
AGRICULTURE FIELD MOTOR CONTROL SYSTEM USING GSM

ABSTRACT

This project is aimed to design a system to control the agriculture field motor by using a wireless technology called GSM technology.

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.

Villages are the backbone of our nation. The farmers strive hard day and night to yield very good results in their farm. They know the entire process how to produce a farm, when to provide water to the farms etc. When it is the time to water the farms, they just stop their current works then and there and rush to the farms to start the pump sets to water the farms.

This project provides an excellent solution to this process. The farmer need not go to the farm to water his field. He can sit at his present place and start the motor on to water his field. No cabling or hardware connections are required to do this. Everything will be carried in a wireless fashion and this system is entirely an automated product.

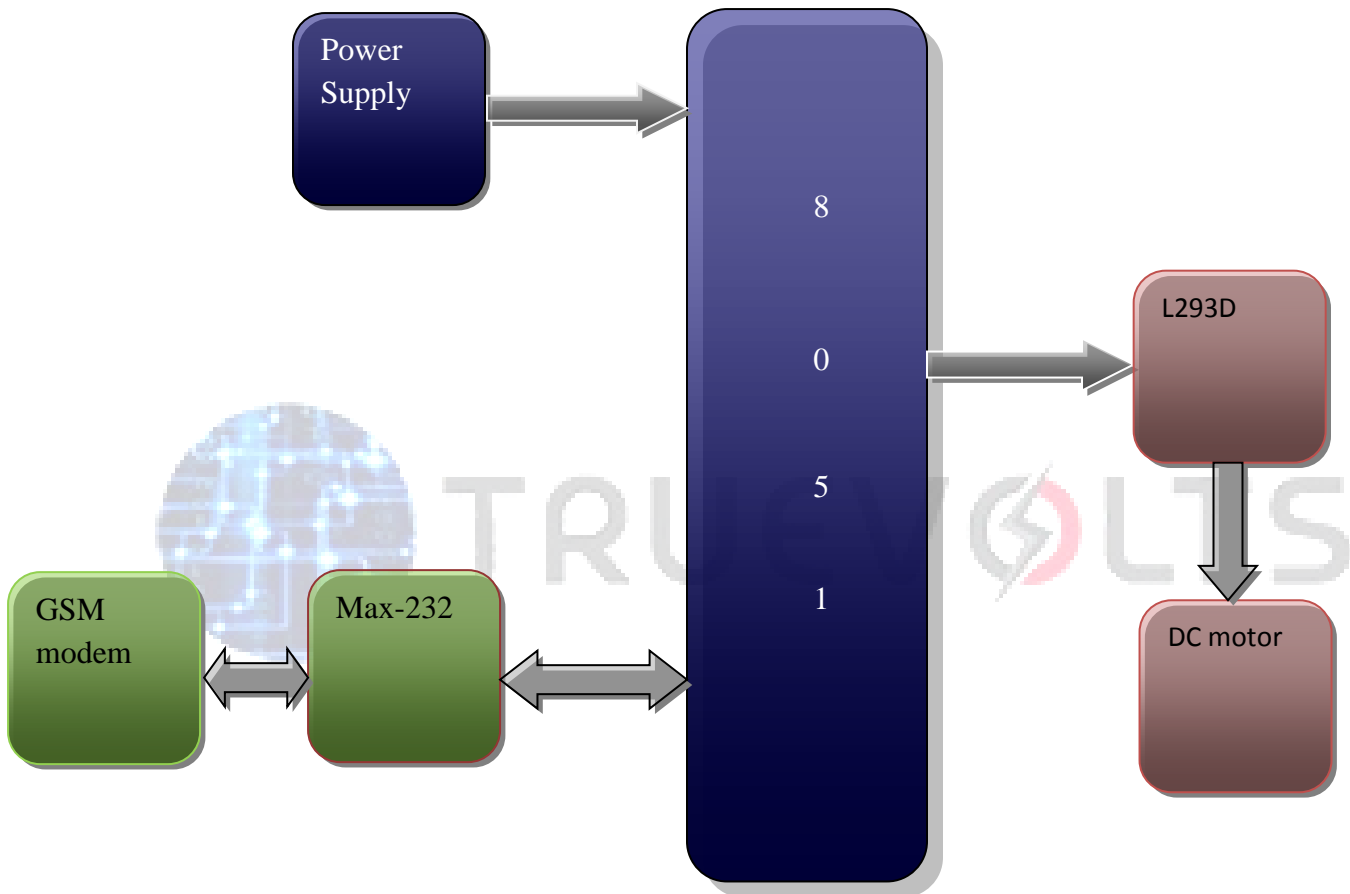
This project is designed in such a way that a GSM modem is interfaced to the controller through serial port along with a motor. The GSM modem performs the task of receiving the message from the mobile and sending the messages to the mobile from the controlling unit. If the farmer wishes to water his field, he needs to switch on the motor. Thus, he has to send a predefined message to the modem from his mobile. The GSM modem receives this message and intimates the same to the microcontroller. Now it is the job of the controller to switch ON/OFF the motor in accordance with the received message.

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:

