WIRELESS SECURITY SYSTEM USING 8051 MICROCONTROLLER

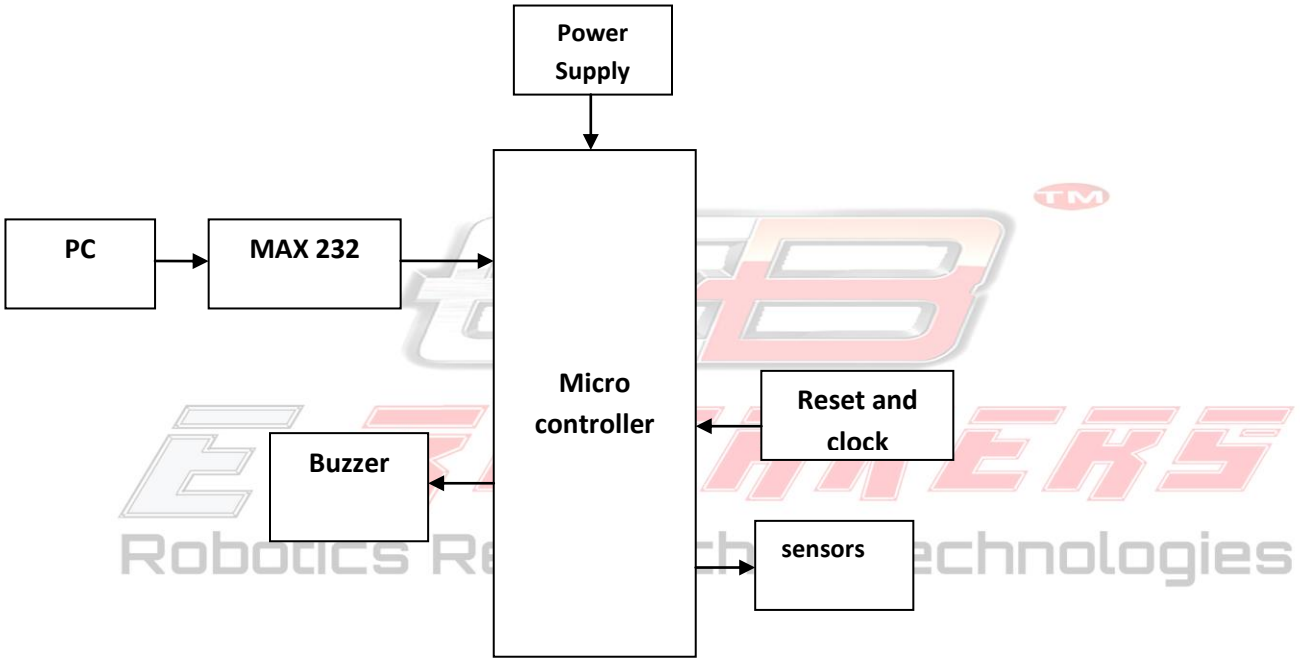
Description:

Security is a prime concern in our day-today life. Everyone wants to be asmuch secure as possible. Knowing your home is protected provides peace of mind bothwhen you are away and when you are home. Security is important even if you haveoutstanding public safety agencies (police, fire, highway patrol, etc.) in your area. Thereare far more homes than there are police officers, not to mention a plethora of skilledthieves. So we would like to implement our project to do everything possible to makeyour house secure rather than just relying on others.With the increasing busy schedules people rely on machines to supportthem in this modern world. It led to the need for intelligence to these machines in every area. Here the case is with home security.

Our project involves an access control for doors and windows forming avital link in a security chain implemented using two fully controlled 8 bitmicrocontrollers 8515. The Microcontroller based Home Security System can be adoptedat Home, it has various types of Sensors. The other microcontroller can be carried alongwith the user or can be placed at his working place, it has a buzzer and an LCD .In ourProject we have Passive infra red sensor (PIR sensor), Infra red sensor (IR sensor),Magnetic sensor switch sensor (Reed sensor switch).

The Microcontroller at the transmitter end will continuously monitors allthe Sensors and if any security problem is found then the Microcontroller at the receiverend will switch on the Buzzer (Alarm) and the type of problem is displayed on the LCD.This equipment uses low power and operates in real time.

Block diagram:



Hardware requirements:

1. Micro Controller
2. PC
3. MAX 232
4. Buzzer
5. RF
6. sensors

Software requirements:

1. Keil software
2. Embedded c