HOME SECURITY USING GSM

ABTRSACT

Security is primary concern for everyone. This project is aimed to provide the security for the homes by designing a system using GSM technology. But what if the security is assured irrespective of the person is inside or outside the house. This Project describes a design of effective security alarm system that can monitor the house with different sensors using GSM modem.

This GSM Modem can accept any GSM network operator SIM card and act just like a mobile phone with its own unique phone number. Advantage of using this modem will be that you can use its RS232 port to communicate and develop embedded applications. Applications like SMS Control, data transfer, remote control and logging can be developed easily. The modem can either be connected to PC serial port directly or to any microcontroller.

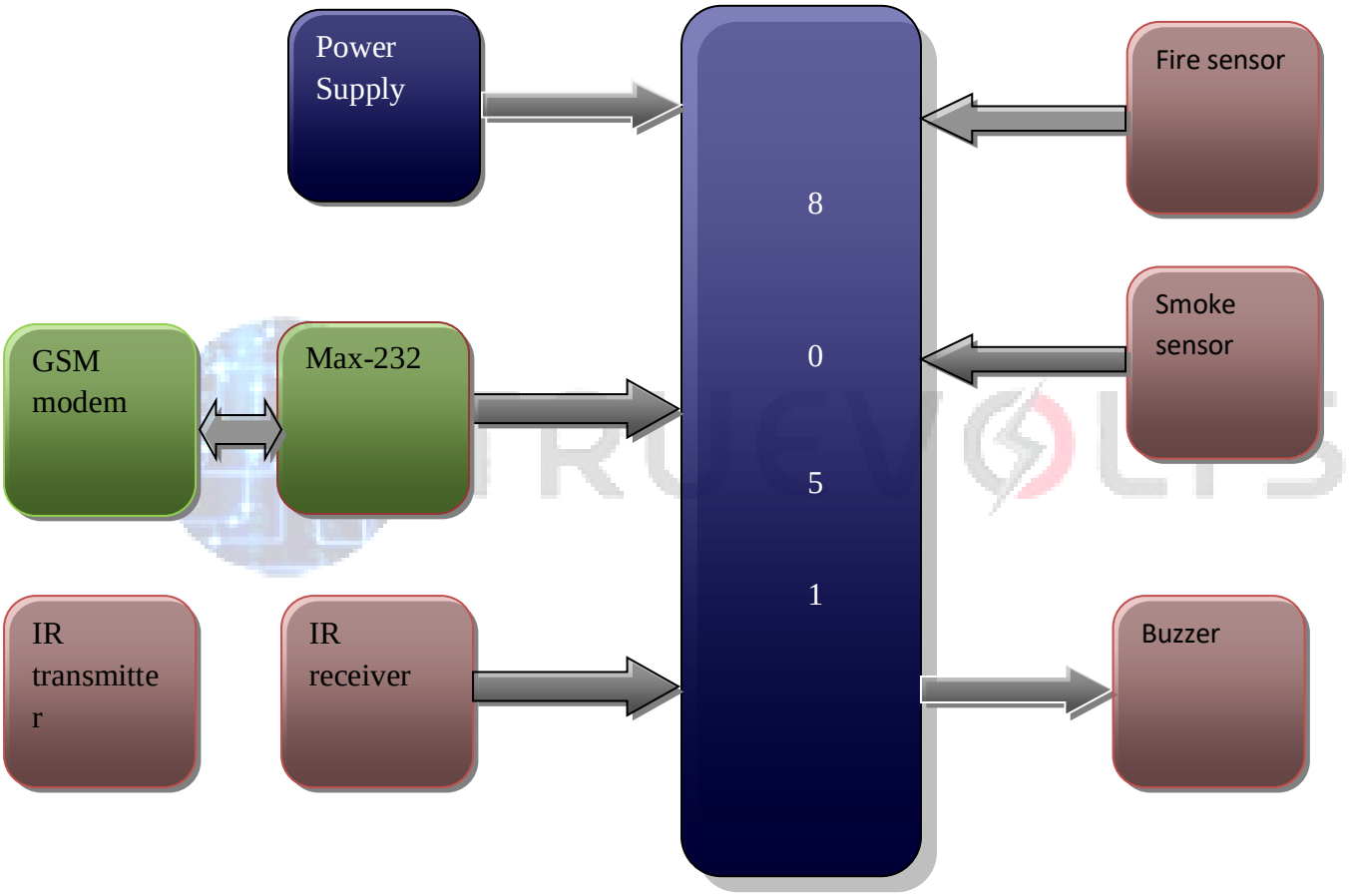
Home Security System is a security system using wireless concept that monitors the status of each sensor continuously. Here in this project IR sensor, Fire sensor and smoke sensor are interfaced to the microcontroller along with a GSM modem is interfaced to the microcontroller using serial communication. A buzzer is also interfaced to the microcontroller for an audio identification. The micro controller continuously monitors the status the sensors and if any of the sensors trigger means that if any fire occurs or if any burglar attacks take place, the controlling unit immediately identifies the change in the output of the sensor and sends the predefined message to the user mobile through GSM modem and also alerts the buzzer.

This project uses regulated 5V, 500mA power supply. 7805 three terminal voltage regulator is used for voltage regulation. Bridge type full wave rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.

APPLICATIONS

- Home applications
- Industrial applications

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM: