FACULTY OF ELECTRICAL ENGINEERING
UNIVERSITI TEKNOLOGI MARA
PULAU PINANG

FULL REPORT:

ELECTRONIC DICE

MUHAMMAD SAIFUDDIEN BIN MOHD PAHLAWI
2014693534
MUHAMMAD RAID AIMAN BIN MOHD ROFFI
2014832354

SUPERVISOR:
PN ASMALIA BINTI ZAINAL

ACKNOLEDGEMENT

In the name of Allah, the most compassionate and the most merciful. I thank Allah for giving me the chance to undergo the Final Year Project this year. I finally completed my Final Year Project successfully with a huge self improvement and gained great knowledge during this project. Next, I would like to thank to the most precious persons in my life, my parents for all their support.

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ABSTRACT

The main objective of this project is to build an electronic dice. This project have been perform via 2 steps, software and hardware. The circuit have built in Proteus and the coding in MPLabX and simulate it. After that, the coding were burn into PIC and proceed to hardware part. Then, important components such as PIC via SK40C were test on breadboard. After done with components testing, the construction of project were stared.

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CHAPTER 1

INTRODUCTION

1.1 Background

A dice is a small throw able object with multiple resting positions, used for generating random number. This makes dice suitable as gambling devices for games like craps, or for use in non-gambling tabletop games.

A traditional die is an often rounded cube, with each of its six faces showing a different number. The design as a whole is aimed at the die providing a randomly determined integer from one to six, each of those values being equally likely. A variety of similar devices are also described as dice; such specialized dice may have polyhedral or irregular shapes and may have faces marked with symbols instead of numbers. They may be used to produce results other than one through six. Loaded and crooked dice are designed to favor some results over others for purposes of cheating or amusement.

The electronic dice throws up at a random number from one to six each time the push button is pressed. It has no bias and can never roll on the floor and get lost. The project could be developed fairly easily into a double dice. It provides an interesting introduction to a range of digital circuit- oscillator, counter and logic gates.

This is a random LED for dice. When press the button, the LED will start flashing in a similar manner to a rolling dice. This gradually slow down and the last, a number is displayed exactly like the spot on a dice and LED dice goes into sleep mode, until reset button is pushed. This simply show 1-6 using 7 LED's put in the same shape as the dots on a dice face.