

EE Practical Applications I - Project 05 Traffic light using 3 cascaded 555 monostables

#	Student ID	Student Name	Grade (10)
1			

Delivery Date	
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<p>١. يتم تسليم المشروع في خلال أسبوعين من تاريخ عرضة، و يتم حذف درجتان و نصف من المشروع عن كل أسبوع تأخير ٢. يتم تسليم المشروع لمعيد المقرر مباشرة</p>

Objective

To build a functional prototype of simple traffic light using 555 ICs

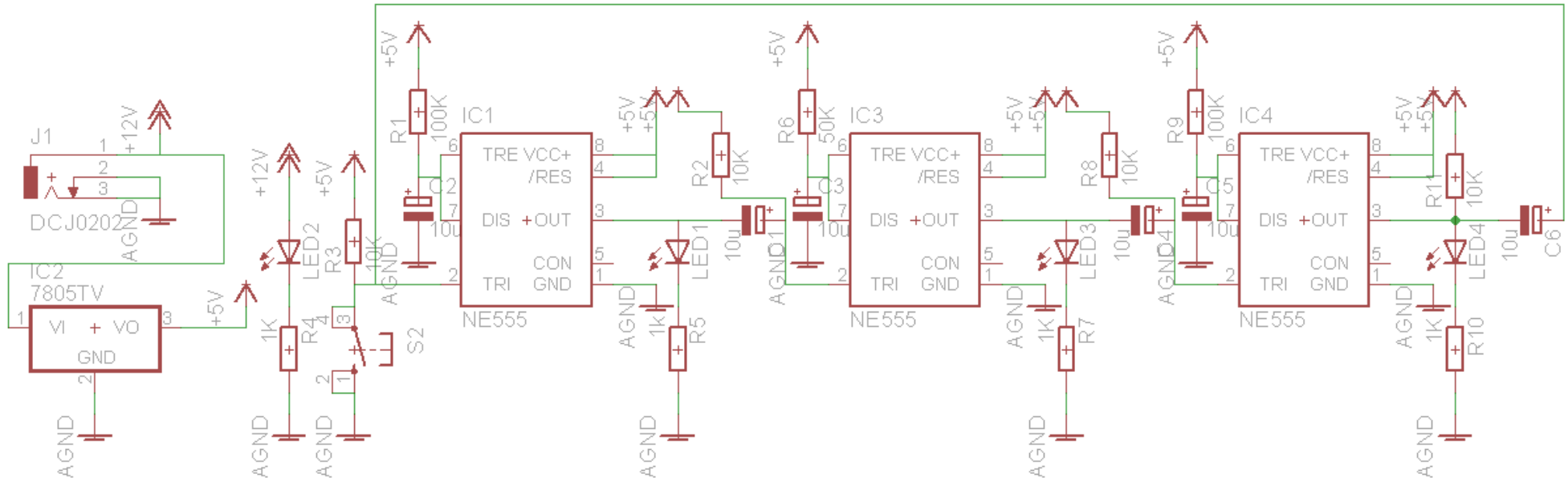
Theory

This Traffic Light Circuit can be used to control traffic on roads or in public places. In a Traffic light there are three different color bulb which are Green, Yellow/Amber and Red.

This project uses IC555 as Astable Multivibrator for rapid square wave pulse generation.

The cascaded monostables blocks are used, each is triggering the next block.

Schematic



Components list

#	item	link	Quantity
1	DC Power 2.1mm Connector on PCB	http://ram-e-shop.com/oscmax/catalog/product_info.php?products_id=1203	1
2	L7805CV "Positive Voltage Regulator 5V"	http://ram-e-shop.com/oscmax/catalog/product_info.php?products_id=635	1
3	1 K resistor	http://ram-e-shop.com/oscmax/catalog/product_info.php?cPath=31_46_69&products_id=342	10
4	100K ohm resistor	http://ram-e-shop.com/oscmax/catalog/product_info.php?cPath=31_46_69&products_id=383	10
5	10 K resistor	http://ram-e-shop.com/oscmax/catalog/product_info.php?products_id=362	10
6	led	http://ram-e-shop.com/oscmax/catalog/product_info.php?cPath=60&products_id=228	1
7	IC 555	http://ram-e-shop.com/oscmax/catalog/product_info.php?products_id=609	3
8			
9	press	http://ram-e-shop.com/oscmax/catalog/product_info.php?products_id=2714	5
10	Capacitor 10uF 50v	http://ram-e-shop.com/oscmax/catalog/product_info.php?products_id=488	10



11	Led 5mm green	http://ram-e-shop.com/oscmax/catalog/product_info.php?cPath=60&products_id=228	10
12	Led 5 mm yellow	http://ram-e-shop.com/oscmax/catalog/product_info.php?cPath=60&products_id=229	10
13	Led 5mm Red	http://ram-e-shop.com/oscmax/catalog/product_info.php?cPath=60&products_id=227	10

