Digital Electronics and Computer Architecture Laboratory

Class Group: 25 **Section:** A **Project Group (PG):** **PG-**8

Project Abstract

Project Title: LPG Leakage Detector

Project Category:

Microcontroller Based	
Non-Microcontroller Based	
Only Software Based	
Others	

Abstract:
Due to the explosion of LPG, the number of deaths has been increased in recent years. To avoid this problem there is a need for a system to detect the leakage of LPG. To solve this problem we took the initiative to build a device that can detect LPG gas and alert people about leakage. We have used an MQ6 (LPG Gas) sensor to detect LPG leakage. This sensor has a quick response time and it responds in a very short period of time.The sensor then signals the microcontroller (Arduino). Liquid crystal display the threshold level. A Buzzer is also turned on to give Alert indications. We have provided a potentiometer that is used to vary the threshold level of the comparator which decides the threshold level of the leakage condition.

Application Area(s) of Project: This device can be used in every households, hotels and many industries.

Technology Stack: Microcontroller-Arduino, IC1- 7805, 5V voltage regulator,;D1, D2-1N4007;Resistors;CapacitorMiscellaneous:PZ1-12V high-gain siren/buzzer,GS1- MQ-6 LPG sensor.

Batch Details:

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