

Kata kunci : **kunci elektronik,password,mikrokontroler,mobil, keamanan pada mobil,alarm**

## **ABSTRACT**

In the modern era like now that all these levels of mobility for someone to reach a place with a short time is very important, one example solution is to have a private vehicle in the form of motorcycles, cars, even bicycles. By having your own vehicle there are several advantages for its users, such as saving time and cost when compared to using public transport.

Lately a lot of car thefts. The thieves are seemingly out of his mind to launch a car aksinya.Safety be one aspect that is very important for vehicle owners. This aspect will be a big problem if not addressed properly.

This is what encourages authors to design a security system enhancements that make the car owner feel calm when I had to leave his car. Car security system that has been designed is the "Implementation of Microcontroller Based Electronic Locks For Extra Security At Car". In its design, the car will only light up when a correct password is entered. Before the password is entered, the electronic key must be lit first by using the owner's car keys. Car key switch is useful as a liaison between the ration accumulator with an electronic lock. When the key is in the ON position, the electronic key is lit and the user must enter a correct password in order to run the car. Password is entered in the form of numbers - numbers from 4x4 keypad mounted on the circuit. Password is entered it will appear in a 2x16 LCD character display characters with an asterisk (\*). The default password is set in advance and then stored into the microcontroller. This password can be changed in accordance with the wishes of the user without having to reload the program. The system is equipped by an alarm when the password is entered incorrectly three times.

In the hardware design process, the author uses an actual car. Accumulator used has a current of 32 amperes and a voltage of 12 volts. To lower the voltage and current output of the accumulator is used volt regulator circuit. The results

obtained from the output volt regulator circuit is 5.02 volts for the voltage and amperage to the current 1.14. The resulting output is enough to be used as an insert into the circuit sismin ration.

**Key words: electronic lock, password, microcontrollers, auto, security on the car, the alarm**