

/* MQ-3 Alcohol Sensor Circuit with Arduino */

```
int AnalogPin=0;//the AOUT pin of the alcohol sensor goes into analog pin A0 of the arduino

int value1 = 0;

int value2 = 0;

float promille=0;

void setup() {

  Serial.begin(115200);//sets the baud rate

  pinMode(AnalogPin, INPUT);//sets the pin as an input to the arduino

  delay(100); // this is the pre heat time, maybe not enough, I make a check today

}

void loop()

{

  value1= analogRead(AnalogPin);//reads the analog value from the alcohol sensor's AOUT pin I guess it
  is Parts per Million

  value2=value1 - 98; // here I made a small work around, this sensor has a very long pre heat time, when
  it is not heated to working temperature, it will show values too high even when there is no alcohol, that's
  why I removed the amount which was over 0, when no alcohol was next to it

  // limit= digitalRead(DOUTpin);//reads the digital value from the alcohol sensor's DOUT pin

  Serial.print("Alcohol value: ");

  Serial.println(value2);//prints the alcohol value

  promille = (0.4/200)*value2*2;

  Serial.print("Promillewert: ");

  Serial.println(promille,3);

  //Serial.print("Limit: ");

  //Serial.print(limit);//prints the limit reached as either LOW or HIGH (above or underneath)
```

```
delay(100);  
  
}
```

The screenshot shows the Arduino IDE 2.3.2 interface. The top menu bar includes File, Edit, Sketch, Tools, and Help. The toolbar contains icons for opening files, saving, compiling, uploading, and monitoring. The main editor window displays the sketch 'mq3.ino' with the following code:

```
1  /* MQ-3 Alcohol Sensor Circuit with Arduino */  
2  int AnalogPin=0;//the AOUT pin of the alcohol sensor goes into analog pin A0 of the arduino  
3  int value1 = 0;  
4  int value2 = 0;  
5  float promille=0;  
6  void setup() {  
7      Serial.begin(115200);//sets the baud rate  
8      pinMode(AnalogPin, INPUT);//sets the pin as an input to the arduino  
9  }  
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100
```

The Serial Monitor window is open, showing the output of the sketch. The baud rate is set to 115200. The output displays the following data:

```
-----  
Promillewert: 0.192  
Alcohol value: 216  
Promillewert: 0.864  
Alcohol value: 491  
Promillewert: 1.724  
Alcohol value: 687  
Promillewert: 2.748  
Alcohol value: 925  
Promillewert: 3.700  
Alcohol value: 925  
Promillewert: 3.700  
Alcohol value: 925  
Promillewert: 3.700  
Alcohol value: 925  
Promillewert: 3.700  
Alcohol value: 925  
Promillewert: 3.700  
Alcohol value: 925  
Promillewert: 3.700  
Alcohol value: 854  
Promillewert: 3.416  
Alcohol value: 609  
Promillewert: 2.420  
Alcohol value: 282  
Promillewert: 1.128  
Alcohol value: -88  
Promillewert: -0.352  
-----
```

The status bar at the bottom indicates the current line and column (Ln 7, Col 42) and the connection status (Arduino Uno on COM4). The system tray shows the date and time (10:01 AM 8/22/2024) and the weather (26°C Mostly cloudy).