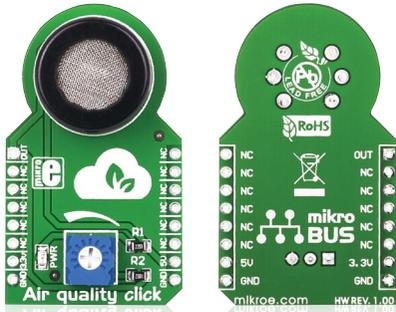




Air quality click™

1. Introduction



Air quality click™ is a simple solution for adding a high sensitivity sensor for detecting a variety of gases that impact air quality in homes and offices. The board features an MQ-135 sensor, a calibration potentiometer, a mikroBUS™ host socket, two jumpers and a power indicator LED. Air quality click™ communicates with the target board through mikroBUS™ AN (OUT) line. Air quality click™ is designed to use a 5V power supply only.

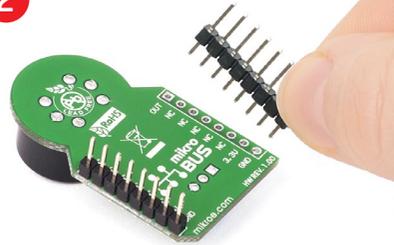
2. Soldering the headers

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.

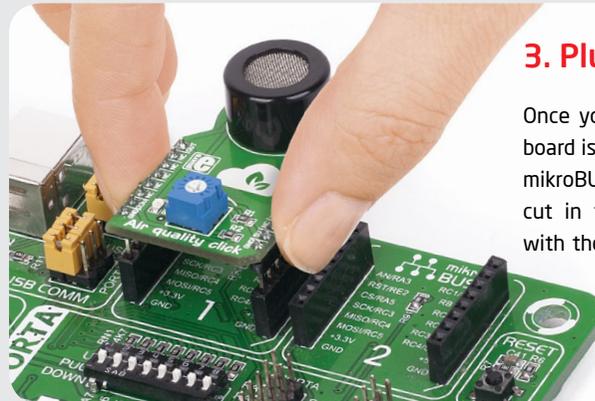


4. Essential features

Air quality click™ is suitable for detecting ammonia (NH_3), nitrogen oxides (NO_x) benzene, smoke, CO_2 and other harmful or poisonous gases that impact air quality. The MQ-135 sensor unit has a sensor layer made of tin dioxide (SnO_2), an inorganic compound which has lower conductivity in clean air than when polluting gases are present. Air quality click™ also contains a potentiometer that lets you adjust the sensor for the environment you'll be using it in.

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.

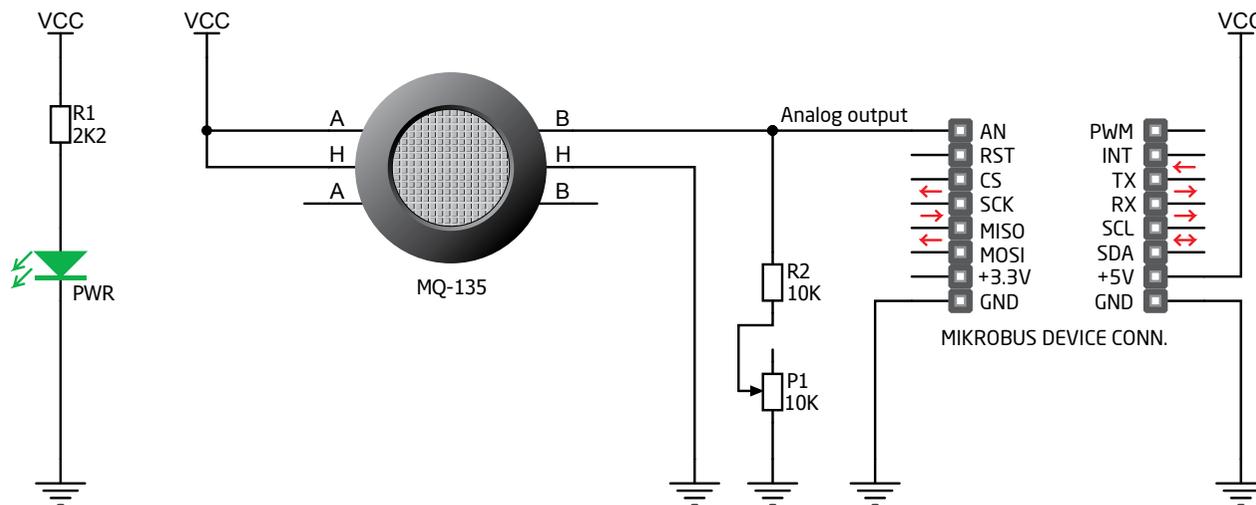


click™
BOARD
www.mikroe.com

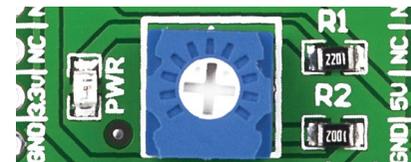
Air quality click Manual
ver. 1.00



5. Air quality click™ board schematic



6. Calibration potentiometer



To calibrate Air quality click™ for optimum performance, use the on-board potentiometer to adjust the load resistance on 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) until the end of the product's lifetime, so if something goes wrong, we're ready and willing to help!