DEPARTMENT OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA CAWANGAN PULAU PINANG

FINAL REPORT OF DIPLOMA PROJECT

MECHANICAL SENSOR FOR DOORS AND WINDOWS

DATE: 18 / 02/ 2005

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CONTENTS

ACKNOWLEDGEMENT	1
ABSTRACT	2
1.0 INTRODUCTION	
1.1. BACKGROUND	3
1.2. SCOPE OF WORK	5
1.3. OBJECTIVE OF THE PROJECT	5
1.4. FLOW CHART	6
1.5. GANTT CHART	7
2.0 DIFFERENT SENSOR TECHNIQUES	
2.1 GATE ALARM SYSTEM	8
2.2 MODULAR BURGLAR ALARM SYSTEM	10
2.3 MOTORCYCLE ALARM	11
2.4 SINGLE ZONE ALARM	14
3.0 CIRCUIT DESIGN AND OPERATIONS	
3.1 CIRCUIT DIAGRAM	15
3.1.1 SPECIFIC FUNCTION OF IC NE555	16
3.1.2 SCHEMATIC DIAGRAM	18

3.2 CIRCUIT SIMULATION	19	
3.2.1 TINA PRO SOFTWARE	19	
3.2.2 SIMULATION PROCEDURES	20	

3.3 PCB DESIGN

4.0 HARDWARE CONSTRUCTION

4.1 HARDWARE CONSTURCTION PROCEDURES	22
4.1.1 PCB MAKING	22
4.1.2 ETCHING	23
4.1.3 COMPONENTS SOLDERING	23
4.1.4 CIRCUIT TROUBLE SHOOTING	24

ACKNOWLEDGEMENT

First of all, we would like to thank to Allah for giving us health and ability to complete this project. The bless from Allah have gave us the strength to complete this report successfully.

Other than that, thank to our beloved parents for their support and prays for our success. You are always at the bottom of our heart. A special thanks to both of our supervisor En. Muhamad Zahim bin Sujod and Tuan Haji Md Noor Bin Tajuddin Without their concern and support, it is impossible for us to propose this project. Hopefully they will pour us more of their knowledge and spirit next time.

Not forget to our friends for giving us many ideas, and lending us their computer software such as TINA PRO 6, and CAD int. in completing this project. Thanks a lot and may Allah bless us.

ABSTRACT

Smart home is a project that gives much benefit to us. There are many devices that we must use for completing one smart house such as alarm sensor, automatic curtain for window, heat sensor and etc. In this project we have been assign a project that will operate as a mechanical sensor for doors and windows.

A mechanical sensor is a project where it can detects any attempt of breaking your lock at the main doors and every window in the house. So the member of the house will not worry, of any robbery attempt in their house. Example of a mechanical sensor is a modular burglar alarm. If the house detected someone is breaking into the house, a burglar alarm will be activated .So, the controller will be reset the alarm by push the reset button. After that the burglar alarm will be activate in an initial condition.

The advantages of the mechanical sensor are the member of the house will feel more safe and it will make our life easier and safety. Every house should use this device because it made our house more comfortable and smart. Almost house at the foreign country such as Europe and Japan use this controller for make their life comfortable and safety either they staying at a house or leaving their house.

1.0 INTRODUCTION

1.1 BACKGROUND

The purpose of the project 2(KEU 380) are to make sure all Electrical Engineering student at Universiti Teknologi Mara (UITM) have some lesson about a theory that they learn in the class. By doing this project, a student learn how to create an electronic devices and learn about electronic component seriously. In KEU 380, an Electronic Engineering student (EE111) was given the Smart house project. This project was divided to 10 subprojects and 1 subproject was given to 2 students. All students should done their project because in the project 2 (KEU 380) all subprojects will be combined to make one smart house.

The specific objective of the project 2(KEU 380) is to introduce a student how to manage and completing their project. From this project we learn how to complete our project with systematically. The project shows us a lesson about how to cooperate with someone and solve a problem together. As an Electrical engineering student, these projects give much benefit to us. A student can learn about a situation when working at a firm. How to accept a project, manage a project and make sure our project is working successfully. Beside that, a student learn how to do a research about their project, how to ask their supervisors and how to follow a procedure for completing their project.

The project was given early of this semester and students have one semester to completing their project 1. The project was given at first week of December and should submit their report before 18th of February 2005.