

# **Alcohol Detection using GSM**

## **Abstract**

The purpose of this project is to develop vehicle accident prevention by method of alcohol detector in an effort to reduce traffic accident cases based on driving under the influence alcohol. This project is developed by integrating the alcohol sensor with the microcontroller 16F877A. The alcohol sensor used in this project is MQ-2 which to detect the alcohol content in human breath. An ignition system which will produce spark plugs is build up as a prototype to act like the ignition starter over the vehicle's engine. The ignition system will operate based on the level of blood alcohol content (BAC) from human breaths detected by alcohol sensor. The main purpose behind this project is "Drunk driving detection". Now a days, many accidents are happening because of the alcohol consumption of the driver or the person who is driving the vehicle. Thus Drunken driving is a major reason of accidents in almost all countries all over the world. Alcohol Detector in Car project is designed for the safety of the people seating inside the car. This project should be fitted / installed inside the vehicle.

## **INTRODUCTION**

This paper presents the progress in using a alcohol Detector, a device that senses a change in the alcoholic gas content of the surrounding air. The sensor will then analyze the amount of alcoholic vapors and offer the user some indication of the amount of alcohol present. This device is more commonly referred to as a breath analyzer; as it analyzes the alcohol content from a person's breath. The device is mostly used by law enforcement to determine whether an individual has been driving under the influence of alcohol. Police breathalyzers measures the Blood Alcohol Content, or BAC, of an individual. The unit designed for this project is a simpler version of the breathalyzer used by police. It will not accurately determine the BAC level of a person. The microcontroller is interfaced with a MQ-2 alcohol gas sensor, which serves as the analog input signal to the controller. There is a LCD attached to six output pins that will function as a display. Depending on the amount of alcohol present, the MQ-2 sensor will analyze its contents and consequently the sensor output voltage will increase. If output voltage increases enough, input pins on the microcontroller will change from active low state to active high state. According to the output of the microcontroller the motor will be driven with the help of L293D as driver IC

**Block Diagram :**

