ABSTRACT

Disaster is an event that we can't expect before. One example is fires, fires

can be triggered by several things, including the human error, electrical short

circuit, and the low quality of electronic products. No one can expect when the

fires will happen, so it need fast respond to handle fires, so that fires does not

become bigger and making it difficult to extinguish. Because of that situation we

needed a tool that can send reports of fires at specific locations directly to the Fire

Department.

At the this final project, I designed a device that can transmit information

about the fires that happen more quickly and automatically, and can call the fire

department by phone calls and send the location of the fires by voice recording

and also it can send information about the fires to the owner of the house. This

device consists of a temperature sensor, smoke detector circuit simulation,

microcontrollers, alarm, blowers, GSM modem, and sound modules. When the

system detects the occurrence of fire from both sensors, the system will contact

the fire department and the homeowner to send a voice recording that contains

information about home address via a phone call. In addition to anticipate the

situation in the house that was in fires, the alarm and the blower is activated

automatically.

The output of this final project is systems that can be applied in a

residential complex to anticipate the fires, with reasonable price and a high degree

of accuracy sensors, the production cost is Rp.545.000. and temperature sensors

are tested and proven accurate.

Key words: fire, microcontroller, sound modules, GSM modem