

## Controlling Many Servo(s) Using IC TLC5940

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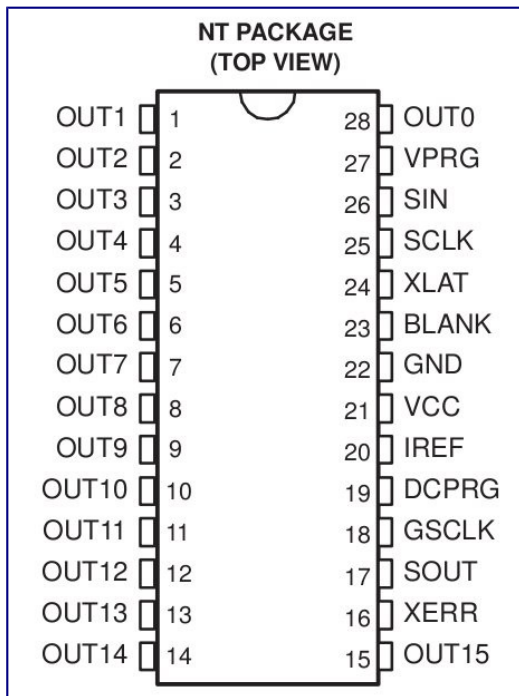
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Tlc5940 is a 16 channel led driver. Since this IC has pwm control ability we can use this IC for controlling up to 16 servo(s).

Below is tlc5940 datasheet:

<http://www.ti.com/lit/ds/symlink/tlc5940.pdf>

TLC5940 pins:

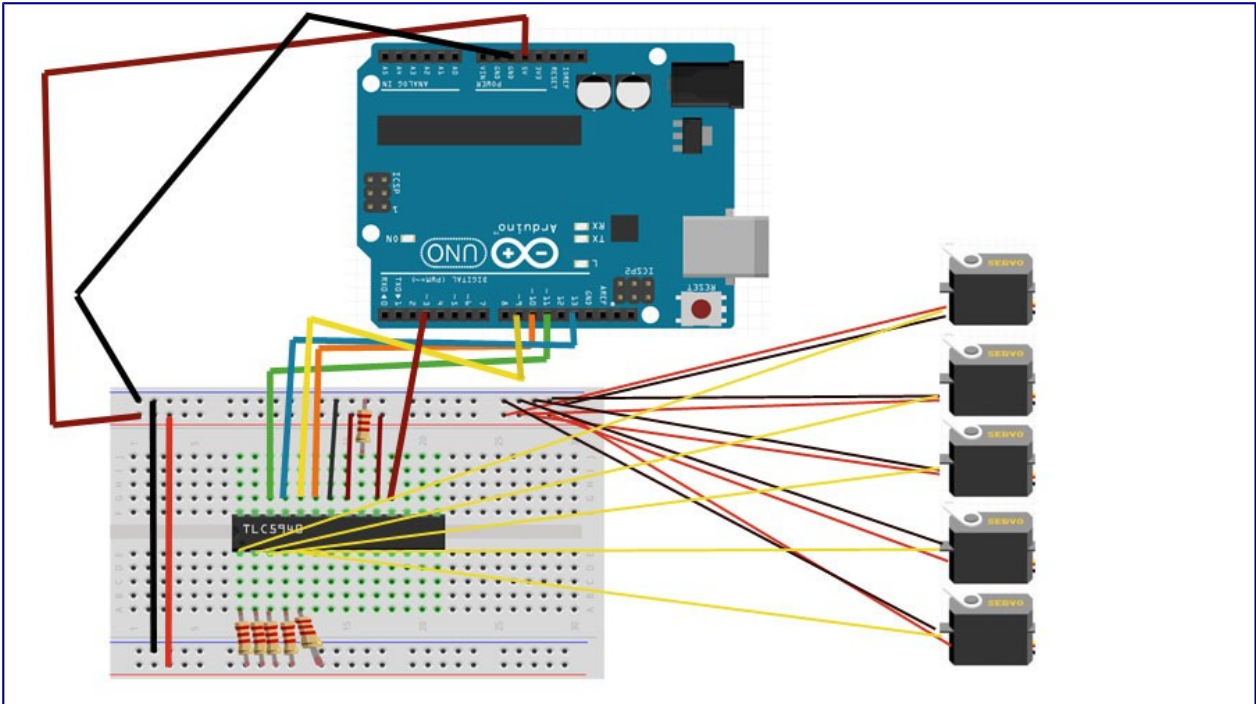


out0 - out15 pin will be used for pwm controller on each servo. In this tutorial, we will control 5 motor servos using tlc5940 and arduino uno.

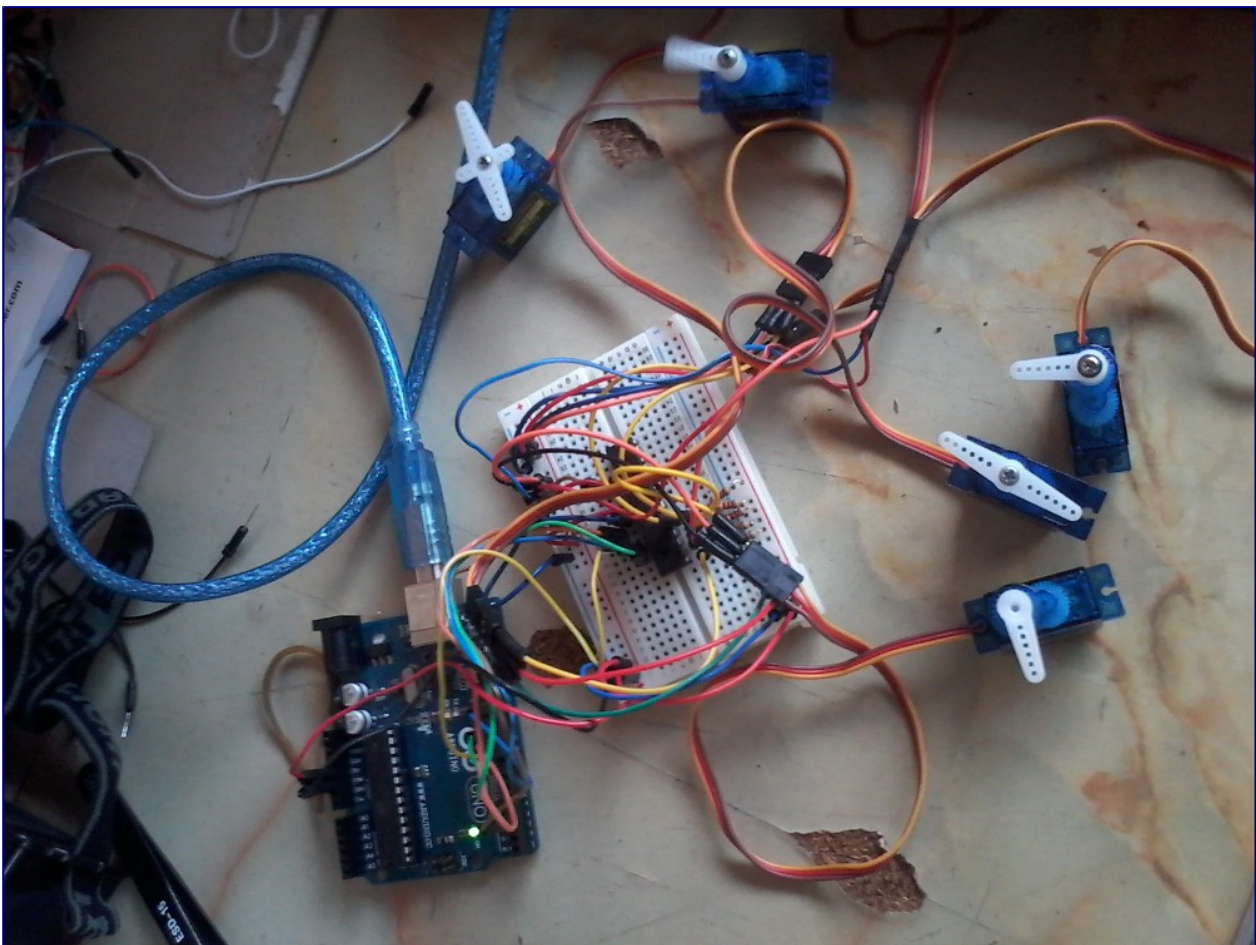
### Requirements:

- 1 arduino uno
- 1 tlc5940
- 1 half + breadboard
- 5 resistor 2,2 k
- male to male jumper wires
- arduino uno
- 5 tower pro micro servos

Schematic:



Actually It's better to use external power source to power multiple servo.



Here's the code for arduino:

```
#include "Tlc5940.h"
#include "tlc_servos.h"
void setup()
{
    tlc_initServos();
}
void loop()
{
    int i;

    for (i = 1; i <= 5; i++) {
        tlc_setServo(i, 0);
        Tlc.update();
        delay(300);
        tlc_setServo(i, 180);
        Tlc.update();
        delay(300);
    }
}
```

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