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# WEATHER MONITORING SYSTEM IN REMOTE PLACES USING GSM

## ABSTRACT

This project is aimed to design a weather monitoring system by monitoring the different parameters like temperature, humidity and light in remote places by using wireless GSM technology.

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.

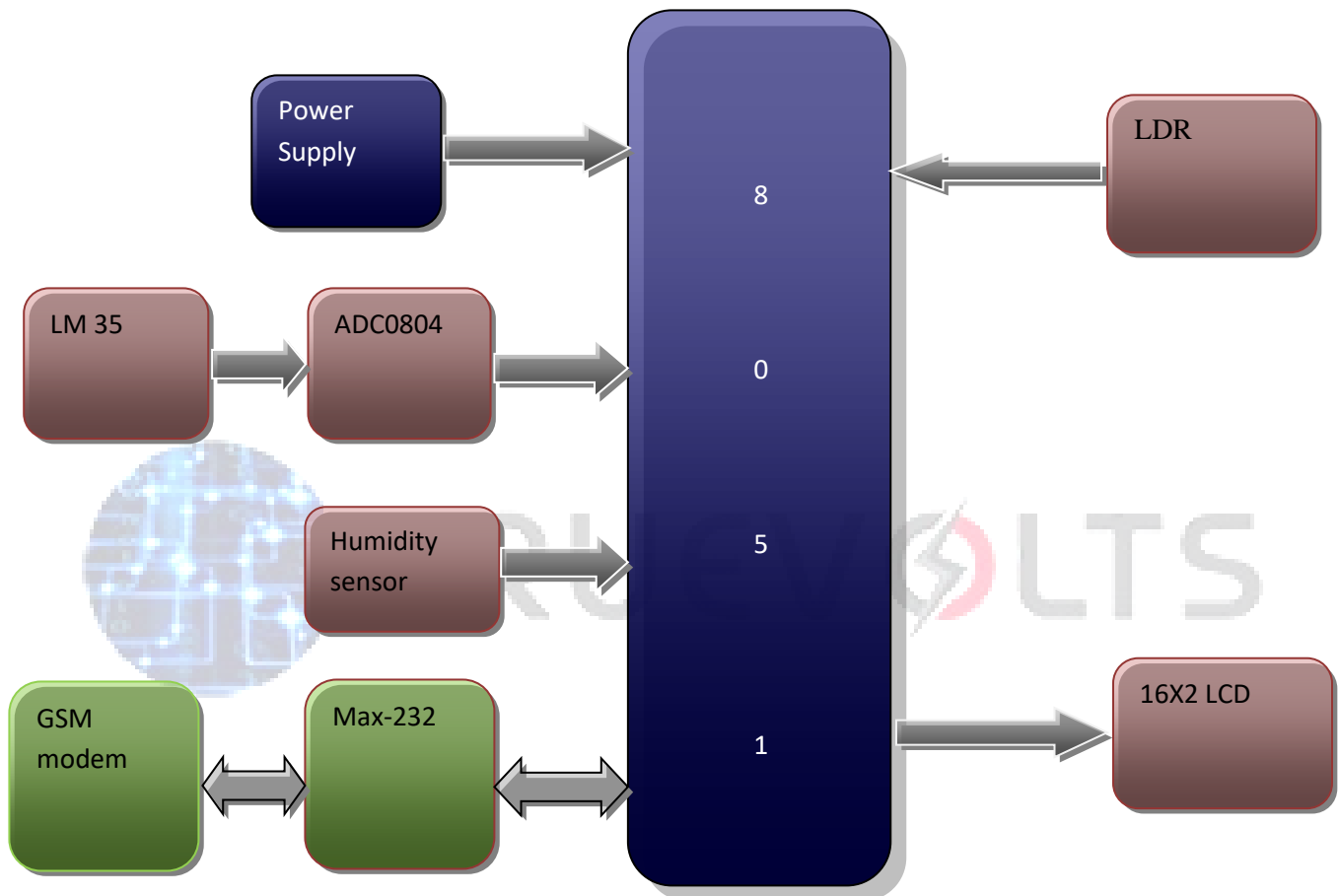
This project is designed in such a way that temperature sensor, humidity sensor and LDR sensors will be interfaced to the controller. An ADC is used in between temperature sensor and the controller to convert the analog value to the digital. A GSM modem will be interfaced to the controller using serial communication. All this arrangement will be fixed at a place in remote area and the processed data will be sent to the user mobile who is actually monitoring this unit, through the GSM modem. This is all done with the help of wireless concept, GSM. The microcontroller will continuously monitors the status of the sensor. A16X2 LCD will be interfaced to the controller to display the values of the sensors.

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:

- Industrial applications
- Household applications

## BLOCK DIAGRAM:



## POWER SUPPLY BLOCKDIAGRAM:

