
VEHICLE TRACKING SYSTEM

ABSTRACT

The project is aimed to design “vehicle tracking system” using which a vehicle can be tracked any where on the earth using GPS and GSM technologies.

A GSM modem provides the communication interface. It transports device protocols transparently over the network through a serial interface. A GSM modem is a wireless modem that works with a GSM wireless network. 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.

Global Positioning System (GPS) satellites broadcast signals from space that GPS receivers, use to provide three-dimensional location (latitude, longitude, and altitude) plus precise time. GPS receivers provides reliable positioning, navigation, and timing services to worldwide users on a continuous basis in all weather, day and night, anywhere on or near the Earth. This ultra-sensitive GPS receiver can acquire GPS signals from 65 channels of satellites and output position data with high accuracy in extremely challenging environments and under poor signal conditions due to its active antenna and high sensitivity. The GPS receiver's -160dBm tracking sensitivity allows continuous position coverage in nearly all application environments. The output is serial data of 9600 baud rate which is standard NMEA 0183 v3.0 protocol offering industry standard data messages and a command set for easy interface to mapping software and embedded devices.

This project mainly works on GPS and GSM systems. GPS and GSM modems are interfaced to the microcontroller using serial communication via MAX232 line driver. GPS modem works under 9600 or 4800 baud rates. GPS modem gives latitude and longitude to microcontroller, so it gets this information and develop TCP stack with standard format. microcontroller transmit these values to user mobile by using GSM modem. The controller is being programmed in such a way that it sends the vehicle location information to the user mobile

**A1, 2nd FLOOR, EUREKA COURT, KS BAKERY BUILDING, OPP. R.S.BROTHERS LANE, AMEERPET,
HYDERABAD, TELANGANA-500073.**

Call: +91 9908665239

email: info@truevolts.com

Website: www.truevolts.com

with some delay. We can also track the navigation of the vehicle through the web server by using GPRS technology. But it is optional. The stack data will be sent to web server through GSM modem. Web server consists of particular IP address and port number. Web server maintain data base of the vehicle with respect to time. Owner could see this information in web server from any where in the world. This is very helpful for transport and cop departments.

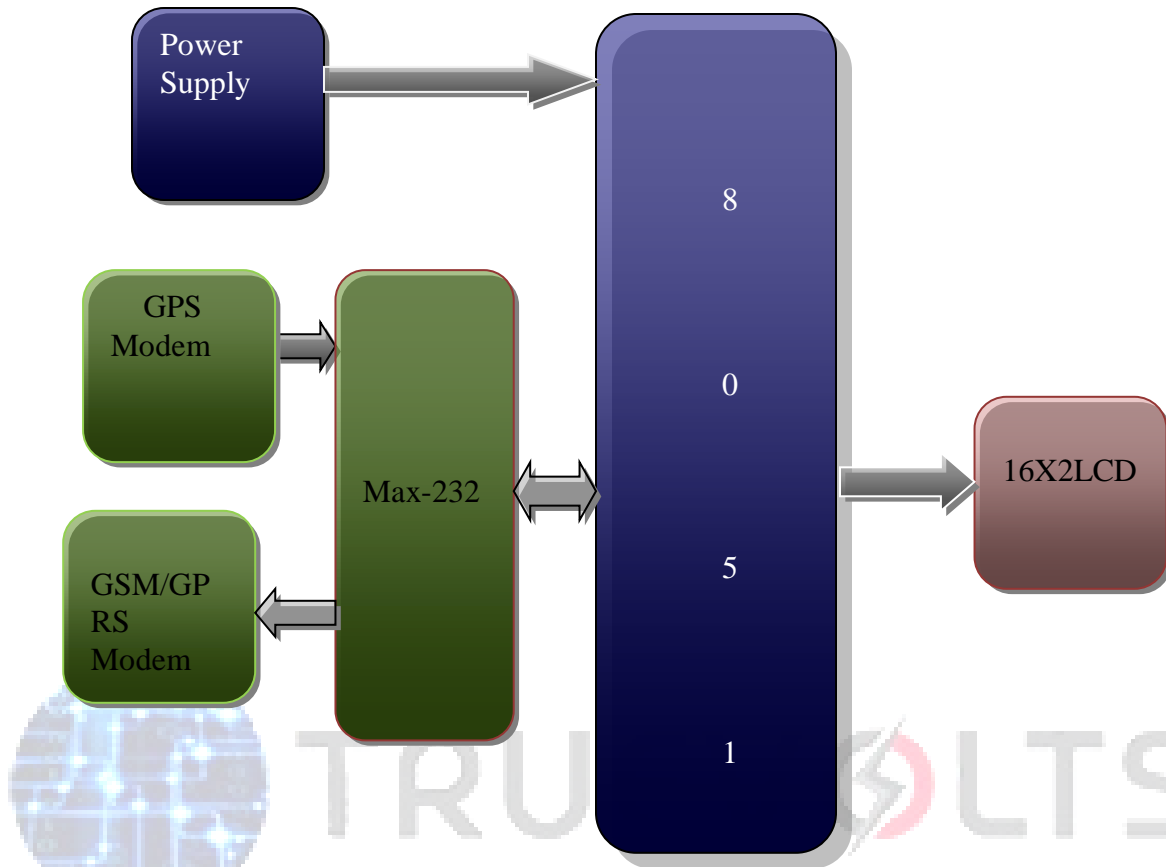
Here a 16X2 LCD will also be provided to the controller to display the latitude and longitude of the vehicle.

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

APPLICATIONS:

- Navigation System
- Tracking System
- Transport Companies
- Industrial

BLOCK DIAGRAM:



POWER SUPPLY BLOCK DIAGRAM:

