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FINAL REPORT OF DIPLOMA PROJECT

FACULTY OF ELECTRICAL ENGINEERING

"CMOS DIE WITH LEDs DISPLAY"

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1.0   ABSRACT

These days there are much kind of games are played on TV studios. Over 90% of required electronic equipment.

The title of our project is a " CMOS Die has LED display ". Here's a particularly elegant electronic dice design which uses CMOS circuit for long batteries life. It also features automatic turnoff each " throw " is displayed. The read out is via a seven – LED display very similar to that of a normal die.

Even with the inroads has made, games of skill and luck, where the element of chance provided by a die or pair of dice are still among the most popular recreations. However, many arguments have been caused by the perchant for normal dice to give apparently biased or ambiguos answer, particularly when the fever of the game is high.

2.0   ACKNOWLEDGEMENT

Our sincerest appreciation must be extended to our supervisor, Encik Abdul Rahim. Also our ex-supervisor, Encik Ali Othman. Both handle our problems professionally and proving, guiding and taking the most interest in our project. Without him we cannot accomplish our project. We are looking forward to work her in future.

I am gracefully that we have finish our project 2. This project is for the diploma level that for the final year and derided into two section, the beginning semester (project 1-keu 280) and at this last semester (project 2- keu 380). And this report is done for the all part. We done with details on its theory and practical will continious from project 1.

Thank are also due to Man X, KyOO and Ali who lend their PC to us for finishing this report. We also very grateful to our collegues Ask-What , Mark Owen , Carlil and my neighborhood for providing us ideas and critics for us improve our project

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4.0   INTRODUCTION

Even with the inroads has made, games of skill and luck, where the element of
chance provided by a die or pair of dice are still among the most popular recreations.
However, many arguments have been caused by the penchant for normal dice to give
apparently biased or ambiguous answer, particularly when the fever of the game is high.

In an effort to provide an attractive way of overcoming these problem, we have
developed a new solid state die. Fitted with a red Perspex lid, upon which is mounted a
single momentary contact swicth.batteries are utilized as the power source, making the
device both fully portable and safe to use.

Each pressed of the switch provides the equivalent of a single " throw " of a
normal die. When the switch is first pressed, and array of seven LEDs is illuminated, and
flashes at random. After approximately two seconds, the display stabilizes, showing a
number from one to six as a pattern of lit LEDs, as would normally appear on the upper
face of a die.

As long as the button is held depressed, the display will remain lit, and it will only
disappear five seconds after the button is released. This mean that if the switch is only
operated momentarily, the display will flash for two seconds, stabilizes for three seconds,
and then disappear again.

No separate ON /OFF switch is provided, as the quiescent current drain of the unit is less then
50µA. The battery life is thus essentially the normal shelf life. When the display is activated, current
consumption rises to about 20mA, but as this normally only occurs in five second bursts, battery life is not
unduly prejudiced.