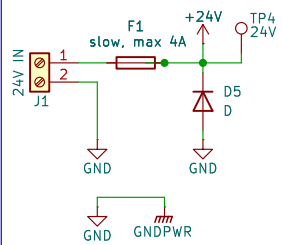
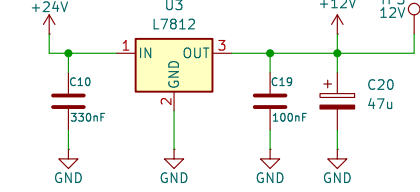


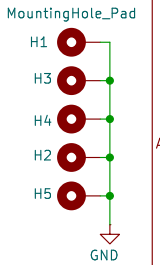
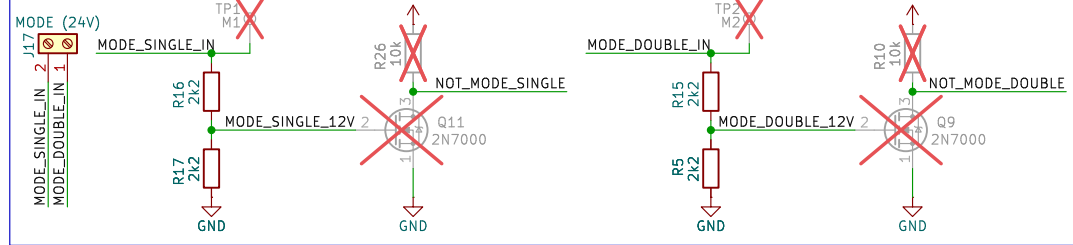
## Input, protection



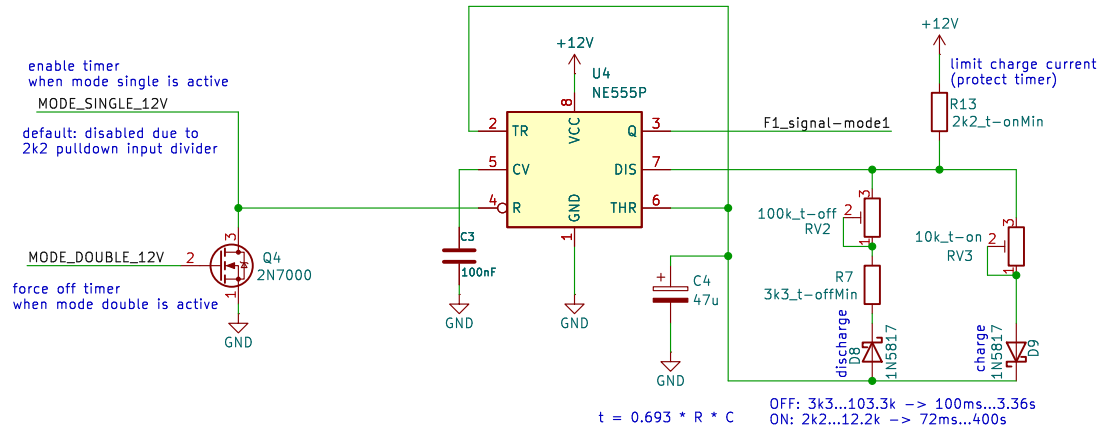
## 12V Supply (linear regulator)



## pre-process input signals

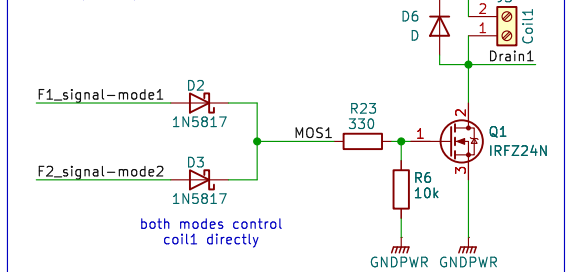


## MODE\_1 (SINGLE): independently adjustable on / off time

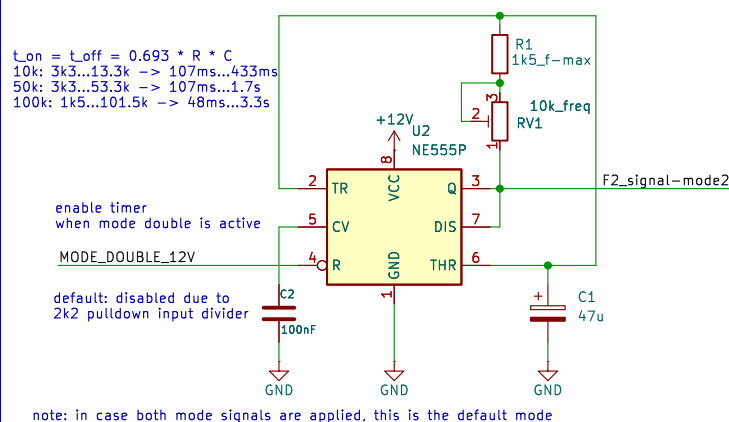


## Driver Coil1 (MOS1)

Mode1 (single): pulses only coil1 on/off  
Mode2 (double): alternates between coil1 and coil2



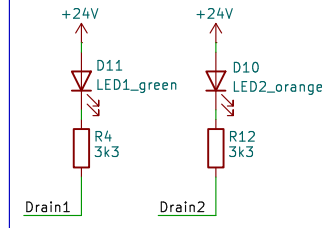
## MODE\_2 (DOUBLE): fixed 0.5 duty, adjustable freq



## Changelog since tag V1-milled:

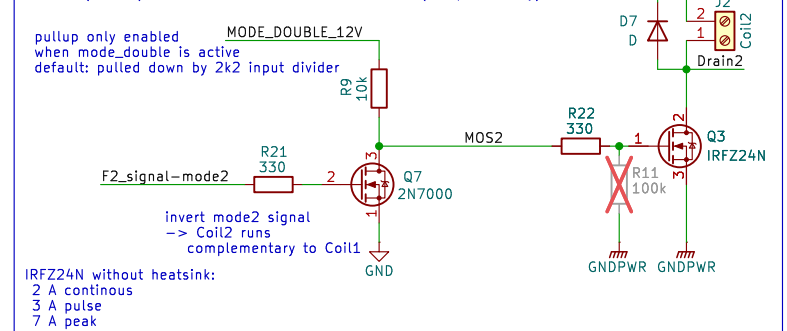
- Fix MOS2 not turning fully on (led pulled down gate)  
-> both LEDs directly powered by power mos now
- Fix swapped terminal text (M1 <-> M2)
- Add max current text
- Add 24V testpoint

## LEDs



## Driver Coil2 (MOS2)

Mode1 (single): coil2 permanently off  
Mode2 (double): alternates between coil1 and coil2 (complementary)



Control the 2 coils of a 5/3-way pneumatic valve  
2 Modes:  
- M1: Single (pulse one coil), - M2: Double (switch between coils)  
Adjustable on/off-time or frequency

Sheet: /  
File: ValveToggler.kicad\_sch

**Title: Pneumatic Valve Toggler**

Size: A4 Date: 2025-09-20  
KiCad E.D.A. 9.0.4

Rev: 1.0  
Id: 1/1