SCHEDULE DATA CAPTURING USING GSM

ABSTRACT

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 built on 8051 micro controller, the project is about to capture data from different sensors present in an industrial plant, and when the parameter is found to exceed the permissible limit then an SMS should be sent to the predefined mobile number, here in our project we are using a smoke sensor, fire sensor, LDR and humidity sensor, the data from all the four sensors is continuously monitored, if the reading of the sensor is exceeding the limits then we the micro controller will send an SMS to the mobile number predefined in the code. A 16x2 LCD is also interfaced to the project to display the status of the system.

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
- Monitoring systems

BLOCK DIAGRAM:

POWER SUPPLY BLOCKDIAGRAM: