

ABSTRACT

The development of the technology the microcontroller is currently widely used in various aspects, one is the vehicle safety systems of the bike. This study uses the actuator solenoid to lock the bike through the android app with the help of bluetooth module HC-05 as interface security systems bicycle. MPU 6050 to detect vibration on a bike that will give commands to the SIM 800L for deliver notification by SMS. The result of this study, Researchers can state that the success of Bluetooth range testing, G-Force tesing, vibration sensor testing, and SMS receiving testing from GSM with average time 10.6 second, this tool can be used optimally.

Keywords: bluetooth, microcontroller, solenoid, vibration sensor.