

BABY MONITORING SYSTEM USING WIRELESS SENSOR NETWORK WITH GSM

AIM:

Design and development of Baby Monitoring System Using Wireless Sensor Network with GSM.

PURPOSE:

Baby monitoring is very important after birth. Because there are thousands of babies affected with sudden infant death syndrome (SIDS) every day around the world. To overcome this we have to read baby body condition. To facilitates this we are proposing system like baby monitoring system using wireless sensor network with GSM.

DESCRIPTION:

This project includes GSM (Sim800C) module, which is connected to Arduino through UART interface. Temperature Sensor , Humidity Sensor, MIC Sensor(Crying sensor) and MEMS Sensor(body moment sensor) connected to Arduino Through respective digital pins.

WORKING:

Arduino reads all sensors continuously. DHT11 sensor detects temperature and humidity of baby. MIC reads crying sound and gives digital signal to Arduino. MEMS sensor attached to baby body part and it can detect body moments. If any sensor gets activated then SMS will be sending to registered mobile number. By sending request SMS we get all sensors data in SMS. All sensors data will be displayed on LCD.

TECHNICAL SPECIFICATIONS:

HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
GSM	:	SIM800C
Temperature, Humidity	:	DHT11
Sound Sensor	:	MIC
Moment sensor	:	ADXL345/335
Power Source	:	12v 2 amp Adaptor

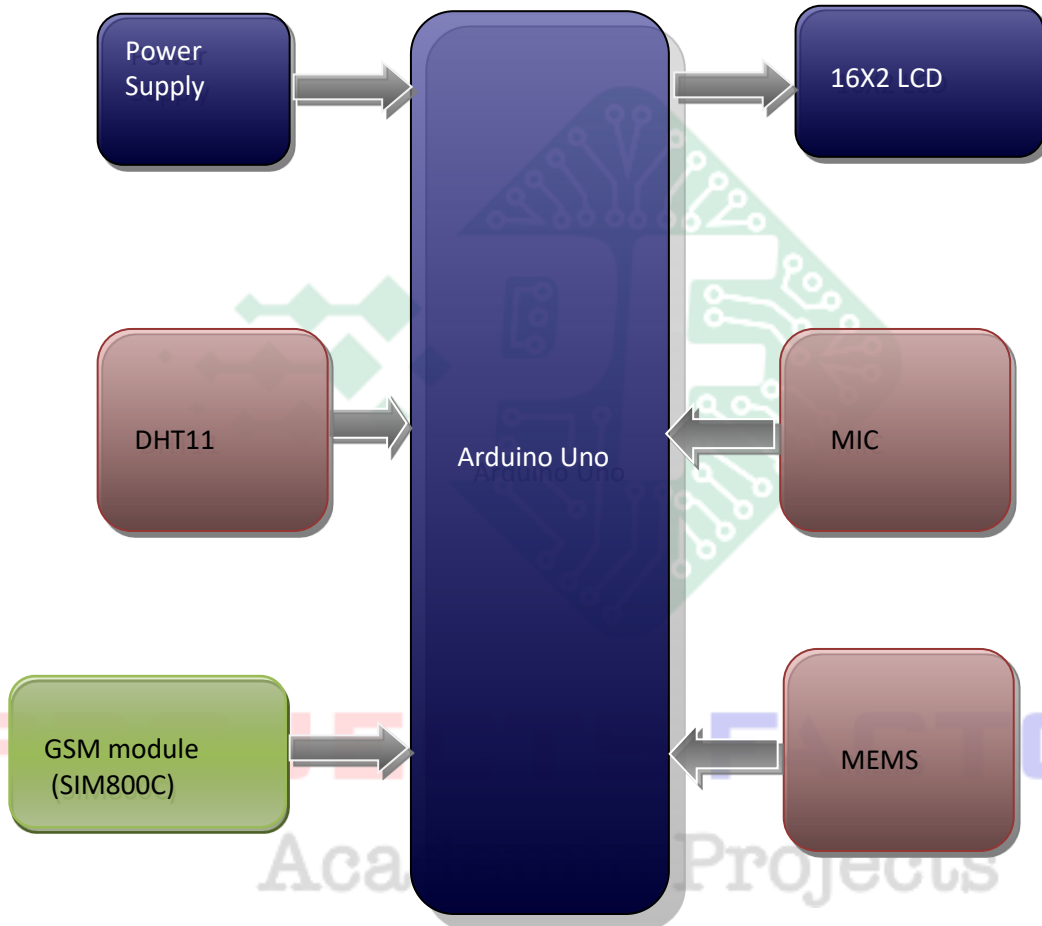
SOFTWARE:

Arduino IDE
Proteus based circuit diagram

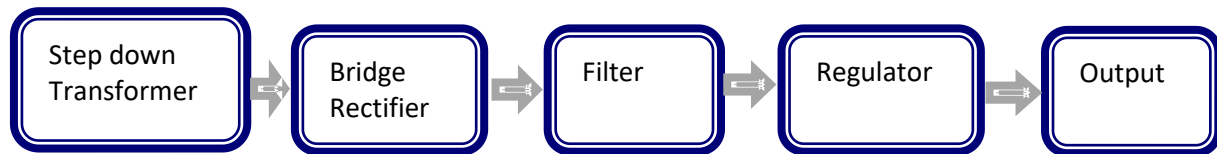
APPLICATIONS:

- Baby Care
- Hospitals
- Incubators

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



INTERFACES COVERED:

- We have covered GSM (SIM800C) module interfacing
- Different Sensors like DHT11, ADXL345/335 and MIC sensor interfacings



PROJECTS FACTORY
Academic Projects