Alcohol click

MIKROE-1586

Weight: 33 g

Alcohol click has a high sensitivity to alcohol and it can be used to detect alcohol **in concentrations from 0.04 to 4mg/l**.

Alcohol click carries an MQ-3 Semiconductor sensor for alcohol. The click is designed to run on a 5V power supply only. It communicates with the target microcontroller through the AN pin on the mikroBUS™ line.

MQ-3 sensor features

The gas sensing layer on the sensor unit is made of Tin dioxide (SnO_2), an inorganic compound which has lower conductivity in clean air. The conductivity increases as the levels of alcohol gas rise.

Calibrating the sensor

To calibrate the sensor for the environment you'll be using it in, Alcohol click has a small potentiometer that allows you to adjust the Load Resistance of the sensor circuit.

Key features

- MQ-3 sensor
  - Concentration: 0.04-4mg/l alcohol
  - Sensitivity: Rs(in air)/Rs(0.4mg/LAlcohol)≥5
- Interface: Analog
- 5V power supply

Specifications

Type	Gas
Applications	Portable alcohol detector, breathalyzer for estimating BAC (blood alcohol content)
On-board modules	MQ-3 Semiconductor sensor for alcohol
Key Features	Designed to use a 5V power supply
Key Benefits	Potentiometer for calibration
Interface	Analog
Input Voltage	3.3V or 5V
Compatibility	mikroBUS
Click board size	M (42.9 x 25.4 mm)

Pinout diagram

This table shows how the pinout on **Alcohol click** corresponds to the pinout on the mikroBUS™ socket (the latter shown in the two middle columns).

Notes	Pin	mikroBUS™		Pin	Notes
Sensor analog output	**AN**	1 AN	PWM 16	NC	Not connected
Not connected	NC	2 RST	INT 15	NC	Not connected
Not connected	NC	3 CS	TX 14	NC	Not connected
Not connected	NC	4 SCK	RX 13	NC	Not connected
Not connected	NC	5 MISO	SCL 12	NC	Not connected
Not connected	NC	6 MOSI	SDA 11	NC	Not connected
Not connected	NC	7 3.3V	5V 10	**+5V**	Power supply
Ground	**GND**	8 GND	GND 9	**GND**	Ground