

UNIVERSITY COLLEGE SEDAYA INTERNATIONAL
SCHOOL OF ENGINEERING

FINAL YEAR PROJECT

FINAL REPORT

AUTOMATIC CAR BRAKING SYSTEM

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Abstract

This final report contains the complete documentation about the researches, theories, simulation and testing works as well as the development of this project with the title of "AUTOMATIC CAR BRAKING SYSTEM" The system is installed in the vehicle, to detect any object and upon detection the vehicle will response accordingly.

Generally this project consists of three main parts. They are ultrasonic transmitters, ultrasonic receivers, and output devices. The ultrasonic used in this project is 40kHz ultrasonic transducer for transmitting and receiving the ultrasonic waves. The PIC16F877 microcontroller is program to transmit the 40kHz ultrasonic waves through the ultrasonic sensors and the reflected waves will be received by the sensors. The received signals will be fed to the microcontroller for further processing.

The following contents of the report include an introduction, objective together with some background of this project, literature review, and the tasks that have been carried out in this project. The cost, marketing, project hardware, PC programmer, PCB layout, and program soft code are also included in the appendices.