

# **Synopsis**

## **RFID based advanced attendance system**

*College Name*

*Class Name*

*Student name*

*Under Guidance*

# **CONTENTS**

1. About project
2. Introduction to RFID
3. Hardware Description
4. Software Description
5. Application
6. Project Time Frame

## **ABOUT PROJECT**

In this project we are going to provide an advanced solution for information about the attendance of employees/students. You can access this information through your PC using USB port. An application is running at PC side will decode this information & it will show you at the application side. If any unauthorized person trying to entry then it will buzzer & display the warning at your LCD.

Four Cards will be available for functioning

1. 1 Employee\_1
2. 1 Employee\_2
3. 1 Employee\_3
4. 1 Unauthorized entry

## **INTRODUCTION TO RFID**

In this project, the RFID module reader typically contains a module (transmitter and Receiver), a control unit and a coupling element (antenna). This module is interfaced with the micro-controller and when the card is brought near to the RFID module it Reads the ID CODE in the card and then compares with the ID CODE of that present in the system. The significant advantage of all types of RFID systems is the non contact, non-line-of sight nature of the technology. Tags can be read through a variety of substances.

## **HARDWARE DESCRIPTION**

- Microcontroller P89V51RD2
- Alphanumeric LCD (16\*2)
- RFID Reader
- RFID Passive Tags – 4
- EEPROM
- RTC
- Regulator 7805
- Capacitor 1000 $\mu$ f
- Capacitor 10 $\mu$ f
- High voltage capacitor
- Ceramic Capacitor 33pf
- W04M Bridge
- Oscillator - 11.0592 Mhz
- LED
- Buzzer
- Switches
- Resistance 10K/1K/470/100 ohm
- Resistance
- General Purpose PCB
- Transformer

# **SOFTWARE DISCRIPTION**

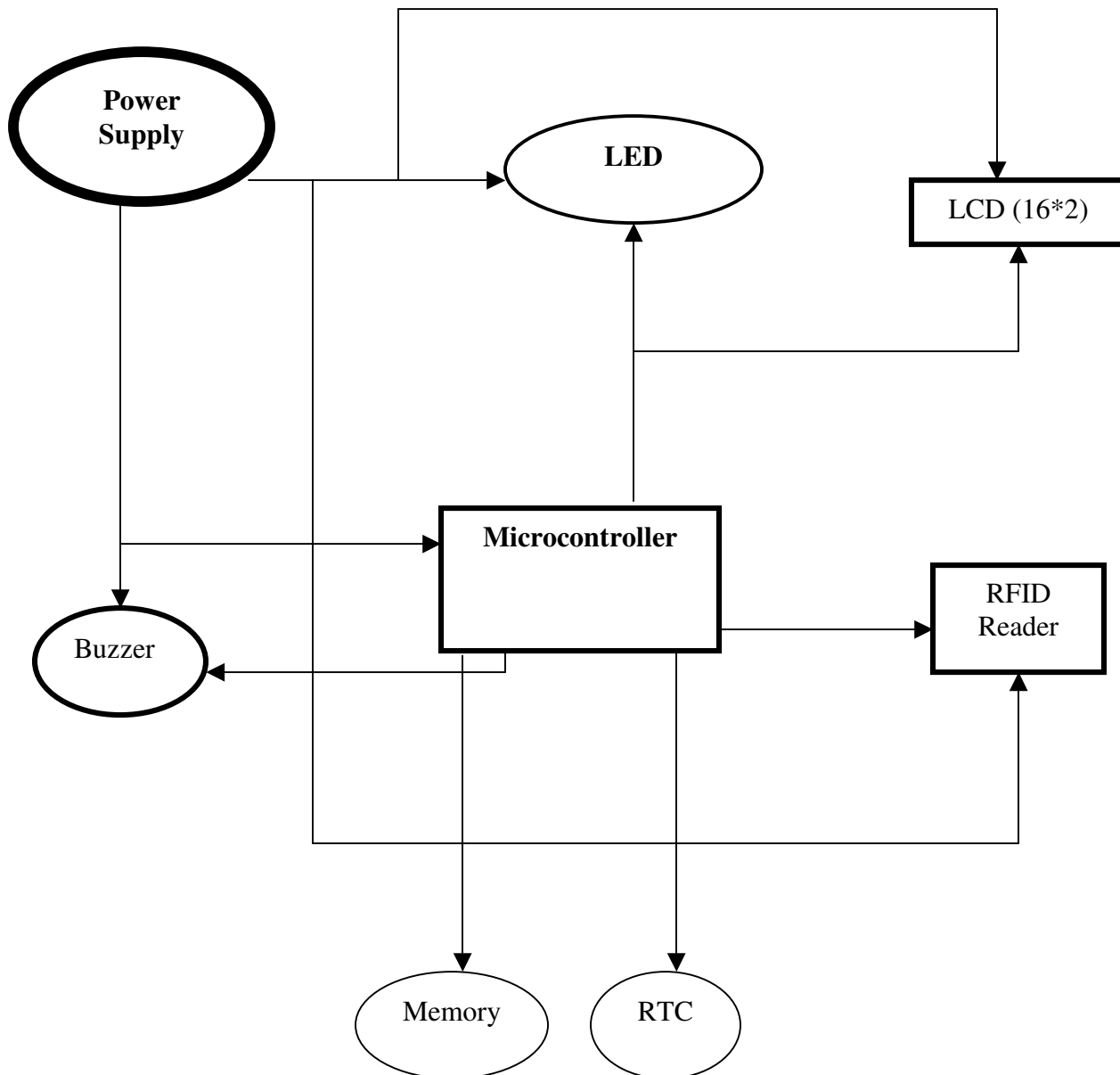
## 1. Keil Microvision 3 (Cross Compiler)

The  $\mu$ Vision IDE from Keil combines project management, make facilities, source code editing, program debugging, and complete simulation in one powerful environment. The  $\mu$ Vision development platform is easy-to-use and helping you quickly create embedded programs that work. The  $\mu$ Vision editor and debugger are integrated in a single application that provides a seamless embedded project development environment.

## 2. Embedded C (Programming Language)

We use C language to develop logic for the functioning.

## **BLOCK DIAGRAM**



## **Application of RFID**

1. Door Security
2. Attendance System
3. Library System
4. Security & Surveillance

## **Project Time Frame**

Frame-1: (Documentation + Purchasing)

Frame-2: (Hardware Design +Testing of Different section)

Frame-3: (Hardware + Software Co-design)

Frame-4: (Project Report +Final Testing + Submission)

### **FRAME**

### **DATE**

Frame-1	2 Week
Frame-2	4 Week
Frame-3	4 Week
Frame-4	2 Week