

MOTORCYCLE ALARM SYSTEM USING RFID TECHNOLOGIES

MUHAMMAD FIKRI BIN ZAHARUDIN MUHAMMAD ZULKIFLI BIN BIDI YUSHAIDA BINTI AMINUDIN

FACULTY OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA TERENGGANU

SEPTEMBER 2015

ACKNOWLEDGMENT

In the name of Allah Most Gracious and Most Merciful, special thanks to my supervisor, Sir Wan Khusairi Bin Wan Chek for her kindness, support and concern to us to make this proposal become successful. These ideas have an intense outburst of feeling since we are at semester 4. At the beginning of the project we have many problems to achieve our desire and make our mood frustrated. Even, thought we grateful to blessing of Allah because gave us to us strength and patience to do it. We get supported from our supervisor for this project, to be realized very well. Actually, our ideas were critiqued from our friends because they think that the project will be not realized very well. Even thought, our intention and desire is to fall down the domination ideas of western engineers. As we know that, most ideas and extreme engineering in the world were come from western engineer. Therefore this factor makes us jealous of them base on their fabulous idea. Our mission is to show the world that Islam also has the extreme and futuristic engineer. We would like to give special thanks to our familybecause of their concern and support in the process to make the proposal especially our project become successful. Without them we have more problems to make it. Special thanks to our friends for their love and support to our project. They give us idea and motivation to improve our weakness in solving our problem and produce something extraordinary. So thank again to the entire person that involve with us in making of this proposal especially our project become successful.

ABSTRACT

The theme for this final years project is safety and healthy. Beside that, choose to make a motorcycle security system using RFID technology. This project are design to prevent motorcycle from been stolen by thief. Moreover, with this project we would like to decrease of motorcycle crime thief rates in this country. This project is combination of RFID circuit with alarm circuit that are design in Proteus software. This project aims for the bike user in order to avoid their bikes stolen, and as precautionary measure in case. With the RFID and alarm in motorcycle system, it will be difficult for thief from stealing motorcycle. For the expecting this project can achieve the project objective and become one of the important things to bikers

TABLE OF CONTENT

CHAPTER	TITLE	PAGE
	Declaration	i -iii
	Dedication	iv
	Acknowledgement	V
	Abstract	vi
	Abstrak	vii
	Table of content	viii - x
	List of symbols	xi
1.0	INTRODUCTION	1
	1.1 Introduction	1
	1.2 Problem Statement	1
	1.3 Aims and Objective	2
	1.4 Scope of project	2
2.0	LITERATURE REVIEW	3
	2.1 Introduction	3
	2.2 Component Review	4
	2.2.1 NE555	4
	2.2.2 Capacitor	5

2.2.3 Resistor	5
2.2.4 Transistor	5
2.2.5 Battery	6
METHODOLOGY	7
3.1 Introduction	7
3.2 Software Simulation	7
3.2.1 Reference circuit	7
3.2.1.1 NE555	7
3.2.2 Flowchart	8 - 9
3.2.3. Circuit Of Proje	10
3.2.3.1 Alarm Circuit	10
3.2.3.2 RFIID Immobilizer	11
3.2.3.3 Relay	11
3.2.3.4 CDI	12
3.2.3.5 Coil	13
3.3 Hardware Implementation	14
3.3.1 PCB Layout	14
3.3.1.1 Alarm System	14
3.3.2 PCB Hardware	15 – 18

3.0