** VEHICLE CONTROL SYSTEM**

**IMPLEMENTATION USING**

**CAN PROTOCOL**

**A PROJECT REPORT**

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**BONAFIDE CERTIFICATE**

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**ABSTRACT**

Generally a vehicle is built with an analog driver-vehicle interface for indicating various vehicle parameters. Vehicle Control System Implementation Using CAN Protocol is aimed at the implementation of digital driving system by CAN protocol using MSP430 for vehicle monitoring system. Controller Area Network is an attractive alternative in automotive and automation industries due to its ease in use, low cost and provided reduction in wiring complexity. CAN was developed by Robert Bosch for communication between digital devices inside an automobile where heavy electrical interferences and mechanical vibrations are present. The main feature of the system includes monitoring of various vehicle parameters such as temperature, fuel level of the vehicle. The communication module used in this project is embedded networking by CAN which has efficient data transfer. It also takes feedback of vehicle conditions like Vehicle speed, Engine temperature, Battery voltage and Light intensity are controlled by main controller.

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**LIST OF ABBREVIATIONS**

ADC Analog to Digital Converter

CAN Controller Area Network

CRC Cyclic Redundancy Check

KB Kilo Byte

LCD Liquid Crystal Display

LDR Light Dependent Resistor

LED Light Emitting Diode

LVD Low Voltage Detection

mA milli Amperes

Mbps Mega bits per second

MHz Mega Hertz

PC Personal Computer

PLL Phase Locked Loop

PWM Pulse Width Modulation

RISC Reduced Instruction Set Computer

USART Universal Synchronous Asynchronous Receiver Transmitter

USB Universal Serial Bus