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FINAL REPORT OF DIPLOMA PROJECT

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TRAFFIC LIGHT MODEL

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ABSTRACT.

This project is to expose about the simple or basic traffic light operation. The lamps move or change the position from red-green-yellow could be learnt. The circuit completed by two ICs as main controller. Furthermore, the ICs are 16 pins BCD decoder 4017IC and the timer (555 timer). The timer provides the BCD codes to the 4017IC. Then 4017IC will operate by sending the current to the base of transistors. Therefore, the transistors act as switch will switch on or switch off depends on the current delivered by 4017IC. As the result, the lamp will rotate their function by the sequence condition for the specified time delay.

ACKNOLEDGEMENT.

With the name of Allah SWT the most gracious and most merciful, to our prophet Muhammad SAW. Thanks to Allah SWT for giving us an opportunity to complete this project successfully.

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1.INTRODUCTION.

Everyone sees traffic lights everyday, either pedestrians or they who driving cars, lorries, buses and etc. Traffic lights can be everywhere especially at a T-junction, train crossing, t-junction and big cities. It has many functions namely :

- i) it avoids traffic jams and accidents.
- ii) it trains road users so that becoming more discipline and be patient.
- iii) to help traffic cops to control the traffics.
- iv) it consists of three lights; red (to stop), yellow (ready to stop) and green (to move)
- v) it trains road users so that always more be careful and tolerate to other road users.