
DESIGN AND IMPEMNTATION OF A WIRELESS ELECTRONIC NOTICE BOARD SYSTEM USING GSM

ABSTRACT

Notice boards play a vital role mostly in educational institutions. The events, occasions or any news, which has to be passed to the students, will be written on the notice boards present in every floor in the colleges or schools. The present system is like, a person will be told the news and he has to update this news on all the notice boards present in the college or school. This will be seen mostly during the examination seasons.

The time table or the schedule of the exams has to be given to the students. This will be done by writing the details on the notice boards. But this process consumes a lot time to update the news on all the notice boards and there may be chances that the person responsible may commit some mistakes or he may be absent sometimes. So, this may create disturbances and the entire schedule may be disturbed. To avoid all these, Wireless Notice Board have been designed which completely eliminates the manual work.

The 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. It can be used to send and receive SMS or make/receive voice calls. It can also be used in GPRS mode to connect to internet and do many applications for data logging and control. In GPRS mode you can also connect to any remote FTP server and upload files for data logging.

This GSM modem is a highly flexible plug and play quad band SIM300 GSM modem for direct and easy integration to RS232 applications. Supports features like Voice, SMS, Data/Fax, GPRS and integrated TCP/IP stack.

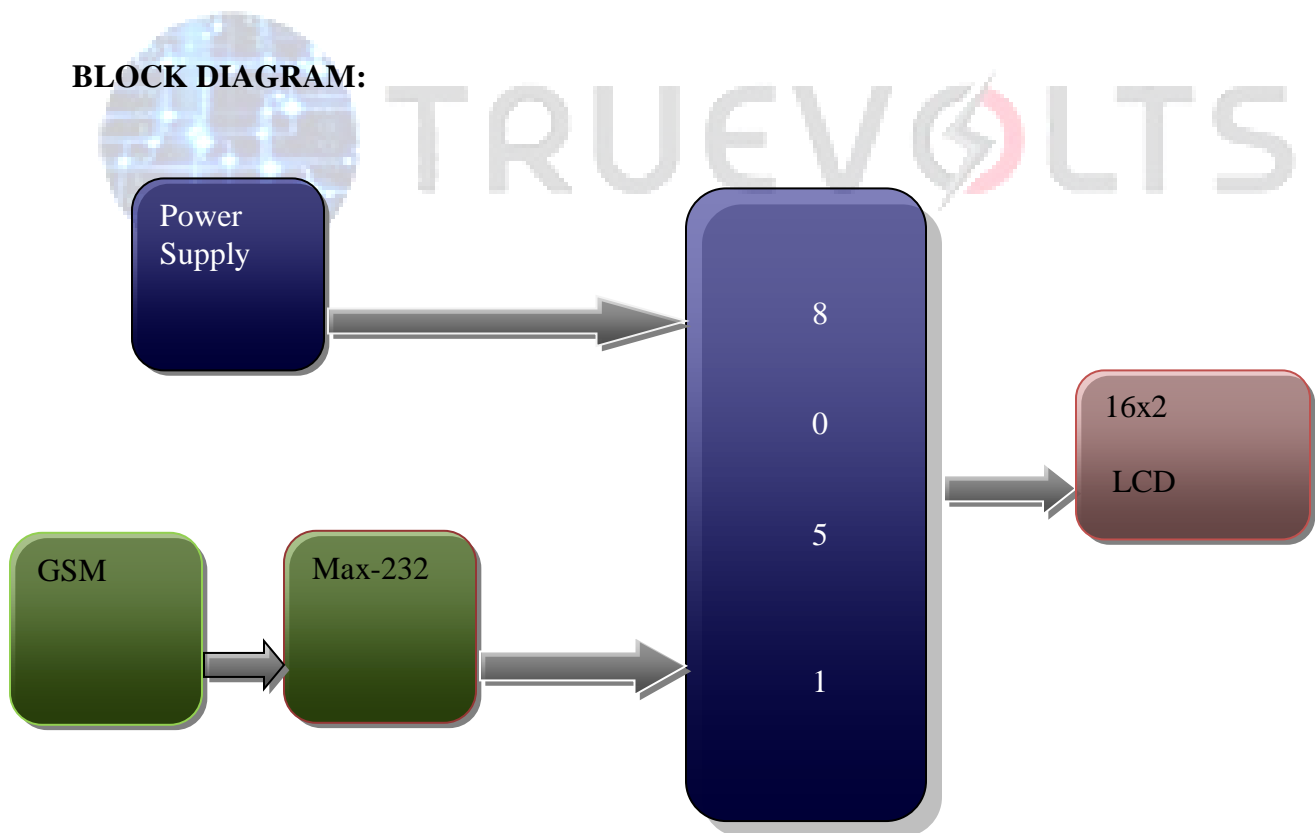
This project is designed in such a way that the microcontroller is interfaced to the GSM modem through a serial line driver IC MAX232 along with an LCD. The GSM modem can receive the message from any mobile as well as it can transmit the messages to any mobile number. In our project, if we send any message to the GSM modem it receives the message and passes the same to the controller. Then the controller performs the predefined task of displaying the same received message on the LCD.

Here we use 8051 as a microcontroller with 5v DC Power supply. Serial (UART) protocol is primary concern here. The main heart of this project is GSM/GPRS modem and it works on GPRS AT commands.

APPLICATIONS:

- Electronic notice boards

BLOCK DIAGRAM:



POWER SUPPLY BLOCK DIAGRAM

