

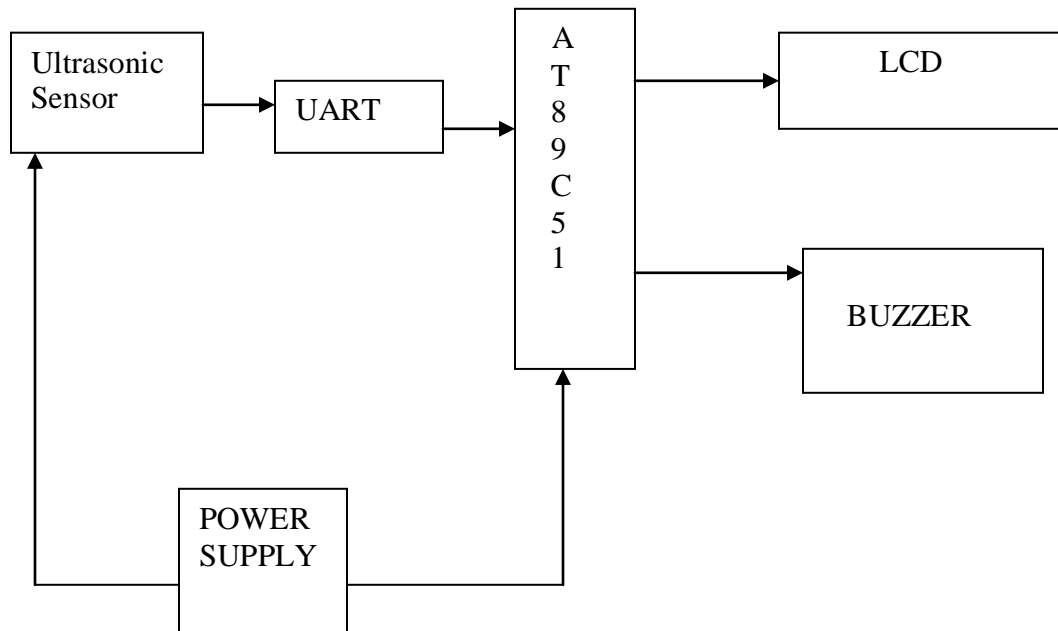
ULTRASONIC BASED PARKING GUIDANCE SYSTEM

Abstract:

Parking a vehicle is one of the biggest task in a congestion area and especially when you are reversing back your vehicle u couldn't guess the exact distance you are moving and how much distance is the vehicle from you.

This Project is used to avoid all the above conflictions by using ultrasonic sensor. This ultrasonic sensor is used to read the distance and display it on your dash board. When your vehicle is moving back the exact distance between your vehicle and the object is shown in LCD and if the distance is reducing to a certain limit a warning is raised by making sound. This helps parking your car with more safely.

BLOCK DIAGRAM:



Working Principle:

When your car starts moving back to park your vehicle the ultrasonic sensor module is get on and it starts reading the data and sends the data to micro-controller through UART .In micro-controller the data received is compared with the data stored in micro-controller ,If the value reduces below certain limit a buzzer is on,the readings are shown on LCD.

SOFTWARE REQUIREMENTS:

- Kiel μ vision 2
- Embedded C
- Flash Magic

HARDWARE REQUIREMENTS:

- Ultrasonic Sensor
- AT89c51 controller
- LCD
- Buzzer