MARA UNIVERSITY OF TECHNOLOGY
PENANG

DEPARTMENT OF ELECTRICAL ENGINEERING

FINAL REPORT DIPLOMA PROJECT

TITTLE:

TO ADD HOURLY CHIME TO THE DIGITAL CLOCK

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ABSTRACT

This project is about an hourly chime that will add to your own digital clock. It is made to your clock looked more functional.

This project clock is using some common IC s and other active and passive components. In addition, from these components that have been used, we can learn more about the function of the components itself.

The price to make this project is a low cost hourly chime that is has 16 different tone that can enhance the charm of your digital clock. This unit can be attached equally well to clocks made using different clock IC s or any discrete IC chips.

And after we had finished this project, we have learned how to make our own chime that will add to the digital clock.

Finally, from this project, it can help us to improve our knowledge in the electronic components that always been used in the engineering world.

ACKNOWLEDGEMENTS

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Thank you, so much.

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1.0 INTRODUCTION

This project is started by introducing some underlying concepts that are important in the technologies.

The heart of this project is the interface and decoder. This part is one of the parts in the circuit. This circuit can been divided by three main parts.

The first part which is has 7404, 7408 and 7805 is called 7-segment to one decoder. It used to decode the output from the 7-segment of the clock.

The second part which have 74121 is called monoshot and driver circuit. It triggers the input and monoshots the output.

Lastly, the third part is musical tone generator circuit, which have 555 and 7493. This part is to generate the tone of the circuit. But, if any change to the tone, select the suitable component in this part and change it.

This project is also introduced some of the terminology that is necessary when embarking on a new field of study. More concepts will be expended on, as you are needed later in this project.