ABSTRACT

In this last project would be made a instrument that can detect the leaking from LPG gas tube that have three leaking grade.

Nowadays the conversion program from the petroleum to LPG is being held, but that program creates many incident which are caused by the leak of the LPG's tube, which can cause a death. According to that, an instrument that can detect the leak of LPG tube is needed. In this last project the instrument which can solve that problem would be made.

This instrument will detect the leak of LPG tube. If there is a leak as equal as the gas concentrate which is detected by the surface of the censor. And then the output of the censor, which is voltage, will be processed to be the binary signal by the ADC, so that it can be processed by the microcontroller. In microcontroller that binary bits will be divided into three levels which are a small leak level (custom), medium leak level (alert), and a large leak level (dangerous).

To small leak level (custom) with the output of ADC is about 25≤Output ADC<50 which is marked by the light of the green led and a buzzer sound with 2,5 second delay, medium leak level (alert) with the output of ADC is about 50≤Output ADC<100 which is marked by the light of the yellow led and a buzzer sound with one second delay, and a large leak level (dangerous) with the output of ADC is about ≥100 which is marked by the light of the red led and a buzzer sound which sound continuously.