

FACULTY OF ELECTRICAL ENGINEERING  
UNIVERSITI TEKNOLOGI MARA (UiTM), TERENGGANU

FINAL REPORT OF DIPLOMA PROJECT


CAR ACCIDENT PREVENTION BY USING TILT SENSOR

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MUHAMMAD IZZAT BIN ROSLAN	2012474608
WAN AHMAD FIRDAUS BIN WAN AZHAR	2012444014
MOHAMAD ARIF SYAFIQ BIN MOHAMAD ROHIM	2012474958

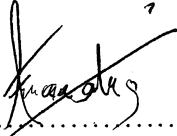
MISS SUHAIRIYANTI BINTI MOHD YUSOFF

“I declare that this report entitled “Car Accident Prevention using Tilt Sensor” is the result of my own group research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.”

Signature :  .....

Name : MUHAMMAD IZZAT BIN ROSLAN

Date : 8.4.2015 .....

Signature :  .....

Name : WAN AHMAD FIRDAUS BIN WAN AZHAR

Date : 8.4.2015 .....

Signature :  .....

Name : MOHAMAD ARIF SYAFIQ BIN MOHAMAD ROHIM

Date : 8.4.2015 .....

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“In the name of Allah the Most Gracious , most merciful”

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May Allah bless you all.

## ABSTRACT

This project is about car accident prevention by using tilt sensor based on the theme given which is health and safety. This project consists of one input which is the tilt sensor and consists of four outputs which are the vibrator, LED , LCD and the buzzer. This projects working principle is that when the input is high, all the outputs will trigger. Since the input is the tilt sensor, the variable that will be monitor or that will affect the sensor is movement. The tilt sensor will be place at spectacles. The sensor detects the movement of the driver's head. The outputs are programmed to turn on when the head of the driver bends down for 3 seconds. If the 3 seconds is up, the LED will light, the buzzer will give out sound, vibrator will vibrate and the LCD will display "WAKE UP!" when initially displays "DRIVE SAVE". The vibrator is placed at the neck of the driver or at the back of the driver. The placement of the LCD and buzzer is inside of a box created so that the prototype will look less messy and more organize. If the driver is awake and straighten his/her head again, the alarm will turn off and will turn back on again if the same scenario happens. That's how the project works.

## TABLE OF CONTENTS

CHAPTER	CONTENTS	PAGE
	DECLARATION	i
	DEDICATION	iv
	ACKNOWLEDGEMENT	v
	ABSTRACT/ABSTRAK	vi
	TABLE OF CONTENTS	viii
	LIST OF FIGURE	x
	LIST OF SYMBOLS	xi
	LIST OF ABBREVIATIONS	xii
CHAPTER 1 :	INTRODUCTION	1
	1.1 Problem Statement	2
	1.2 Objective of the Project	2
	1.3 Scope of Work	2
CHAPTER 2 :	LITERATURE REVIEW	
	2.1 Background	4
	2.2 Components Reviews	4
	2.2.1 Tilt Sensor	5
	2.2.2 Atmel AT89S52 microcontroller	6
	2.2.3 IC ULN2003A	7
	2.2.4 IC LM358	8
	2.2.5 Voltage Regulator	9
	2.2.6 Crystal Clock Oscillator	10
	2.2.7 Relay	11