MEMS BASED DRIVING SIMULATION [with front end]

ABSTRACT

Micro electromechanical systems (MEMS) (also written as micro-electro-mechanical, Micro Electro Mechanical or microelectronic and Micro Electro Mechanical systems) is the technology of very small mechanical devices driven by electricity and it merges at the nano scale into nano electromechanical systems (NEMS) and nanotechnology.

MEMS are separate and distinct from the hypothetical vision of molecular nanotechnology or molecular electronics. MEMS are made up of components between 1 to 100 micrometers in size (i.e. 0.001 to 0.1 mm) and MEMS devices generally range in size from 20 micrometers (20 millionths of a meter) to a millimeter. They usually consist of a central unit that processes data, the microprocessor and several components that interact with the outside such as micro sensors.

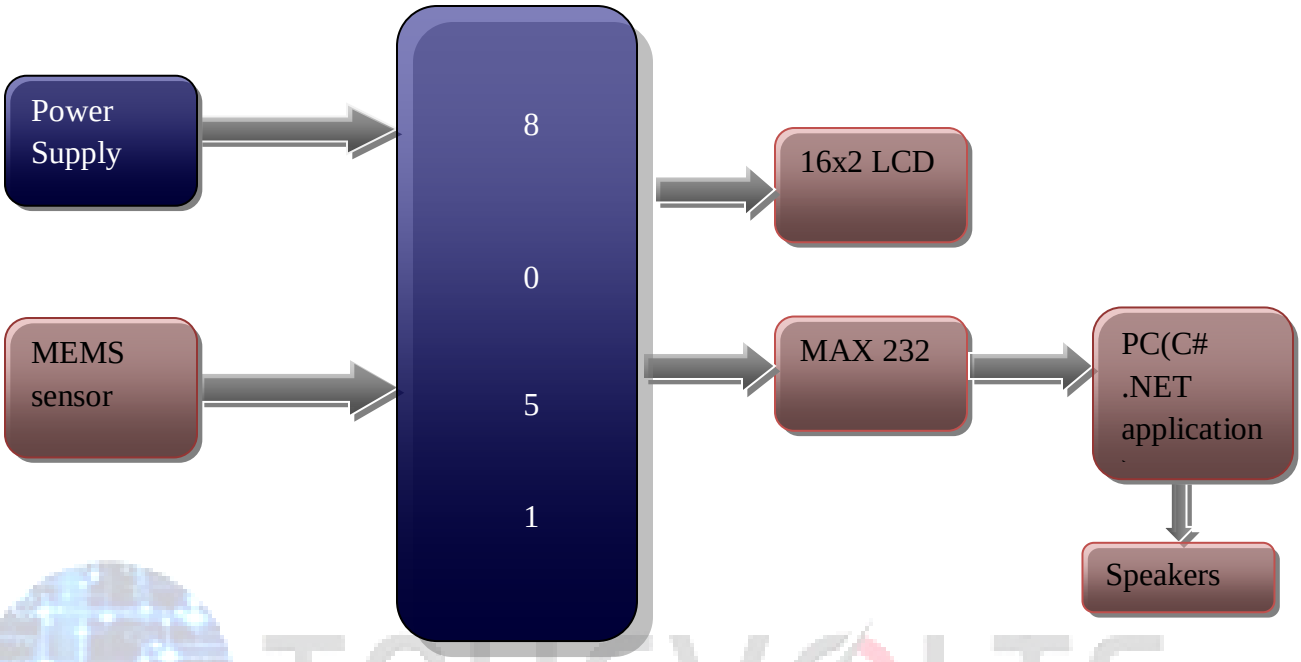
This is very useful in automobiles. MEMS connected to microcontroller and microcontroller connected to PC. If any inclination occur in any side Voice alert comes from PC speakers. It is very help full in driving simulation. Particularly in airplanes this simulation is very helpful.

This project uses regulated 5V, 500mA power supply. 7805 three terminal voltage regulator is used for voltage regulation. Full wave bridge rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.

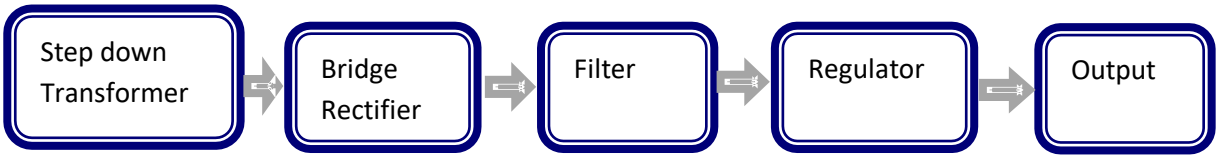
APPLICATIONS:

- Industrial applications
- Automatic control systems
- Automobiles

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



A1, 2nd FLOOR, EUREKA COURT, KS BAKERY BUILDING, OPP. R.S.BROTHERS LANE, AMEERPET, HYDERABAD,TELANGANA-500073.
Call: +91 9908665239 email: info@truevolts.com
Website: www.truevolts.com