VEHICLE ACCIDENT DETECTION SYSTEM WITHSMS APPLICATION USING GSM MODE

ABSTRACT

Security in travel is primary concern for every one. This Project describes a design of effective alarm system that can monitor an automotive / vehicle / car condition in travelling. This project is designed to inform about an accident that is occurred to a vehicle to the family members of the travelling persons. This project uses a vibrator sensor which can detect the abrupt vibration when an accident is occurred. This sends a signal to micro controller. A GSM modem is interfaced to the MCU. The GSM modem sends an SMS to the predefined mobile number and informs about this accident.

The project is built around the PIC micro controller from Microchip . This micro controller provides all the functionality of the SMS alert system. It also takes care of filtering of the signals at the inputs. Only after an input has remained unchanged for 30 milliseconds, is this new signal level passed on for processing by the micro controller program. This time can be varied by adopting small changes in the source code. The uniqueness of this project is, not only alerting the neigh boors by its siren, but also it sends an caution SMS to four mobile numbers. This numbers can be changed at any time by the user using a 3X4 key pad. These numbers are stored in EEPROM. This project uses regulated 5V, 750mA power supply. 7805 three terminal

voltage regulator is used for voltage regulation. Bridge type full wave rectifier is used to rectify the ac out put of secondary of 230/12V step down transformer.

Block Diagram :