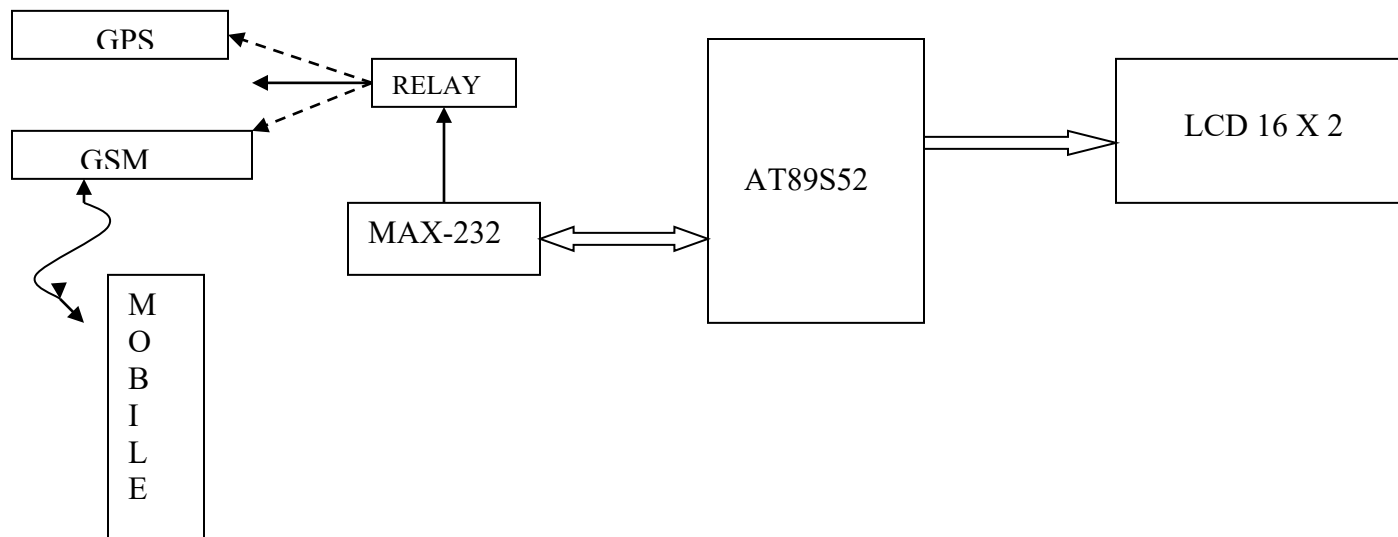


# TRACING DOWN THE VEHICLE USING GSM AND GPS

## Aim:

Tracing the path of the vehicle using the GPS (Global Positioning system) and GSM (Global system for Mobile Communication)

## Block Diagram:



## Description:

The Global Positioning System, usually called GPS, is a system. The NAVSTAR GPS (Navigation Signal Timing and Ranging Global Positioning System) is a collection of Satellites, which monitors the Longitude and Longitudes of a particular position. The Global System for Mobile Communications, GSM is used for transmitting and receiving the messages. The GSM and GPS modules can be serially interfaced to the micro controller AT89S52 which has UART. The longitude and latitude values are displayed on the LCD. The applications are in Military, Navigation, Automobiles and aircrafts

The project involves two types of modules that are GSM which is a mobile communication device and GPS which is a satellite communication device.

The first step in this system takes the action of GPS. It works with the satellite communication that reads the different positions from the satellite; here we take the data of GPGLL data consists of longitudinal and latitude positions. These positions perform the role on tracing down the vehicle. This module is connected to the max 232 through a relay for switching the GPS and GSM alternatively. From the max 232 data reads from the microcontroller and store in the buffer continuously

The GSM module roles the action of sending message and receiving the message from the mobile. Both the GSM and GPS has to be connected to the microcontroller UART, so that by using relay GSM is connected to the controller in particular time when ever the GSM action is going to be done.

The execution starts from the receiving data from the GPS, and ready to send the data. When ever the micro controller receives message from the GSM, micro controller sends the longitudinal and latitude positions to the mobile no. which is executed in the program.

#### Hardware:

- AT89S52
- LCD
- GPS MODULE
- GSM MODULE
- RS232
- MAX232
- RELAY

#### Software:

- Functionality of all above components
- Embedded C programming