



**FACULTY OF ELECTRICAL ENGINEERING  
UNIVERSITI TEKNOLOGI MARA**

---

**AUTOMATIC FOOD COVER**

AHMAD SAFWAN BIN RAMLI	2009228766
MOHD FILDZA BIN CHE IBRAHIM	2009257988
MUHAMAD ABDUL HAKIM BIN CHE DERAMAN	2009486064

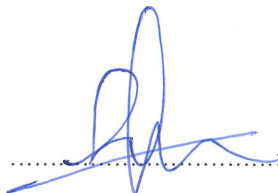
**SUPERVISOR: MISS SUZIYANI BINTI ROHAFAUZI**

A project report submitted in partial fulfilment of the requirement for the award of the degree of the Diploma of Electrical Engineering (Electronic/ Telecommunication/ Instrument/ Computer)


Faculty of Electrical Engineering  
University Technology MARA

NOVEMBER 2012

“I declare that report entitled “Automatic Food Cover” is the result of my own group research except as cited in the reference. The report has not been accepting for any degree and is not concurrently submitted in candidature of any other degree”.

Signature :   
Name : AHMAD SAFWAN BIN RAMLI  
Date : MARCH 2012

Signature :   
Name : MOHD FILDZA BIN CHE IBRAHIM  
Date : MARCH 2012

Signature :   
Name : MUHAMAD ABDUL HAKIM BIN CHE DERAMAN  
Date : MARCH 2012

## **ACKNOWLEDGEMENT**

Alhamdulillah, thanks to Allah S.W.T. with His blessing we are able to finish our Final Year Project at last. We had gone many obstacles and frustration as well as joy along us doing this project. With Allah S.W.T. always by our side, we are able to complete this project successful.

Special thanks to our supervisor, Miss Suziyani Binti Rohafauzi that guide us a lot in order to make this project come true. She always gives her commitment and full of support to us to accomplish this project. We had own him so much. Although we always seek her if we have any problem regarding this project, she always gives her hand without any problem.

Other than that, we would like to delicate our thanks to our beloved parents and all of our family that also contribute to the success of this project. They had given us moral support as well as their money to help us to accomplish this project. We also would like to say a very thank to our group member that had give full of commitments and dedication to this project.

## **ABSTRACT**

Our main purpose of this project is to construct and make a food cover that can produce heat that can make food inside it always warm. In order to make the food inside food cover always warm we have to produce a uniform temperature inside the food cover. To produce a uniform temperature we combine three different circuit that is heater circuit, heat sensor circuit and comparator circuit. We use the heater circuit as the element of heating for our project. Then, we use heat detector circuit to detect to temperature of the environment in the food cover. The comparator circuit act as the automatic for our project. When the heat detector sense the heat that we set is enough, so the comparator will switch off the heater circuit. Then other situation when the heat sense by heat detector is not enough the comparator will switch on the heater circuit.

## TABLE OF CONTENTS

CHAPTER	CONTENTS	PAGE
	ACKNOWLEDGEMENTS	viii
	ABSTRACT	ix
<b>1</b>	<b>INTRODUCTION</b>	
1.1	INTRODUCTION	1
1.2	PROBLEM STATEMENT	2
1.3	OBJECTIVES	2
1.4	SCOPE OF THE PROJECT	3
<b>2</b>	<b>LITERATURE REVIEW</b>	
2.0	INTRODUCTION	4
2.1	RESEARCH	4
2.1.1	THE IMPORTANCE OF FOOD	4
2.1.2	HOW FOOD CAN AFFECT OUR BODY	5
2.1.3	HOW TEMPERATURE AFFECTS THE FOOD	6
2.1.4	FOOD TEMPERATURE ZONE	7