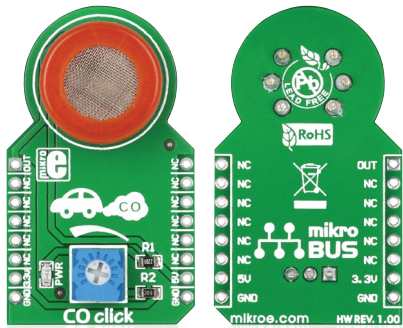


CO click™

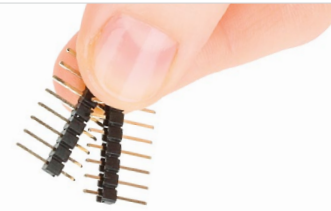
## 1. Introduction



CO click™ is a simple solution for adding a high-sensitivity Carbon monoxide sensor to your design. The board features an MQ-7 sensor with a SnO<sub>2</sub> gas sensing layer, a calibration potentiometer, a **mikroBUS™** host socket, two jumpers and a power indicator LED. CO click™ communicates with the target board through mikroBUS™ AN (OUT) line. CO click™ is designed to use a 5V power supply only.

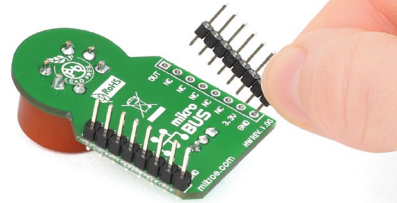
## 2. Soldering the headers

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.



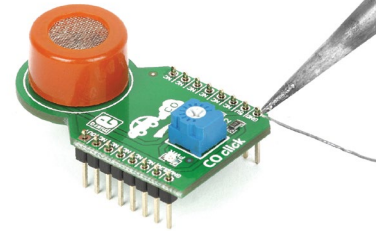
1

2



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.

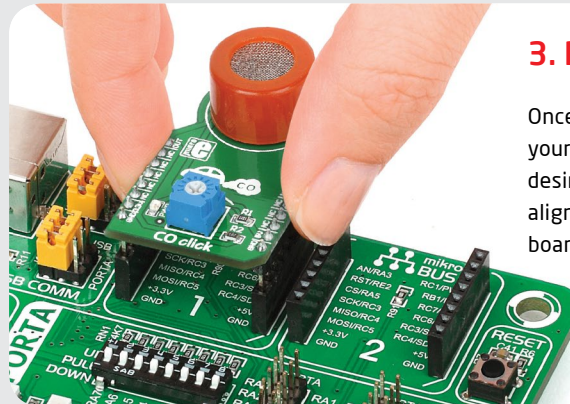
3



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...



## 4. Essential features

CO click™ can detect Carbon monoxide levels in concentrations from 20ppm to 2000ppm. The MQ-7 CO sensor unit has a sensor layer made of Tin dioxide (SnO<sub>2</sub>), an inorganic compound which has lower conductivity in clean air. The conductivity increases as the levels of CO rise. CO click™ also contains a potentiometer that lets you adjust the sensor for the environment. For precise calibration the sensor needs to preheat (once powered up, it takes 48h to reach the right temperature).

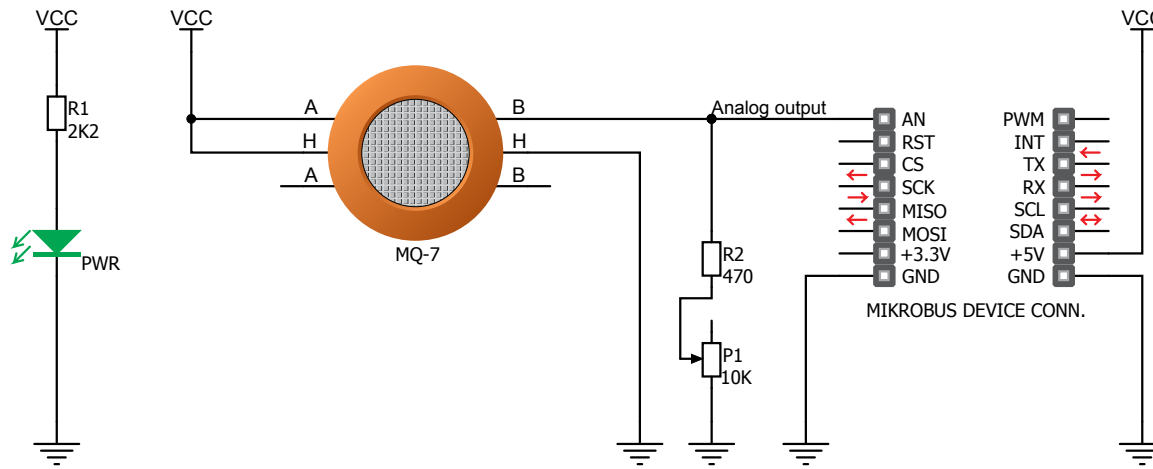
click™  
BOARD  
[www.mikroe.com](http://www.mikroe.com)



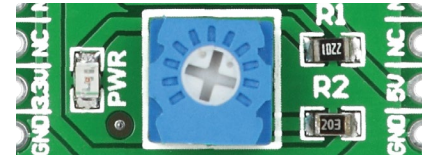
CO click Manual  
ver. 1.00



## 5. CO click™ board schematic



## 6. Calibration potentiometer



To calibrate CO click™ for optimum performance, use the on-board potentiometer to adjust the Load Resistance of the sensor circuit.

## 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 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 the product's lifetime, so if something goes wrong, we're ready and willing to help!