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# **AUTOMATIC PLANT IRRIGATION SYSTEM**

## **ABSTRACT**

The project is aimed to design an “AUTOMATIC PLANT IRRIGATION SYSTEM” through which we can automatically monitor and control the plant irrigation.

Monitoring field conditions is the foundation of modern agricultural management. In order to improve the efficiency of the data collection procedure, and to improve the precision with which agricultural operations are managed, it is necessary that we have an automated system that collects environmental data, especially to record long-term and up-to-the-minute environmental fluctuations. This system automatically reports environmental conditions in real-time.

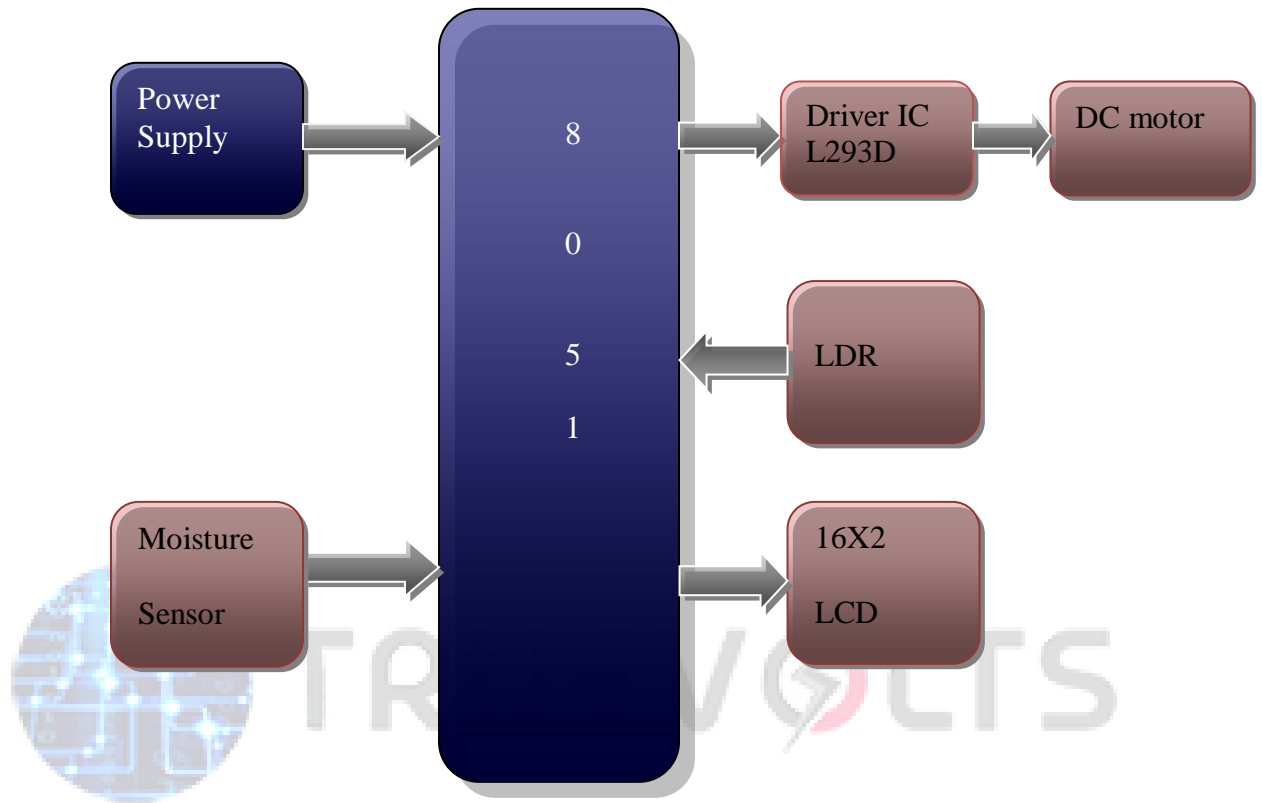
In this project the LDR and moisture sensor are interfaced to the microcontroller. The sensor continuously checking the moisture level in the soil and will be updated to the controller, and if it is less than the pre defined level then the motor will turn ON automatically. Here LCD is interfaced to display the status of moisture. LDR indicates light intensity on LCD display.

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:**

- Irrigation system
- Green house

## BLOCK DIAGRAM:



## POWER SUPPLY BLOCKDIAGRAM:

