

Introduction:

A Heated seats are a standard feature on many vehicles thesedays in cold areas. They provide the driver and passengers with a pleasantly warm seat at all times, even in winter. The desired temperature is usually set in several levels. This can be activated by control of knob which will be allotted for it or by actuating the buttons manually , depending on the configuration installed. We can also implement the option of adjusting the temperature in the seat cushion and backrest areas according to personal perception of the temperature in each area. Heated seats are used increasingly in conjunction with climate controlled ventilation, which removes any condensing moisture from the seat.

Features

- A flexible approach system
- The implementation of this project leads for adjusting passenger seat temperatures according to their adjustments.
- Driver or Passenger has the access to modify the temperature in the vehicle.
- As per the passengers requirement, Heater will generate the heat accordingly when they tune the knob of control.
- It is best for those countries where the room temperature will be below -5* Celsius .
- This system is cost effective and user friendly.

SWOT- Strengths, and Weakness, Opportunities Threats

Strengths

- Easy adoptable system.
- We can adjust temperature accordingly in a easier way.
- Flexible Approach
- It's a cost-effective and a robust system.

Weakness

- Its only applicable for those countries which are having low temperature.

Opportunities

- If possible we can covert this system to both heater and cooler application

Threats

- Doesn't fit good for the places where the room temperature is above 20* Celsius.

4W's and 1'H

WHO: This project can accessed by customers or end users of automobile industry .

WHAT : STEPIn_Seat_Temperature_Monitoring_System

WHERE : Used in Automobile industry for vehicles

WHEN : Can be implemented for the counties which are having room temperature less than -5* Celsius.

HOW: By implementing Seat temperature Monitoring System.

Detail requirements

*High Level Requirements

Requirements	Description
HLR1	Microcontroller
HLR2	Temperature Sensor
HLR3	LCD Display or LED's(different colored)
HLR4	Temprature Generation
HLR5	Softwares to Implement

*Low Level Requirements

Requirements	Description
HLR1_1	ATmega328
HLR2_1	LM35 and ADC
HLR2_2	ADC with PWM
HLR3_1	LCD OR LED'S
HLR4_1	Heat Pump Module
HLR5_1	Code Blocks with AVR GCC compiler
HLR5_2	SimulIDE

Heated seats are a standard feature on many vehicles today. They provide the driver and passengers with a pleasantly warm seat at all times, even in winter. The desired temperature is usually set in several levels. This can be activated by power control or by precise temperature setting, depending on the configuration installed. There is also the option of adjusting the temperature in the seat cushion and backrest areas according to personal perception of the temperature in each area