

**PERSONAL REMINDER SYSTEM**

**NOORHASRINA BINTI MOHD ISA  
NURUL AINI BT ABD. HAMID**

**DEPARTMENT OF ELECTRICAL ENGINEERING  
UNIVERSITI TEKNOLOGI MARA  
CAWANGAN PULAU PINANG**

## **ACKNOWLEDGEMENT**

With the name of ALLAH S.W.T the most gracious and most merciful, and to our prophet MUHAMMAD S.A.W and family. Thanks to ALLAH S.W.T for giving us opportunity to complete this project successfully although faces many problems and difficulty.

Here we would like to express our thankful to supervisor, Mr. Ali b. Othman who were willing to spend his time in helping and guiding us to complete this project. You always have been the spirit and inspiration for us doing accomplishing as well as in full filing the course requirement. Thanks for his patience, help, encouragement and showing us the way out.

Lastly, thanks to our lovely parent for giving us moral support and financial to do our project. Without them we cannot complete this project. Finally, this expression also goes to our entire friend for willing to help us on doing our research. To those who helped us to find material for this project, your participation and co- operation are highly appreciated. Not forgotten to whom that we do not include name, thank you very much for all your collaboration.

Thank you very much.

## **ABSTRACT**

A busy mind tends to forget events that are not of immediate concern. If we are fully involved in an activity, there is a possibility of forgetting other important engagements. To overcome this problem, we have come out with a device called 'Personal Reminder System'. This device will help inform the person time to time, as it is pre-programmed. It may also be used simply as a sleep timer alarm. When the time for an event comes it will produce a beep sound together with blinking LEDs. It continues for a few minutes before going off automatically.

This device is designed for 6V battery operation, to make the system portable. An external mains power supplies circuit also suitable for this device.

<b>TABLE OF CONTENTS</b>	<b>PAGE</b>
Acknowledgement	ii
Abstract	iii
<b>CHAPTER</b>	
<b>1 INTRODUCTION</b>	
1.1 Background	1
1.2 Scope of work	2
1.3 Objective of the project	3
<b>2 CIRCUIT DESIGN AND OPERATION</b>	4
2.1 Circuit design	4
2.1.1 Schematic diagram	4
2.1.2 Components list and data	5
2.2 Circuit operation	8
2.2.1 Stage 1	8
2.2.2 Stage 2	9
2.2.3 Stage 3	10
2.2.4 Stage 4	12
2.3 Circuit simulation	14
2.3.1 Circuit maker software	14

<b>3</b>	<b>HARDWARE CONSTRUCTION</b>	15
3.1	Hardware construction procedures	15
3.1.1	PCB Making	15
3.1.1.1	Printed Circuit Board (PCB)	16
3.1.1.2	Schematic	16
3.1.1.3	Layout	16
3.1.1.4	Lettering	17
3.1.2	Etching	17
3.1.3	Drilling	17
3.1.4	Inserting component	17
3.1.5	Soldering	17-18
3.2	Circuit testing and troubleshooting	19
<b>4</b>	<b>RESULT</b>	20
4.1	Simulation result	20
4.2	Circuit testing result	20
<b>5</b>	<b>DISCUSSIONS AND RECOMMENDATION</b>	21-22
<b>6</b>	<b>CONCLUSION</b>	23