**EARTHQUAKE DETECTION ALERT ALARM FOR PEOPLE SECURITY**

**AIM:**

The main aim of the project is to alert the people just before earthquake occurs.

**PURPOSE:**

The purpose of the project is to alert the people before earthquake occurs and it is helpful for the people living in earthquake prone area before strike occurs.

**NODE SECTION:**

**MICRO CONTROLLER**

**(AT89S52)**

**POWER SUPPLY**

**LCD DISPLAY**

**(16 X 2 LINES)**

**MEMS**

**HT 12E ENCODER**

**RF TX**

**PEOPLE LIVING PLACE:**

**MICRO CONTROLLER**

**(AT89S52)**

**POWER SUPPLY**

**LCD DISPLAY**

**(16 X 2 LINES)**

**BUZZER**

**HT12D DECODER**

**RF RX**

**Power Supply:**

 **Step Down**

**Transformer**

**Bridge**

**Rectifier**

**Filter**

**Circuit**

**Regulator section**

**DESCRIPTION:**

In this project we can alert the people who live in earth prone area by using MEMS technology. In this we have two sections. One is Node section and another section is monitor section. When the earth quake is going to occur, MEMS observe the motion and that values are given to microcontroller. This information is transmitted to the monitor section using RF transmitter. At monitor section RF Receiver receives this data and that is given to microcontroller. If the motion values increases from its threshold level then automatically buzzer will on at the monitor section.

**HARDWARE COMPONENTS:**

1. Micro controller **(**AT89S52)
2. Power supply
3. LCD Display(16X2)
4. MEMS
5. Buzzer
6. Encoder & Decoder
7. RF TX & RF RX

**SOFTWARE TOOLS:**

1. Kiel U vision
2. Express PCB
3. ISP

**RESULT:**

According to this project we can alert the people just before earthquake occurs.