Abstract

The science of measuring the magnitude of earthquake from instrument reading is called Seismology. The source processes of large earthquake are usually studied using seismological data. The rupture of the earth's crust will also generate a major earthquake which can be detected and measured by seismic instrumentation throughout the world. In this paper we are presenting the proposed system which is implemented for the measurement and analysis of Vibration and Seismic signal. Here we have made an attempt to help environment by creating a demo version of earthquake detector using seismology and processing the seismological data to predict earthquake and for other suitable applications. Here we have used a Micromachined
capacitive accelerometer sensor to detect vibration/Seismic signal. The graphical data obtained on the computer screen is calibrated in terms of Richter scale to directly show the magnitude of the wave and for designing the hardware we are using the microcontroller and MATLAB coding is used for analysis the seismic signal.

References

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Index Terms

Computer Science   Emerging Trends in Technology

Keywords

Seismology  Accelerometer Sensor  Matlab  Microcontroller  Vibration/seismic Signal