

ABSTRACT

Use of alcohol or ethanol as a beverage has been widely recognized. Consuming alcoholic beverages of high or low alcohol content within is unlawful in the religious teachings of Islam. There are many bad things that can occur from consuming alcohol. High grade alcoholic beverages are prohibited from circulation. BPOM and the Polices often conduct raids of high alcohol and alcoholic beverages that do not have permission. To measure alcohol content in beverages, BPOM and the polices can not know the alcohol content directly contained in it, so it needs to process the laboratory tests that require a long time. Therefore, it should be made an instrument measuring alcohol content of drinks for the effective time. In addition this tool can also be used for Muslims not to consume alcohol

In this final will realize an alcohol content measuring instrument based on Microprocessor. In principle, system design and manufacture of alcohol content measuring instrument in this project uses gas sensors TGS2620 to detect ethanol/ alcohol, then we got a change in the value of R_s (resistance sensor), thus changing the ADC value when the sensor is brought near to the alcohol processed by microcontroller ATMEGA 8535 and displayed by LCD display.

From the testing that has been done, we got a ADC value in any range brought near to the alcohol that has been tested. The changing of ADC was converted and processed into the alcoholic beverage that is in % (percent) and displayed on the LCD.

Keyword: *alcohol content, Microcontroller ATMEGA 8535, LCD.*