**HAND GESTURE BASED BIO MEDICAL APPROACH FOR DISABLES**

**AIM:**

The main aim of this project is to control the devices by using MEMS Technology for physically handicapped people.

**PURPOSE:**

The purpose of this project is to on and off the home appliances using MEMS accelerometer for physically handicapped people.

**BLOCK DIAGRAM:**

POWER SUPPLY

LCD DISPLAY

MEMS

RELAY

BULB

MICRO CONTROLLER

(AT89S52)

FAN

DRIVER CIRCUIT

DRIVER CIRCUIT

MOTOR

LED

**Power Supply:**

**Step Down**

**Transformer**

**Bridge**

**Rectifier**

**Filter**

**Circuit**

**Regulator section**

**DESCRIPTION:**

This project is to control the home appliances using MEMS technology for physically handicapped people. In MEMS we have Tilt register. When we change the direction, the tilt registers values are changed and that values are given to microcontroller. Whenever the direction of the MEMS changes, depending on the direction various devices like bulb, dc motor, led and fan are made on and off for physically handicapped people.

**HARDWARE COMPONENTS:**

1. Micro controller (AT89S52)
2. Power supply
3. LCD(16 X 2 lines)
4. MEMS
5. Relay
6. Bulb
7. Fan

**SOFTWARE TOOLS:**

1. Keil u-Vision
2. Express PCB
3. ISP

**APPLICATIONS:**

1. Used in General applications
2. Used in Home applications
3. Used in Industrial applications

**RESULT:**

Hence, this project controls various home appliances using MEMS technology for physically handicapped people.