

For more Project details visit:

<http://www.projectsof8051.com/soldier-tracking-system-using-gps-and-gsm-modem/>

Code	Project Title
1825	Soldier Tracking System using GPS and GSM Modem

Synopsis for Soldier tracking system

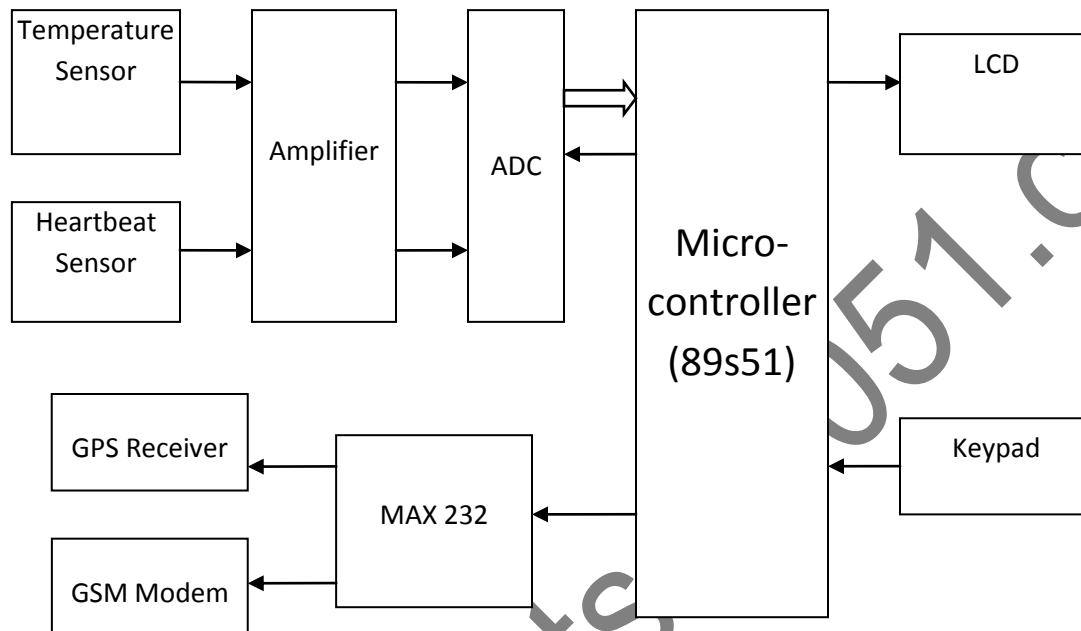
Introduction:

In today's world enemy warfare is an important factor in any nation's security. The national security mainly depends on army (ground), navy (sea), air-force (air).

The important and vital role is played by the army soldier's. There are many concerns regarding the safety of these soldiers. As soon as any soldier enters the enemy lines it is very vital for the army base station to know the location as well as the health status of all soldiers.

In our project we have come up with an idea of tracking the soldier as well as to give the health status of the soldier during the war, which enables the army personnel to plan the war strategies.

Block Diagram of Soldier unit:



Soldier Unit

Base unit:



Soldier unit:

This unit is placed on the soldier. It has mainly 4 parts:

- **Biomedical sensors**

Here to find the health status of soldier we are using a body temp sensor as well as pulse rate sensor. These sensors will measure the body temperature and the pulse rate of soldier and will be stored in μ c memory.

- **GPS Receiver and GSM Modem**

The GPS is used to log the longitude and the latitude of soldier, which is stored in the μ c memory.

The GSM unit sends the SMS to the army base camp containing the health parameters and the location of soldier.

Base unit

SMS will be received at the base station. Upon receiving the SMS, the officer at the base station can find soldier's location on maps based by using the co-ordinates received on text sms. Also the health status is shown on mobile. In this way the army official's can keep a track of all their solders.

Hardware Requirement:

- 1) Micro Controller
- 2) GPS Receiver
- 3) Level Converter MAX 232
- 4) GSM Modem
- 5) Biomedical Sensors

Applications and Advantages:

1. No need to go on field.
2. Higher relibility.
3. Cost effective.
4. Fast and efficient.

Future Development:

1. We can dial an emergency call if the soldier health parameters crosses threshold value or soldier co-ordinates goes out of a certain / pre-decided track.

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