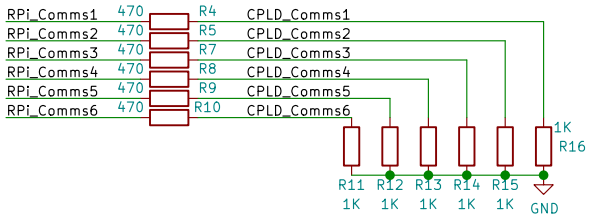
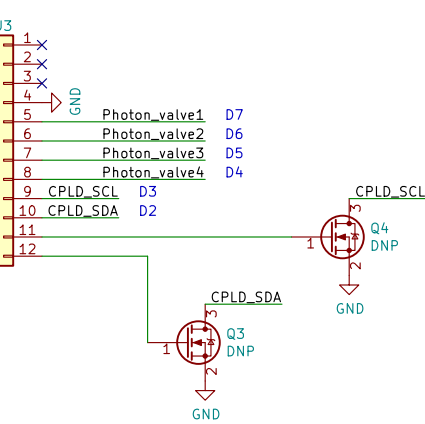
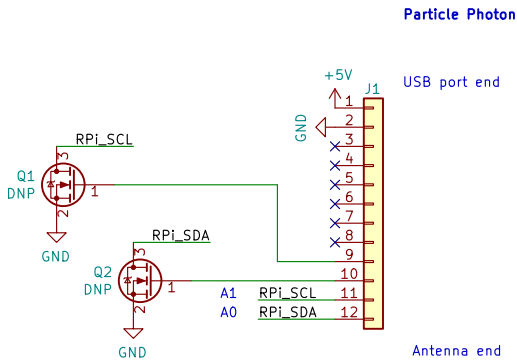
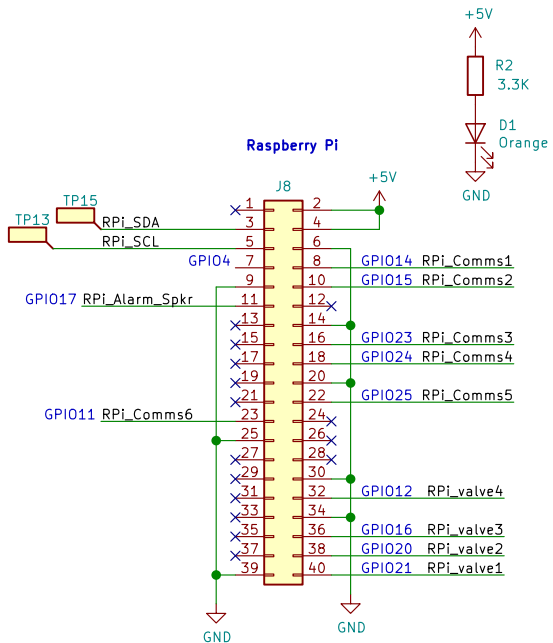


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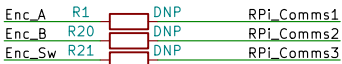
Protection/pull-downs for RPi-CPLD comms



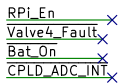
Power comes from Pi, feeds both Photon and CPLD



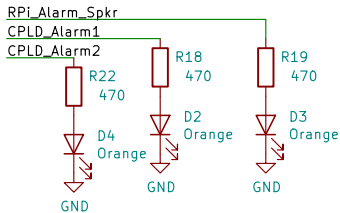
Populate jumpers to use encoder without CPLD



Unused signals

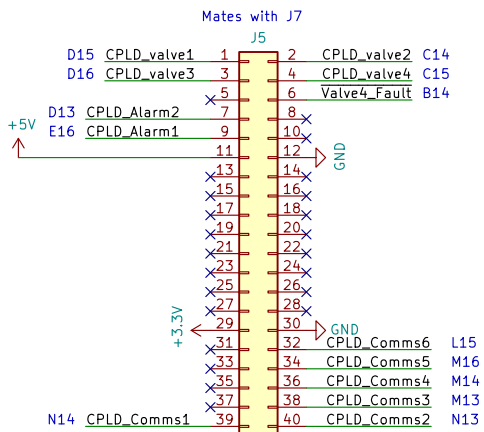
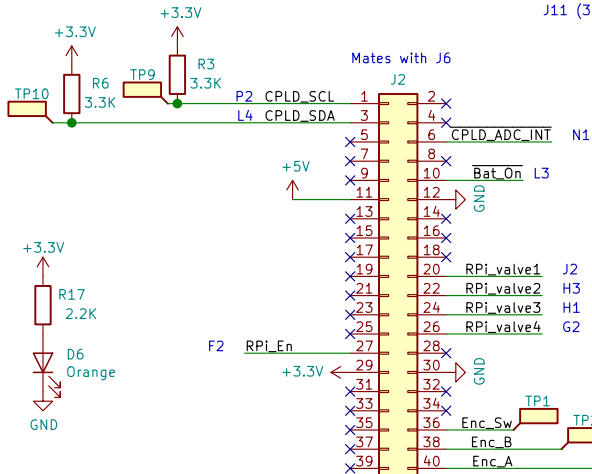


Alarm outputs light LEDs instead

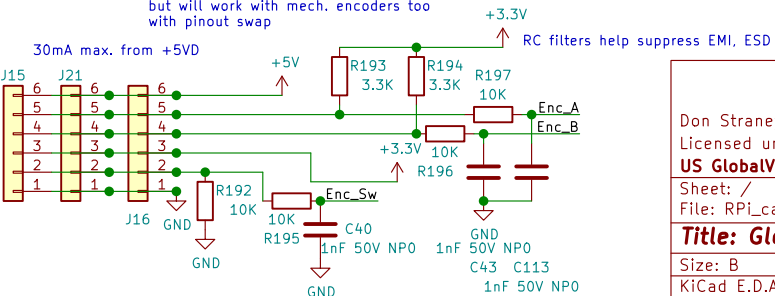


CPLD (MAX V CPLD Development Board)

On dev. board, wire J2 (5V\_CONN) to BATT+, J11 (3.3V\_CONN) to C28 (non-gnd pad)



Rotary encoder input:  
Designed for Grayhill 61C11-01-08-02 (0.1" header)  
or C14D32P-B3 (SMT/through-hole TE connectors)  
but will work with mech. encoders too  
with pinout swap

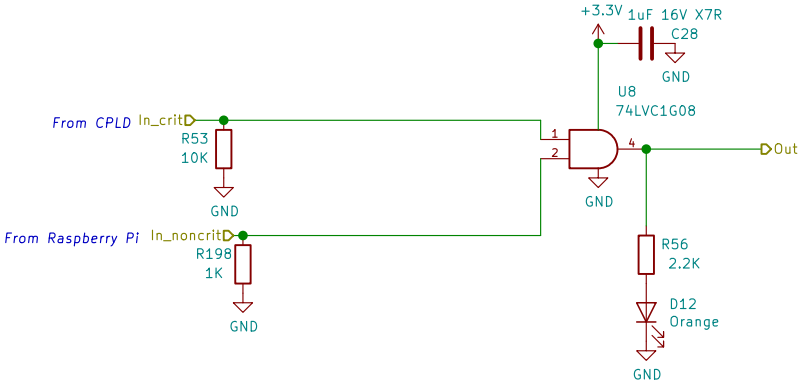


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**US GlobalVent Team**  
Sheet: /  
File: RPi\_cape\_simulator.sch

**Title: GlobalVent Controller: Software Simulator**

Size: B Date: Rev: 1.0  
KiCad E.D.A. kicad (5.1.4)-1 Id: 1/5

Safety-combining logic

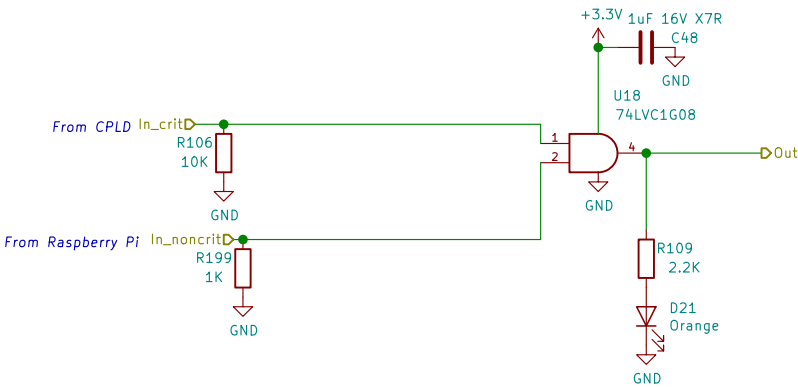


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Sheet: /Output Driver 1/  
File: output\_driver.sch

**Title: GlobalVent Stand-Alone Controller**

Size: A4	Date:	Rev: 1.10
KiCad E.D.A. kicad (5.1.4)-1		Id: 2/5

Safety-combining logic

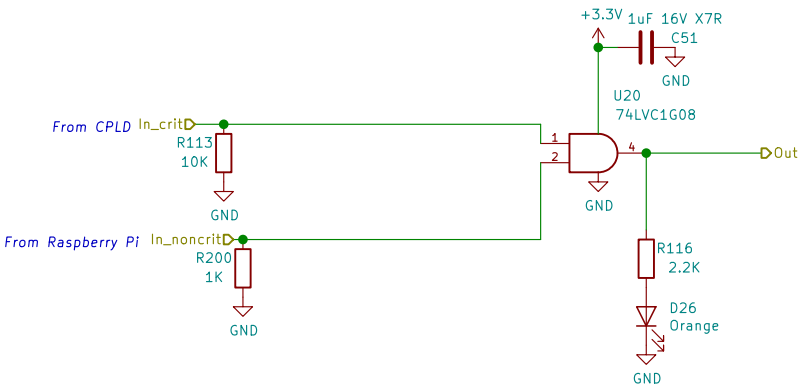


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**US GlobalVent Team**  
Sheet: /Output Driver 2/  
File: output\_driver.sch

**Title: GlobalVent Stand-Alone Controller**

Size: A4	Date:	Rev: 1.10
KiCad E.D.A. kicad (5.1.4)-1		Id: 3/5

Safety-combining logic

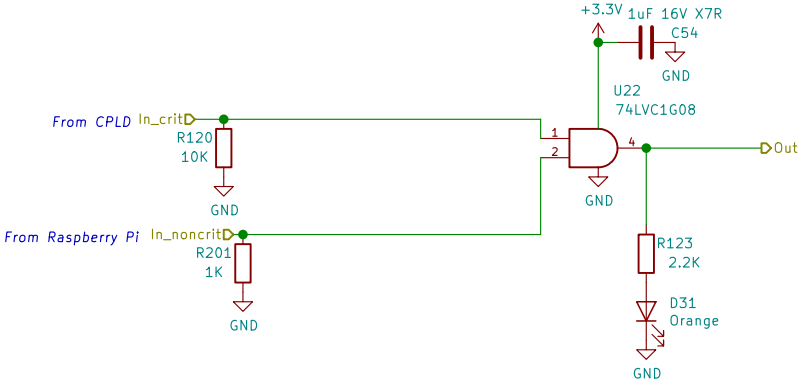


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Sheet: /Output Driver 3/  
File: output\_driver.sch

**Title: GlobalVent Stand-Alone Controller**

Size: A4	Date:	Rev: 1.10
KiCad E.D.A. kicad (5.1.4)-1		Id: 4/5

Safety-combining logic



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Sheet: /Output Driver 4/  
File: output\_driver.sch

**Title: GlobalVent Stand-Alone Controller**

Size: A4	Date:	Rev: 1.10
KiCad E.D.A. kicad (5.1.4)-1		Id: 5/5