

## ADC 2 click

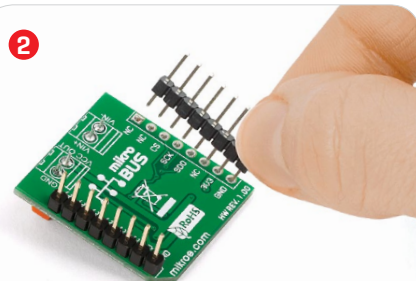
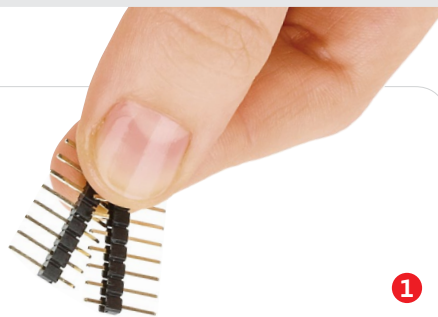


### 1. Introduction

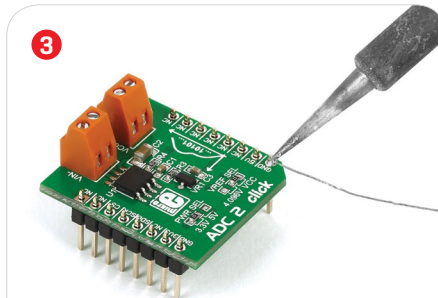
ADC 2 click carries **MCP3551/3**, which is a 22-bit ADC with automatic internal offset and gain calibration. This high precision analog-to-digital converter has total unadjusted error of less than 10 ppm, and low-output noise of 2.5  $\mu\text{V}$  RMS. ADC 2 click communicates with the target board through mikroBUS™ CS, CSK and MISO lines. The board is designed to use either a 3.3V or 5V power supply.

### 2. Soldering the headers

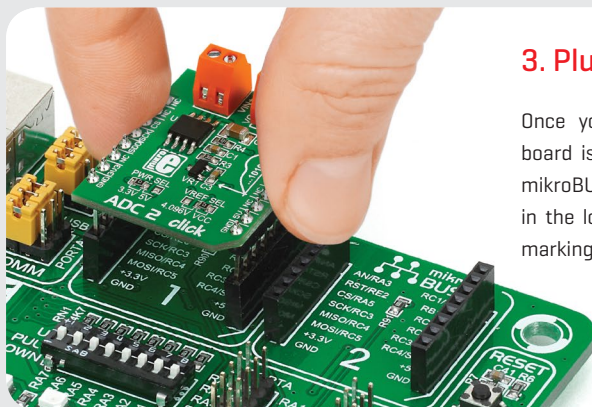
Before using your click board™, make sure to solder 1x8 male headers to both left and right side of the board. Two 1x8 male headers are included with the board in the package.



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

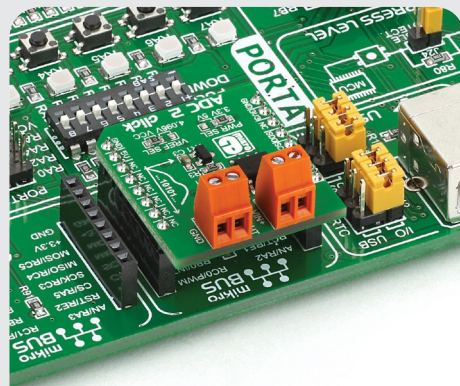


Turn the board upward again. Make sure to align the headers so that they are perpendicular to the board, then solder the pins carefully.



### 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

ADC 2 click, because of the low noise and high oversampling rate of MCP3551, is ideal for high accuracy applications. Measurements from analog pressure, temperature and humidity sensors, for example. The board carries two pairs of screw terminals: VIN- for bringing in reference voltage, VIN+ for the positive voltage. VCC out and GND are output voltages. ADC 2 click also has an extended temperature range [-40°C to +125°C].

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

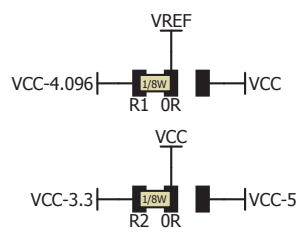
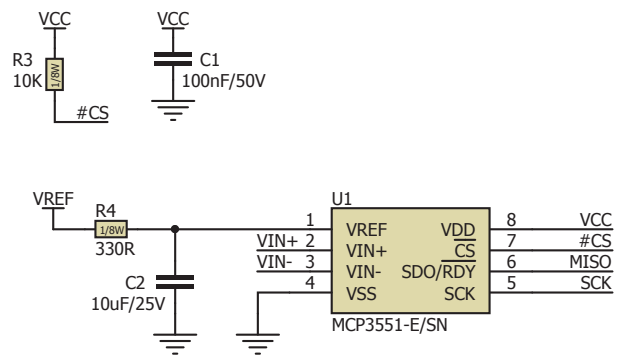
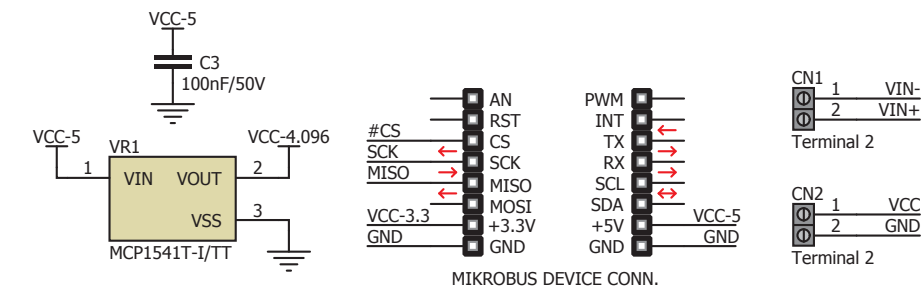


ADC 2 click manual  
ver 1.00

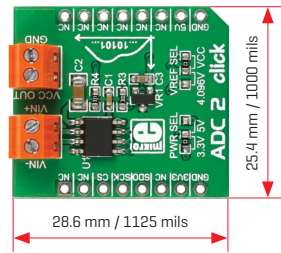


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5. Schematic



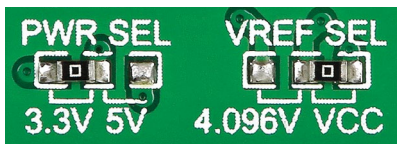
6. Dimensions



	mm	mils
LENGTH	28.6	1125
WIDTH	25.4	1000
HEIGHT*	12.2	480

\* without headers

7. SMD jumpers



PWR SEL is used to determine whether 5V or 3.3V power supply is used, and VREF SEL to select either VCC or 4.096 V as the voltage reference.

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](http://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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