



## Using HTC550 Monostable Multivibrator

HTC550 monostable multivibrator generates an output pulse at an input signal. Voltage level on D[0:2] (VDD or GND) determines output pulse duration. Voltage level on Slope pin(VDD or GND) determines trigger edge used in Trigger input. Please see HTC550 data sheet. There are many interesting projects using this IC. The four that we came up with are:

- **Light activated pulse generator**

This circuit generates desired length of pulse when light level changes. Laser beam, led or other types of light sources might be used. By changing voltage level on Slope pin pulse can be generated at light to dark transition or vice-versa. Potentiometer is used for adjusting sensitivity. Light sensitive resistor with 26K dark resistance is used.

- **Touch sensitive pulse generator**

This circuit generates pulse signal as it senses a touch on touch-pad. This circuit has interesting property: By changing slope we can control when pulse is generated. Note that if HTC550 is set to generate output pulse with less than 100mS duration then multiple output pulses might be generated. This is to say that this circuit is not de-bounced.

- **Switch activated pulse generator**

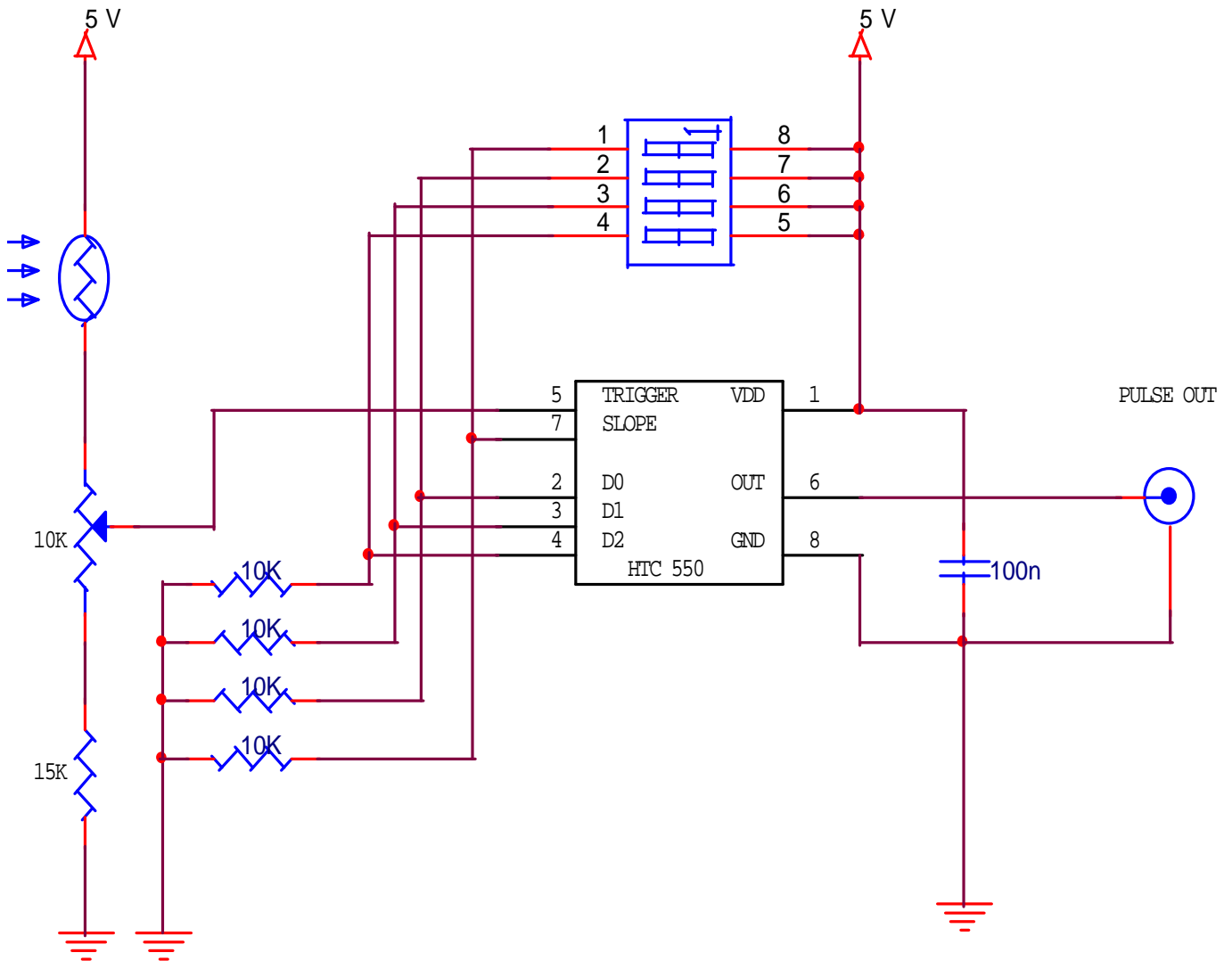
This circuit generates pulse signal from push button. This circuit has interesting property: By changing voltage level on Slope pin we can control when pulse is generated(on Key up or Key down event). Note that if HTC550 is set to generate output pulse with less than 100mS duration then multiple output pulses might be generated. This is to say that this circuit is not de-bounced.

- **Generating pulse train**

This circuit generates pulse train at each trigger. The output pulse of first HTC550 is used for triggering next HTC550 and so on. HTC555 is used as clock generator. Set HTC555 to generate frequency with higher period (1/F) than combined pulse duration's of four HTC550's. Number of output stages could be increased or decreased as required. This circuit might be useful for driving Linear Electrical Engine.

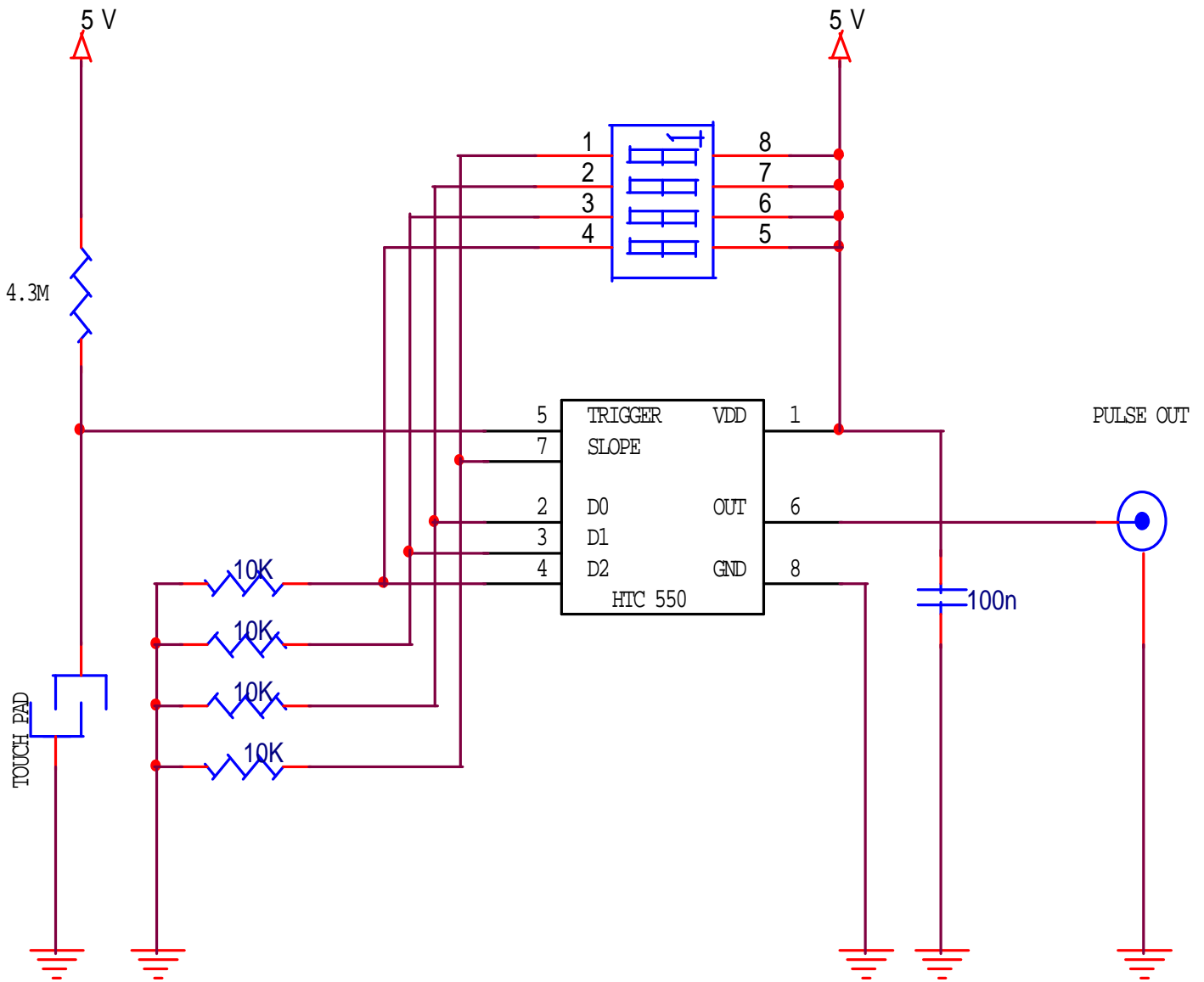


### Light Activated Pulse Generator



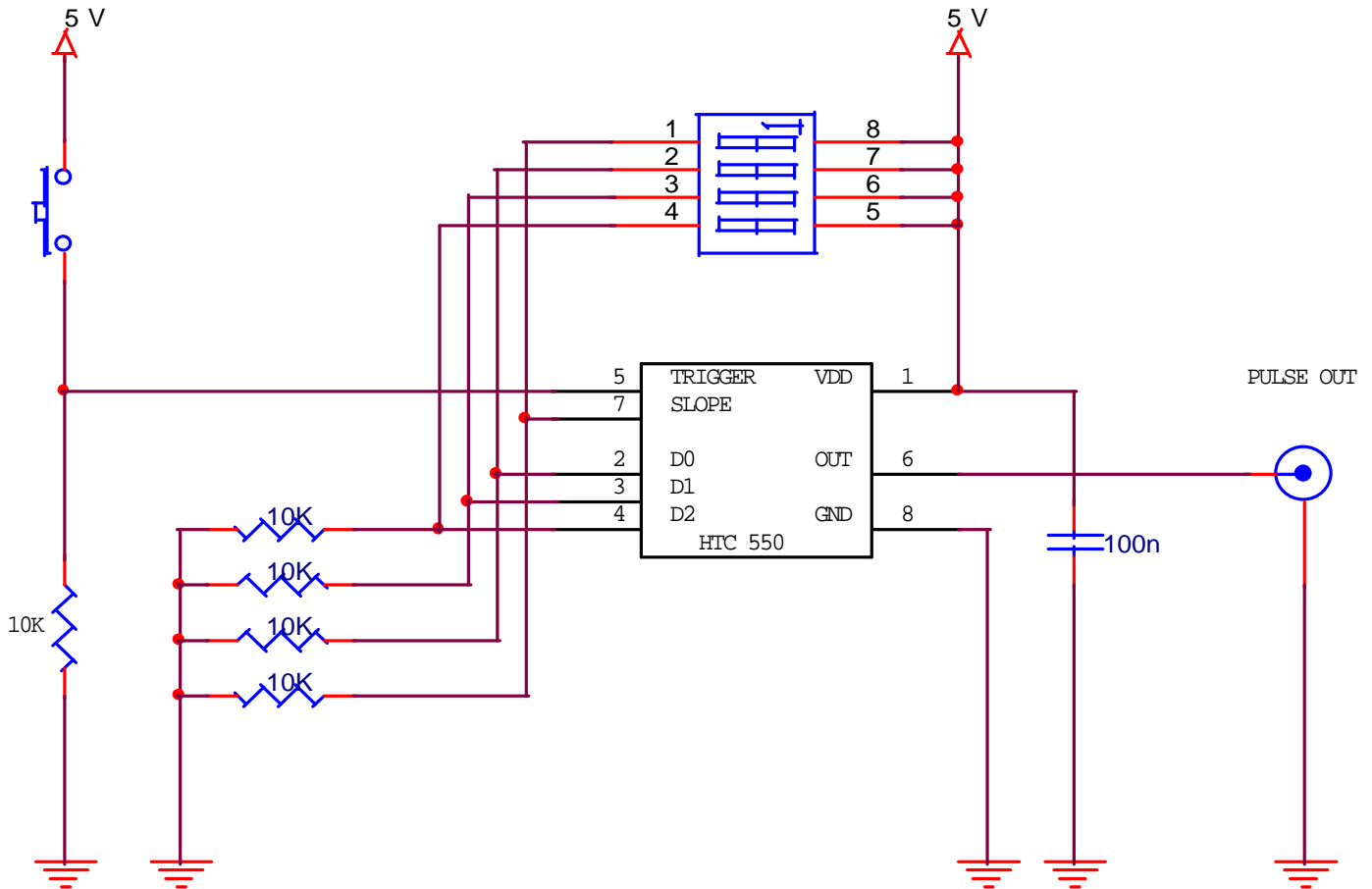


## Touch Sensitive Pulse Generator





## Switch Activated Pulse Generator

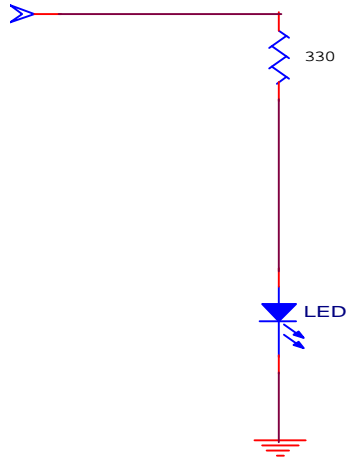


## Generating Pulse Train





## DRIVING LED FROM OUTPUTS



## DRIVING INDUCTIVE LOAD

