ABSTRACT

Currently earthquakes that often occur in Indonesia is almost always deadly. The earthquake occurred because of the perceived surface of the earth vibrations caused by seismic waves from the earthquake source in the layers of the earth. With this situation the authors hope that the earthquake warning system utilization can be fully utilized by members of the community that there are areas prone to earthquakes. Earthquake warning system of earth tremors are not currently present any signs of an automated system is to find out when the vibrations in the earth. This causes around the average citizen to know when an earthquake has begun to remodel-rambikan earth's surface.

Therefore dibutukan an automatic system design to detect earth tremors earlier. Thereby minimizing the occurrence of more casualties as a result of this earthquake. The design of earthquake early warning system utilizes a microcontroller-based vibration sensor that would know about the vibrations that occur on earth with a warning output diandroid to notify the presence of vibrations that occur on the surface of the earth.

The method in accordance with these problems is by way mengetahuai how the earthquake may occur, resulting in its manufacture can be run in accordance with the actual terjadi.Kemudian know the ground waves that occur when an earthquake occurs so that the sensor used to run well.

Therefore. This final project aims to create a prototype system peringtan surface of the earth tremor in the hope that it can be used mainly as a alait a warning system of impending earthquakes greater.

Keywords : Vibration sensor, *microcontroller*, android