Remotely Vehicle Monitoring System

Amruta Karad¹, Ajinkya Shelar², Ketaki Gavhane³, H. B. Magar (Guide)⁴

^{1, 2, 3, 4} Dept of Electronics and Telecommunication

^{1, 2, 3, 4} Savitribai Phule Pune University AISSMS IOIT Kennedy Road Pune, India

Abstract- With rapid progress taking place in automotive industries, large numbers of vehicles are being produced to facilitate demands of increasing population day by day. In this project, we research and design an embedded Vehicle Monitoring system based on GSM Technology. To achieve this purpose, we use Pressure Sensor, Gas Sensor, Battery discharge unit. By these sensors, we check the various parameters of the vehicle system such as State of Vehicle, Detection of leakage Gas, etc. These sensors provide the information to the PIC Controller (PIC18F4520). To monitor the parameters, we use GSM Technology. We directly connect the sensor and the monitoring equipment to achieve remote management and real-time data transmission, so realize the resources and information sharing and increase the efficiency and reliability

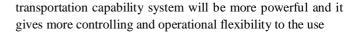
Keywords- Vehicle Transport, Remote Monitoring, Sensor

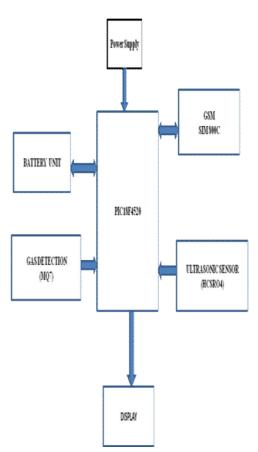
I. INTRODUCTION

When it turned into twentieth century various kind of vehicles have been introduce to provide convenience in human daily life. The aim of this project is to build the system which will provide the security on street and protect human. The industry demand products that work dynamically towards the customer to reduce costs and remain efficiency in the fleet. In this project, we monitor the vehicles parameter using the sensor and through GSM based technology. In this, we use the Gas sensor, Pressure Sensor and battery discharge unit is used for inputs acquisition and Storage. To monitor the available information, we are using GSM Technology. Transport companies also require such technology to monitor their Vehicles and control them. Some features we are trying to add in our project like security buzzer and SMS receiving. System will be controlled using wireless signal.

We need to build a circuitry of transmitter and receiver platform .This signal transfer platform will be used for wireless network with sensor. The wireless and embedded technology will be used for the design and development of this project. This system can be very useful in ground level human life.

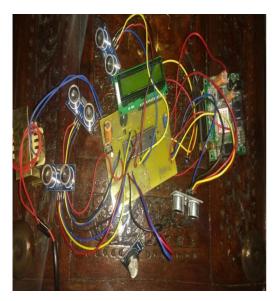
Major limitation with SIM operated GSM is sometime gives network problem so by providing





II. BLOCK DIAGRAM

III. WORKING



IV. CONCLUSION

In this paper we have proposed concept design of vehicle monitoring system. The motivation behind this research is to propose a relatively low cost solution to monitor the parameter of vehicle and get the status of vehicle using GSM technology. This system on successful deployment in the real world will help reduce the major accident to a greater extent. As this systems capable of security offence in real time will reduce the number of accidents.

REFERENCES

- C.S.Smith. Piezoresistance in germanium and silicon. Phys. Rev. 1954. 94: 42-49
- [2] Zhao Xiaofeng and Wen Dianzhong. Fabrication and Characteristics of a Nano2Polysilicon Thin Film Pressure Sensor
- [3] Kovacs Gregory T. A. Microsensor and microactuator complete set. Beijing, science press. 2003
- [4] P.Meenakshi Vidya, S.Abinaya, G.Geetha Rajeswari, N.Guna ,"Automatic LPG detection and hazard controlling "published in April 2014.
- [5] K.Padmapriya, Surekha, Preethi, "Smart Gas Cylinder Using Embedded System", published in 2014