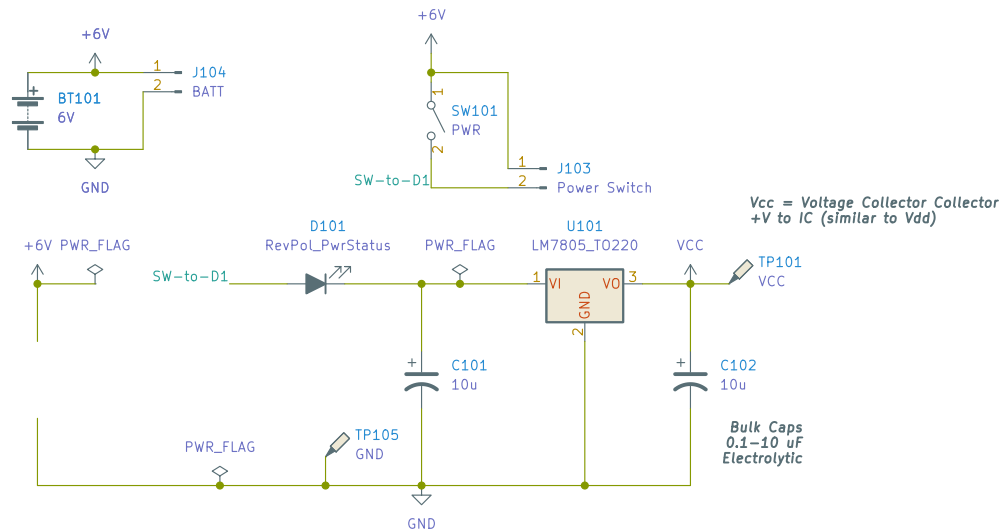


Submit a single PDF (use Plot...) of the following:
 * Both sheets of the schematic
 * Screenshot showing 100% ERC validity
 * Screenshot of the Schematic Setup:Net Classes _after_ you have assigned all net classes.



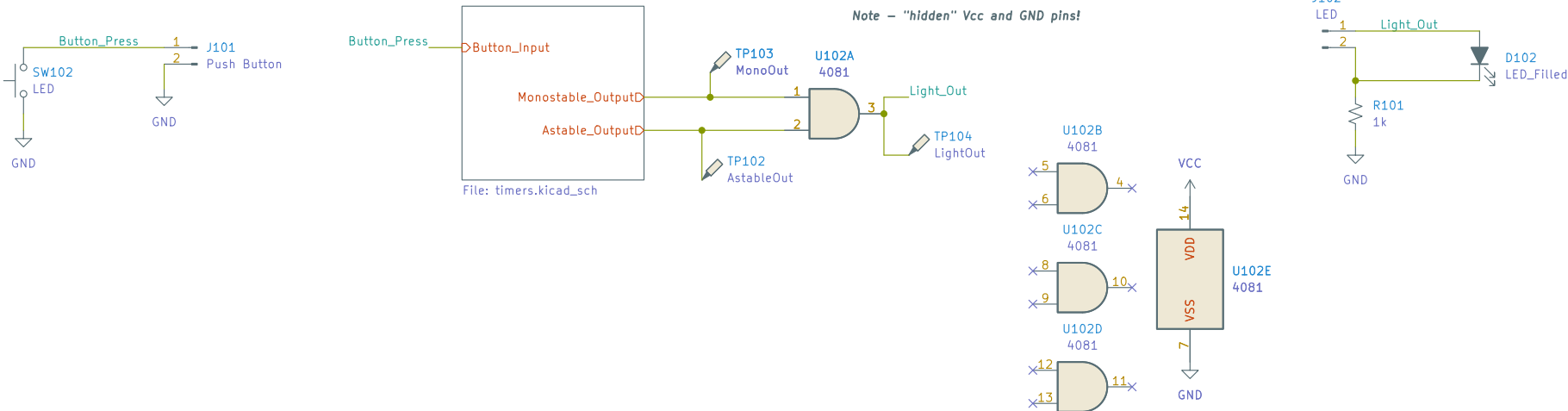
The "Power" net class traces are a slightly different color.

```
# CHANGELOG
## v2.0.0
* Change astable to fixed 50% DC
* Adjust RC values for both timers
* Add annotations & pinouts / desc
* Add NetTie (astable)

## v2.0.1
* Fix oneshot eqn

## v2.1.0
* Add BT connector
* Consolidate connectors/peripherals
* Change to male connectors
* Change AND gate to quad
* Assign footprints
* Assign all parts
```

Timers

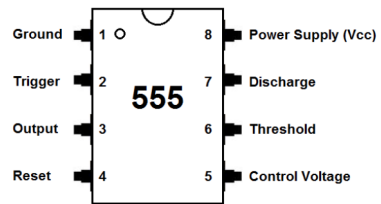


- H101 MountingHole
- H102 MountingHole
- H103 MountingHole
- H104 MountingHole

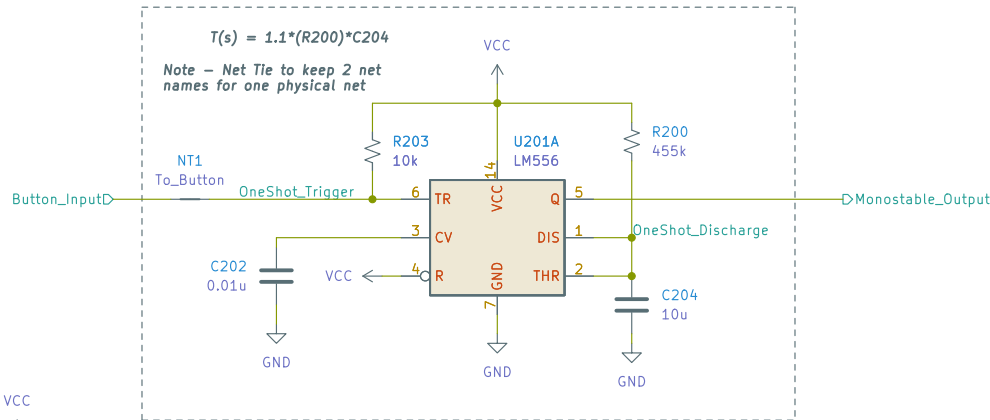
Note that all of the part annotations on this sheet are 1xx.

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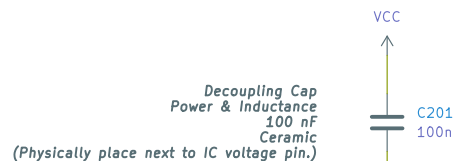
Mark Palmeri	
Sheet: /	
File: one-shot-blinking-light.kicad_sch	
Title: One-Shot Blinking Light	
Size: A4	Date: 2023-02-06
KiCad E.D.A. kicad 6.0.10-2.fc37	Rev: v2.1.0
	Id: 1/2



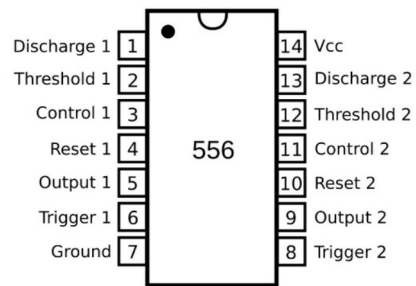
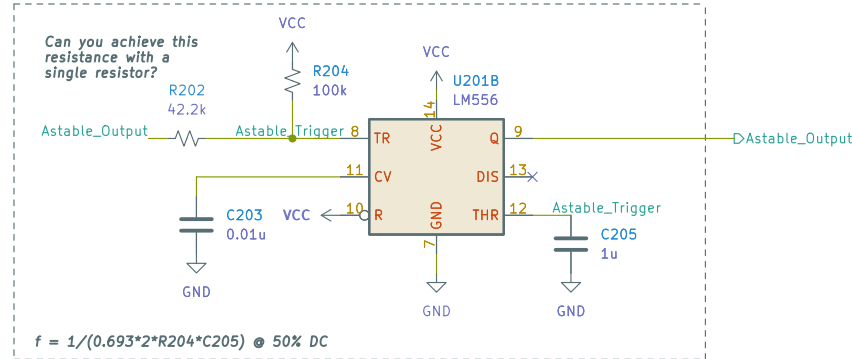
Monostable One-Shot



Pin Number	Pin Name	Pin Function
1	Ground	Pin 1 connects the 555 timer chip to ground.
2	Trigger	Pin 2 is the trigger pin. It works like a starter pistol to start the 555 timer running. The trigger is an active low trigger, which means that the timer starts when voltage on pin 2 drops to below 1/3 of the supply voltage. When the 555 is triggered via pin 2, the output on pin 3 goes high.
3	Output	Pin 3 is the output pin. 555 timer's output is digital in nature. It is either high or low. The output is either low, which is very close to 0V, or high, which is close to the supply voltage that's placed on pin 8. The output pin is where you would connect the load that you want the 555 timer to power. This may be an LED, in the case of a 555 timer LED flasher circuit.
4	Reset	Pin 4 is the reset pin. This pin can be used to restart the 555 timer's timing operation. This is an active low input, just like the trigger input. Thus, pin 4 must be connected to the supply voltage of the 555 timer to operate. If it is momentarily grounded, the 555 timer's operation is interrupted and won't start again until it's triggered again via pin 2.
5	Control Voltage	Pin 5 is the control pin. In most 555 timer circuits, this pin is simply connected to ground, usually through a small capacitor, about 0.01 μ F capacitor. This capacitor serves to level out any fluctuations in the power supply voltage that might affect the operation of the timer. Some circuits (though rare) do use a resistor between the control pin and Vcc to apply a small voltage to pin 5. This voltage alters the threshold voltage, which in turn changes the timing interval. Most circuits do not use this capability, though.
6	Threshold	Pin 6 is the threshold pin. The purpose of this pin is to monitor the voltage across the capacitor that's discharged by pin 7. When this voltage reaches 2/3 of the supply voltage (Vcc), the timing cycle ends, and the output on pin 3 goes low.
7	Discharge	Pin 7 is the discharge pin. This pin is used to discharge an external capacitor that works in conjunction with a resistor to control the timing interval. In most circuits, pin 7 is connected to the supply voltage through a resistor and to ground through a capacitor.
8	Power Supply (Vcc)	Pin 8 is connected to the positive power supply voltage. 555 timer ICs need DC voltage in order to operate. This is the pin which connects to the DC voltage to power the 555 chip. The voltage must be at least 4.5V and no greater than 15V. It's common to run 555 timer circuits using 4 AA or AAA batteries for 6V or a single 9V battery.



Astable Oscillator



Make sure your Page Settings data is exported to all sheets.

Duke | BME

Mark Palmeri

Sheet: /Timers/
File: timers.kicad_sch

Title: One-Shot Blinking Light

Size: A4 Date: 2023-02-06
KiCad E.D.A. kicad 6.0.10-2.fc37

Rev: v2.1.0
Id: 2/2

Note that all of the part annotations on this sheet are 2xx.