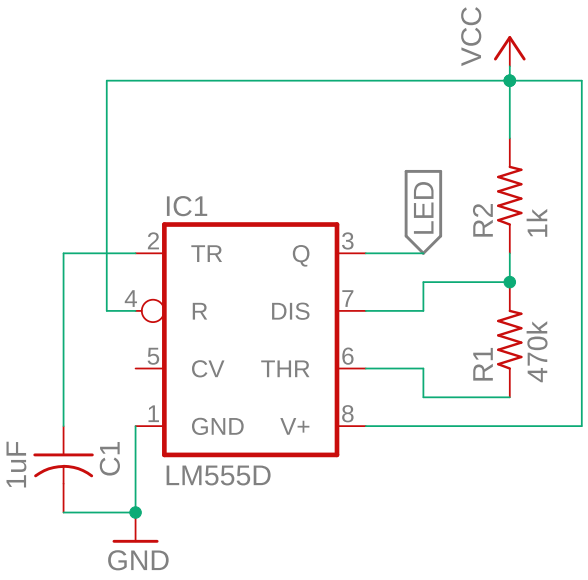
SMD Board Manufacturing Example: 555 Blinker

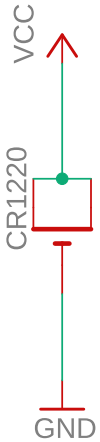


555 Integrated Circuit

The 555 timer integrated circuit is a classic.

Here it is being used in an Astable mode to blink an LED. This requires some of the pins to be connected to power or ground and pin 3 is used as the output for driving the LED to blink at a regular interval.

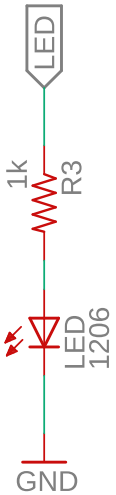
Modifying the value of the resistors and the capacitor (excluding the LED's resistor) this circuit can blink at a variety of different speeds and also change the percentage of time that the LED is turned ON during that cycle.



2 Options for Power

The 555 IC will work at voltages that typically range from 4.5V to 18V so the two pads are best for a 9V battery.

The clip is for a CR1220 coin cell that may not fully power the 555IC, if it is not the low-volt variant of the chip.



LED Output

The LED & resistor are the simple output for this little circuit.

LED's need to have their current draw limited, so the resistor is used to simply restcit the flow of current.