

## **ABSTRACT**

### **DESIGN AND IMPLEMENTATION OF HOME SECURITY SYSTEM BASED MICROCONTROLLER**

Security system is an integrated security system, which automatically gives information on the state of a condition that can be applied to a residential, office, college or institution in need.

Principally on the security system uses two sensors that will alert when there are fires and the second sensor when there is a suspicious object, the MQ-2, LM35, and infrared sensors. MQ-2 smoke sensors and LM35 will detect a fire, while the infrared sensor detects an object that enters the room, where the thief detection sensor can be in ON / OFF with a combination of password, the control center is located at 8535 ATmega microcontroller. For the transmission of information, used SMS Gateway facility using Siemens C55 as a medium to transmit information from the sensor response.

The security system can be connected with several other security systems. So that when applied to the housing, each house will be connected to one another, so that when a theft or fire, each home will receive the information, and is also connected to the security post at the housing complex, so as to provide first aid.

**Keywords:** home security systems, fire, smoke sensor, Infrared Sensor, PIR Sensor.