

# Experiment 5

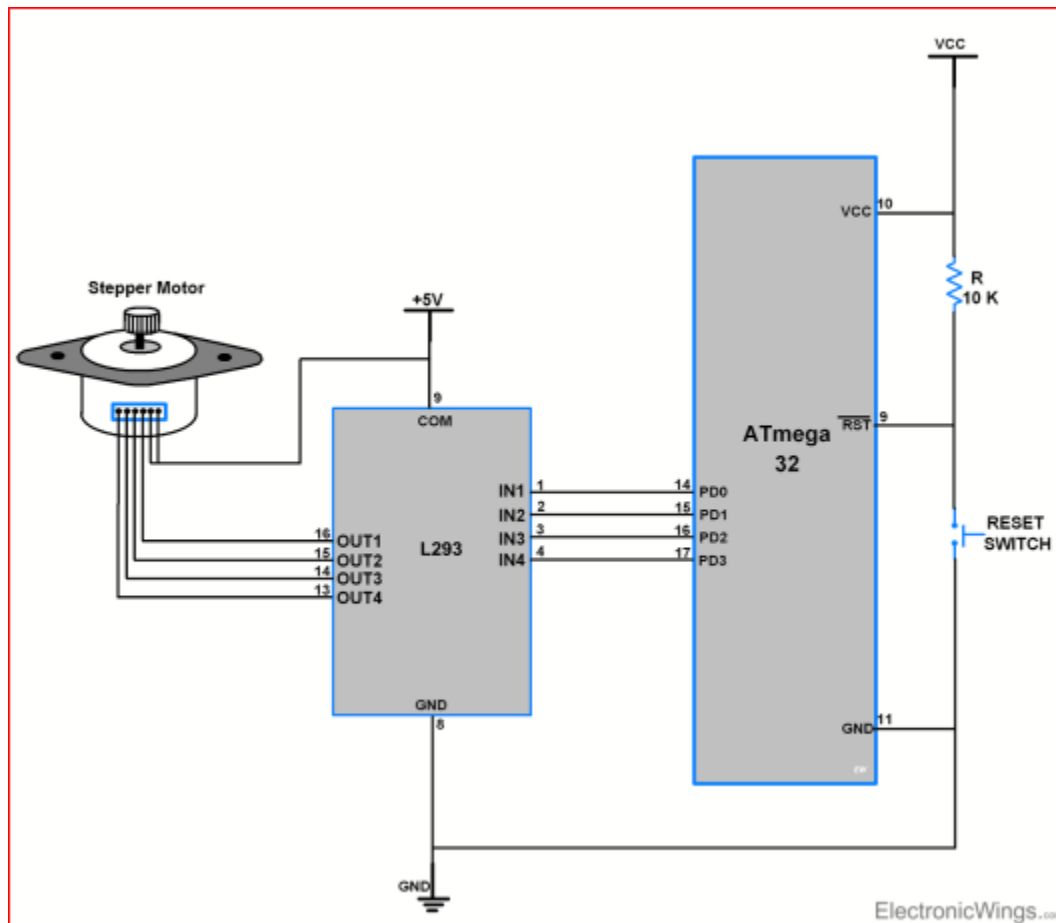
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## Question 1 - part one

### Control Stepper motor with push button connect to PORTC2

For control stepper motor we need L293 driver, like below circuit:



**Note:** Proteus can't handle 0.5ms stepper motor so changed it to 0.5s.

For handle 0.5s with we need to configure timer 0 like this:

- Timer = Timer0
  - Prescaler = 256
  - Overflows = 61
  - Reminder = 9
  - This timer should count every 0.5s

**Note2:** Result video of project attached in directory.

### References:

- [Avr Atmega Stepper Motor Interfacing With Atmega32 | Avr Atmega](#)
- <https://www.electroschematics.com/l293d-datasheet/>

## Question 1 - part two

### **Control rotate direction of Stepper motor with push button**

Default directions are counter clockwise and when the user clicks it changes to clockwise.

**Note2:** Result video of project attached in directory.

## Question 1 - part three

### **Control rotate direction of Stepper motor automatically**

The Rotated direction of stepper motor changes automatically when it has fully rotated.

**Note2:** Result video of project attached in directory.