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Multichannel Sequential Card Scanner

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ABSTRACT

There has been rising demand for secure system that must be dependable and quick respond for the industries and company. RFID (Radio Frequency Identification) is one of the consistent and fast means of identify the material object. In the long-ago the barcode's are more preferable as compared to RFID because of their cost but now a day's RFID are easily available and are more convenient to use. Paper is based up on security access and control system using RFID and Microcontroller with GSM module. Security access system is very convenient to use at home, office and commercial buildings.

Keywords : Acoustic Insertion Loss, Flow Field, Pressure Loss, Reactive Muffler, Model, Heat Transfer.

I. INTRODUCTION

The main intention of this project is to design an access control system that allows only authorized persons to operate a particular device by establishing a RFID system, which authorize persons with unique tags to access the secured device. This system provides security to organizations for protecting physical as well as intellectual property. This project Multichannel Sequential Scanner is developed to build a security system for a office to prevent the other persons to operate the device by controlling radio frequency identification by checking a suitable RFID card. RFID will help to identify a data. Integrated circuit used for storing and processing information. Display is used as displaying unit. For more security purpose keypad is used. If any kind of interrupt is occurred on machine side then GSM module is used to send message on mobile. For the small scale we use motor application but the main purpose of project is for industrial use.

II. METHODS AND MATERIAL

A. Problem Statement

The objective of this project is to develop a device that allows for a user to remotely control multiple devices using a RFID. This system will be a powerful and flexible tool that will offer this service at anytime, and from anywhere with the constraints of the technologies being applied. Possible target appliances include (but are not limited to) climate control systems, security system; anything with an electrical interface. The proposed approach for designing this system is to implement a microcontroller-based control module that receives its instructions and commands from a RFID and for better security propose Keypad is used. The microcontroller then will carry out the issued command.

B. Summary of Invention

This product is aimed toward industries who wish to control device appliances remotely from their RFID provided that the appliances are electrically controllable.

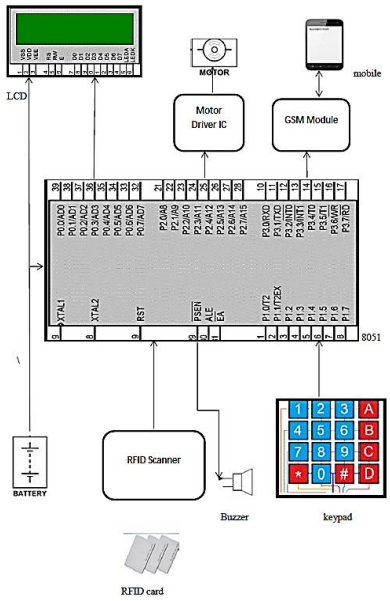


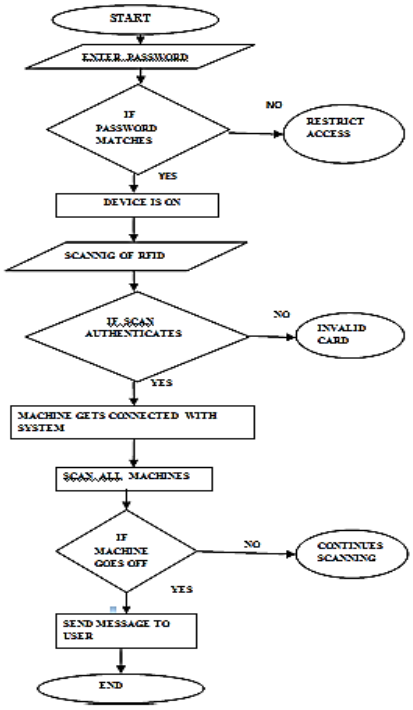
Figure 1. Block Diagram

III. RESULTS AND DISCUSSION

A. Working

The system is designed in a way that each person has given a unique RFID passive tag which is embedded within every ID card. When a person scan his/her card tag value will be identified by the RFID reader. The value sensed will be sent to a microcontroller. This microcontroller will be having the database which consists of all the person name and their respective tag values. Transmitter in of RFID scanner in connected to Microcontroller port 3. When person scan the card. RFID scanner send signal to microcontroller. Then Microcontroller will send signal to Motor driver IC L293D to on the Motor and it will display on LCD. When motor get off it will also display on LCD. For security purpose User should enter password through keypad. Keypad is connected to Port 1 of microcontroller. If user enter wrong password LCD will display "Access denied". If any device gets off because any internal issue GSM will send SMS to user. microcontroller programed in C language

B. Flowchart Of Program



IV. CONCLUSION

On considering requirement of simple, fast and secure system we design system whose response is quick and the system is very less time consuming. By using this system it is very easy to control the remotely located machines without going on field

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