

Biometric Bank Locker System

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Abstract— Biometric supported security system can be used at many site like Industries, Offices, and Colleges or even at our home. This project is a combination of “Biometrics technology” and “Embedded system technology”. Fingerprint sensor is the main part of this system. It makes use of Biometric sensor to detect fingerprint. It is also called as Biometric sensor. The principal characteristic or particularity of fingerprint is that it is unique. It gives this project the high level security than other security systems. Person recognition using the Fingerprint identification is used since a long time. Most frequent example is use in the criminal cases.

Keywords: AVR-Automatic Voltage Regulator, OTP, 100% Secured Locker

I. INTRODUCTION

In today's up-to-date world, security act an serious role. Every person has expensive accessories like gold, jewelry or money. It is not enough to have these accessories, but protection of this is very essential, for this purpose we keep them in bank lockers. Still we often hear or read in newspaper that some fake person accessed the locker of another person and have stolen money. In order to overcome this type of frauds authentication of the person who wants to use the locker is very necessary. In this project we are designing advance security systems for banking which will ensure the guanine access of the locker overcoming all the abuse.

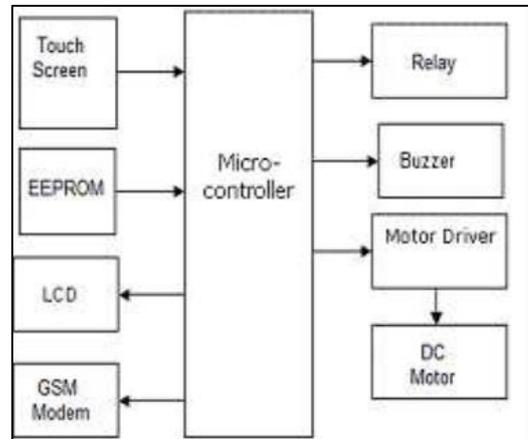
II. RELATED WORK

To manage this project first we have to operate this project in two modes first “Settings mode or Admin mode”. In this form we have to enter data into the database of finger print sensor, for this we have to take impressions of finger mark of that person whom we want to give access to our security system. This can be done once or whenever a new entry has to be added in the system. Secondly this project has to be used in “Normal mode or Search mode”. In this mode the system compare with the fingerprint input received at its optical plate with the previously stored fingerprint from its flash memory. If the entry matches with the memory then it fetters out ok signal along with the identity number of that person. But if the entry does not agree with the memory then it fetters out fault signal. The output received from fingerprint sensor

III. LITERATURE REVIEW

We decided to do a project on smart bank locker access system in the seventh semester. Our first inspiration in this direction was our subject embedded system in which we learned the principles controlling real time application. In this first pair of months we spent scrutinizing topics for project work, we came across numerous case of the fast advancements made in the field of bank security system as described in other journals and magazines as well as over the internet.

IV. PROPOSED SYSTEM



V. BLOCK DESCRIPTION

The AVR core bind a precious instruction set with 32 general purpose working registers. All the 32 registers are directly joined to the Arithmetic Logic Unit (ALU), allow two self-reliant registers to be accessed in one individual instruction executed in one clock cycle. The resulting architecture is more code efficient while achieving throughputs up to 10 times as faster as than conventional CISC microcontrollers.

VI. IMPLEMENTATION

Fingerprint scanner and module: It is a standalone fingerprint identification device with many marvellous characteristic such as high identification performance, low power consumption and serial interface with the distinct commands for easy integration into a extended range of applications. It is durable and compact.

LCD interface: LCDs have become a usual and easy way to get text display for embedded system Common displays are set up as 16 to 20 characters by 1 to 4 lines. Thus we use here is a 16*2 LCD display.

Serial interface: The RS232 is the communication line which enables Smart Bank Locker Access System. Data transmission takes place by only using three wire links. The three link supply „transmit“, „receive“ and common ground.

DC motor: When current is passed through the armature of a DC motor, a torque is generated by magnetic reaction, and the armature revolves.

A. Working of Fingerprint Scanner:

