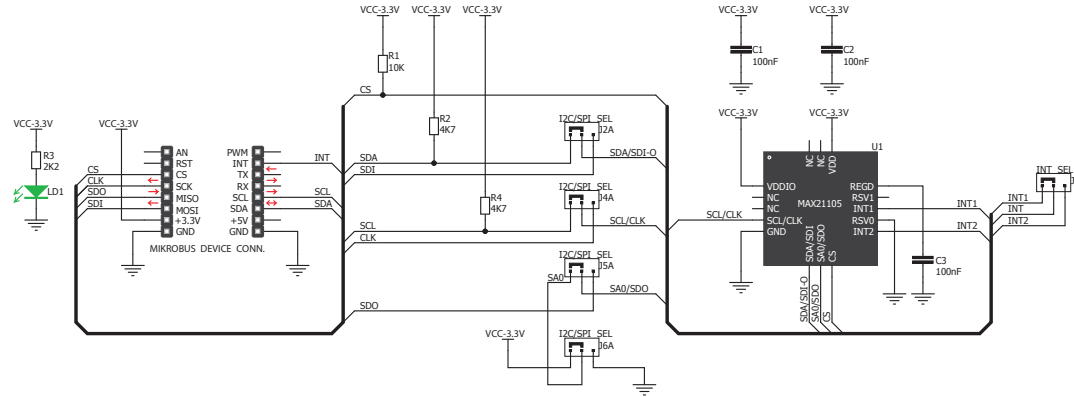


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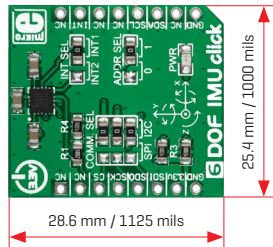


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5. Schematic



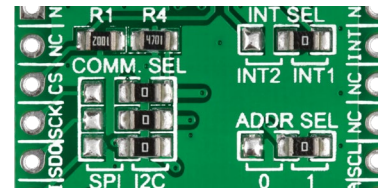
6. Dimensions



	mm	mils
LENGTH	28.6	1125
WIDTH	25.4	1000
HEIGHT*	3	118

* without headers

7. SMD Jumpers



The board has 3 sets of jumpers: INT SEL for specifying which interrupt line will be used; COMM SEL for switching from I2C to SPI and ADDR SEL for selecting the I2C address.

8. Code examples

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



9. Support

MikroElektronika offers **free tech support** [www.mikroe.com/support] until the end of the product's lifetime, so if something goes wrong, we're ready and willing to help!



10. Disclaimer

MikroElektronika assumes no responsibility or liability for any errors or inaccuracies that may appear in the present document. Specification and information contained in the present schematic are subject to change at any time without notice.

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