

## DESIGN OF AUTO-GUARD SYSTEM BASED ON RFID AND NETWORK

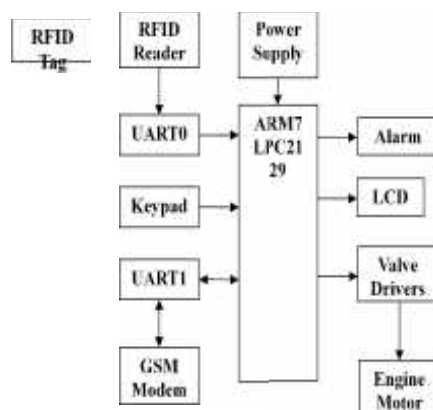
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### ABSTRACT:

This study presents a new design for an anti-theft protection System as an inexpensive solution to protect cars from theft and from non-authorized users by using arm microcontroller-based system. Approach: Three stages of protection to strengthen the security of the car: Firstly when the car is accessed by the user and wrong password is entered, the power is remain disable. If the power is shifted by others, the second level starts by incapacitating the starter motor from being turned on, so the keys which are stolen cannot make the car on. Results: Assuming that the car battery is directly connected to the starter motor by a thief or a non-identified person, the car does not get turned on because the directional valve is set to the case where the fuel is fed back to the fuel tank and no fuel is pumped inside the engine, which is the 3rd security level.

**INTRODUCTION :** The main intention of this project is to reduce the theft rate of the car and meet the Intellectualized auto-guard demand of people which combined the radio frequency identify technology and the global mobile communication networks. The motive of this project is to join the embedded technology with the RFID (Radio Frequency Identification) and GSM communication technology.

### CIRCUIT DIAGRAM :



## Existing system:

In existing system we use eye blink sensor in this we have to wear a glass and it has IR sensor is fixed in that glass to sense drowsiness. By using this eye will get affected while passing IR sensor. So overcome these problems we go for proposed system.

## Proposed System:

The purpose of this project is to investigate the development of a system for detecting the likelihood that a driver is about to fall asleep in control of the vehicle, and to sound an alarm or carry out some other function if this occurs. In this system the driver's fatigue is going to detect with the help of steering wheel grip sensor.

In steering sensor part, the sensors are placed in the steering wheel. The output of the sensor is given to the ADC0808. The ADC output is given to the microcontroller; here we are going to check the grip values. If the pressure of the driver is reduced in the steering than the microcontroller gives the indication by means of alarm and stop the vehicle after quite bit time. Using GPS the location will be received. And the location will send to the control section via GSM technology.

## GENERAL DESCRIPTION

The LPC2119/2129/2194/2292/2294 are based on a 16/32 bit ARM7TDMI-STC CPU with real-time emulation and embedded trace support, together with 128/256 kilobytes (kB) of embedded high speed flash memory. A one twenty eight-bit wide internal memory interface and a unique accelerator architecture enable 32-bit code execution at maxm clock rate. For analytical code size applications, the alternative sixteen bit Thumb Mode decreases code by more than 30% with minimal performance penalty.

With their concise 64 and 144 pin packages, low power consumption, various 32-bit timers, combination of 4-channel 10-bit ADC and 2/4 advanced CAN channels or 8-channel 10-bit ADC and 2/4 advanced CAN channels (64 and 144 pin packages respectively), and up to 9 external interrupt pins these microcontrollers are particularly suitable for industrial control, medical systems, access control and point-of-sale.

Number of available GPIOs goes up to 46 in 64 pin package. In one forty four pin packages number of available GPIOs tops 76 (with external memory in use) through 112 (single-chip application). They are equipped with wide range of serial communications interfaces, that's why they are also highly suited for communication gateways, protocol converters and general –purpose applications as well as for embedded soft modems.

## **Conclusion:**

The auto-guard system combines the advantages of RFID and GSM. RFID card is a key of the automobile which is contactless, security and convenient. The mobile phones of users can realize the long range monitor and grading responses, which made the alarm cover a wide range. For enhancing the reliability and the capability of anti interference, the microcontroller for vehicle was adopted. These advantages discussed above meet the requirements of auto-guard system. So that a better effect can be made in practice. In addition, it is easy to prolong functions. The GPS module can be added if the function of position tracking is needed. We only need to rewrite the soft[10], if the internet of things is to be entered. As a result, the radio technology at present can be replaced completely. So the practical value and the market prospect are considerable.

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