

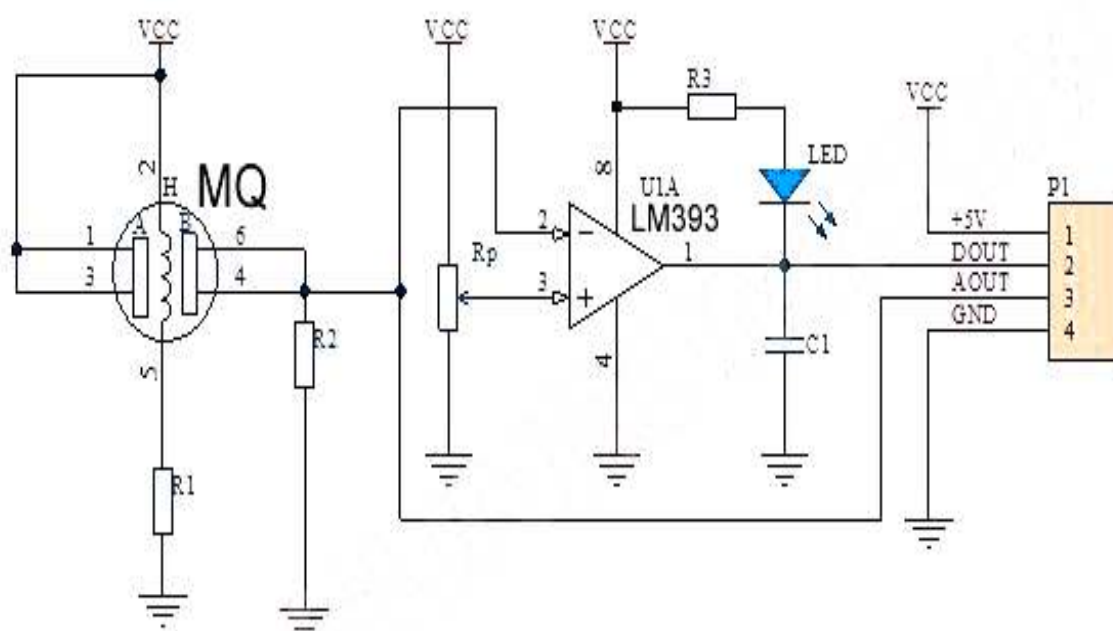
MQ3 Alcohol Gas Sensor Module



This module is made using Alcohol Gas Sensor MQ3. It is a low cost semiconductor sensor which can detect the presence of alcohol gases at concentrations from 0.05 mg/L to 10 mg/L. The sensitive material used for this sensor is SnO₂, whose conductivity is lower in clean air. It's conductivity increases as the concentration of alcohol gases increases. It has high sensitivity to alcohol and has a good resistance to disturbances due to smoke, vapor and gasoline. This module provides both digital and analog outputs. MQ3 alcohol sensor module can be easily interfaced with Microcontrollers, Arduino Boards, Raspberry Pi etc.

This alcohol sensor is suitable for detecting alcohol concentration on your breath, just like your common breathalyzer. It has a high sensitivity and fast response time. Sensor provides an analog resistive output based on alcohol concentration. The drive circuit is very simple, all it needs is one resistor. A simple interface could be a 0-3.3V ADC.

Board Schematic



Features

- 5V operation
- Simple to use
- LEDs for output and power
- Output sensitivity adjustable
- Analog output 0V to 5V
- Digital output 0V or 5V
- Low Cost
- Fast Response
- Stable and Long Life
- Good Sensitivity to Alcohol Gas
- Both Digital and Analog Outputs
- On-board LED Indicator

Technical Data

- Concentration : 0.05 mg/L ~ 10 mg/L Alcohol
- Operating Voltage : 5V $\pm$ 0.1
- Current Consumption : 150mA
- Operation Temperature : -10°C ~ 70°C

Pin Out

- VCC – Input Power Supply
- GND – Supply Ground
- DO – Digital Output
- AO – Analog Output

Applications

- Vehicle Alcohol Detector
- Portable Alcohol Detector