**CAR DRIVING SYSTEM TO ASSIST THE PHYSICALLY CHALLENGED**

**AIM:**

The main aim of the project is to control the movements or directions of cars using MEMS technology.

**PURPOSE:**

The purpose of this project is to give the directions to the vehicles for physically challenged persons.

**BLOCK DIAGRAM:**

POWER SUPPLY

LCD DISPLAY

MEMS

MOTOR

DRIVER (L293D)

GEAR MOTORS

MICRO CONTROLLER

(AT89S52)

**Power Supply:**

**Step Down**

**Transformer**

**Bridge**

**Rectifier**

**Filter**

**Circuit**

**Regulator section**

**DESCRIPTION:**

Inertial sensors are quickly becoming essential components in consumer electronics, enabling features that enhance the operation of an ever expanding list of products such as laptop computers, MP3 players, digital cameras, television remotes, game controllers and mobile phones. Enabling this trend are recent innovations in Micro-Electro Mechanical Systems (MEMS) silicon sensors; in particular, accelerometers and gyroscopes. While these have commonly been used as industrial and automotive components, engineers are overcoming the obstacles that have prevented the introduction of motion sensors into Airplanes, Trains and handheld consumer products. Specifically, advances have been made that reduce cost, size and power consumption.

This project discusses the use of inertial sensors in a few handheld applications, provides a brief technology overview of accelerometers and gyroscopes, and presents the advantages of using it as a standalone solution, or for supplementing multi-axis accelerometers for a more effective motion sensing solution. The objective of this project is to develop a system that controls the directions of vehicle.dependes upon the angles of the tilt sensor then the vehicle will move in that direction. This is very helpful project for the physically challenged.

**HARDWARE COMPONENTS:**

* Micro controller (AT89S52)
* Power supply
* LCD
* MEMS
* Motor Driver Circuit (L293D)
* Gear Motors

**SOFTWARE TOOLS:**

* Keil u-Vision
* Express PCB
* ISP

**RESULT:**

By using this project we can control and give directions to vehicle of physically challenged persons.