



SCHOOL OF ENGINEERING

EN312 ENGINEERING PROJECT

DESIGN OF AN ULTRASONIC CAR SENSOR WITH L.E.D. DISPLAY

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Abstract

The application of ultrasonic sensor enjoys rapid increase of interest in the field of automotive recently years. Many car manufacturers like Mercedes-Benz, BMW and Porsche have invested lots of money in developing smart technologies for their car system, part of it was the parking-assistance system. This system uses ultrasonic sensor which is embedded in the rear bumper (also in front bumper for some luxurious vehicle) to measure distance to nearby object, and the driver will be informed with visual warning. PIC16F873A microcontroller will be used to control the entire circuit. This concept of measuring device definitely can bring a lot of benefits to the users. The system is a safety feature which can reduce the accident rate, and in the future may be a factor in reduction of insurance cost. It makes human life easier and more convenient.