

## **ABSTRACT**

*Disaster is an undesirable and unexpected event when it occurs. So also with fire, Fires occur sometimes when we forget to turn off the fire or even because of the electric circuit. The more dangerous if the fire is unknown or occurs in an empty room. Certainly a fire will have a more severe impact if we do not detect it early.*

*In this final project is made a fire detection tool using microcontroller. The microcontroller will be connected to a smoke detector sensor that is MQ-2 and GSM / GPRS SIM 800l module.*

*Information on the occurrence of early fire will be read when there is smoke detected by the MQ-2 sensor and the information is then processed in a microcontroller, Then the microcontroller sends information to the GSM / GPRSSIM 800l module which will proceed by sending sms messages to the home owner's phone and the nearest fire department. The system has been successfully designed to receive messages in the form of orders to check the condition of the room and the delivery of information messages the room. The speed of delivery of room information ranges from 1 to 2 minutes from the time of dispatch of the room condition check requests and the success of the blackout depends on the number of smoke source points and the availability of water volume.*

**Keywords :** *MQ-2, Microcontroler, GSM/GPRS 800l, threshold.*