

Sheet: /Sensors/  
File: Sensors.sch

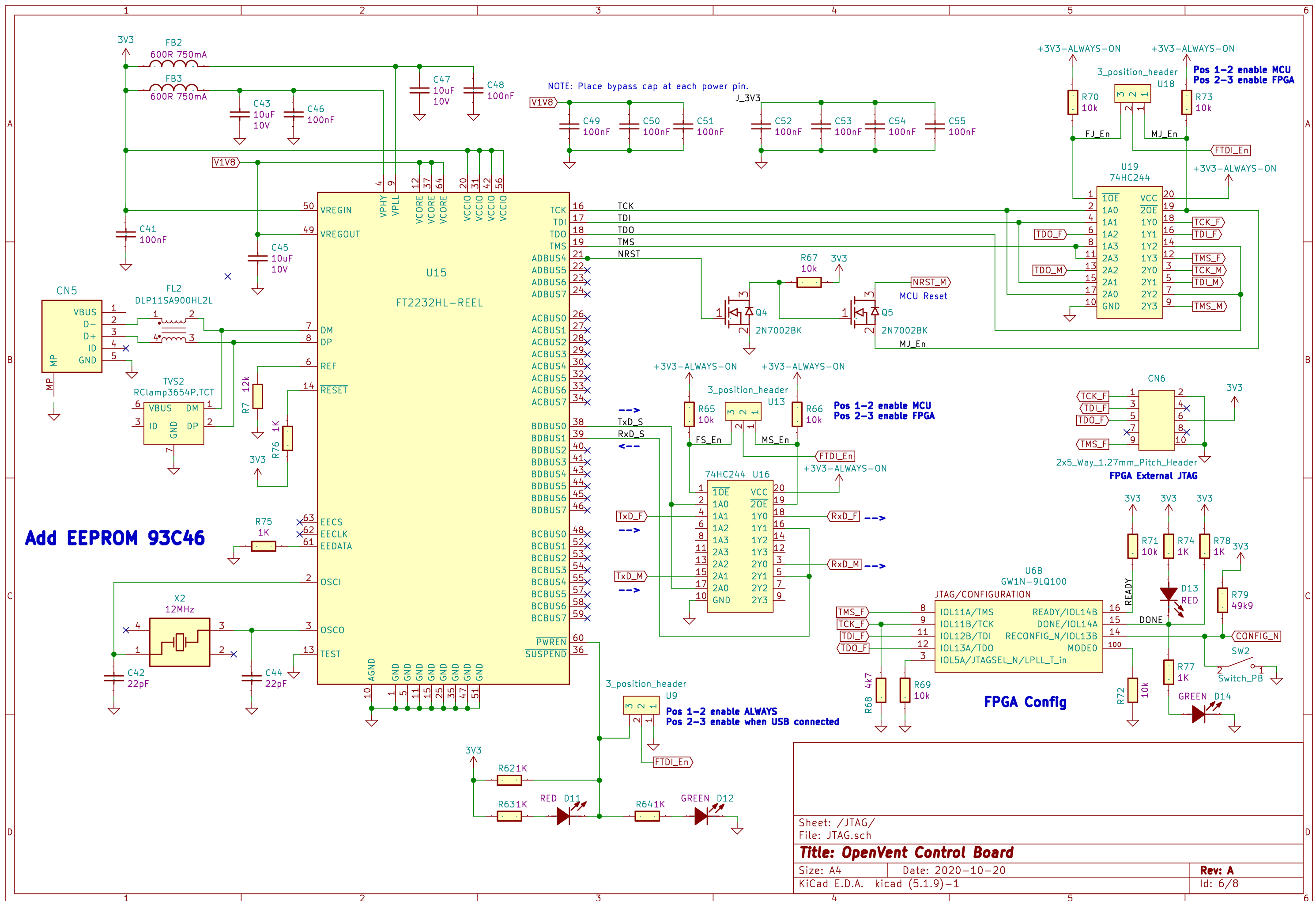
**Title: OpenVent Control Board**

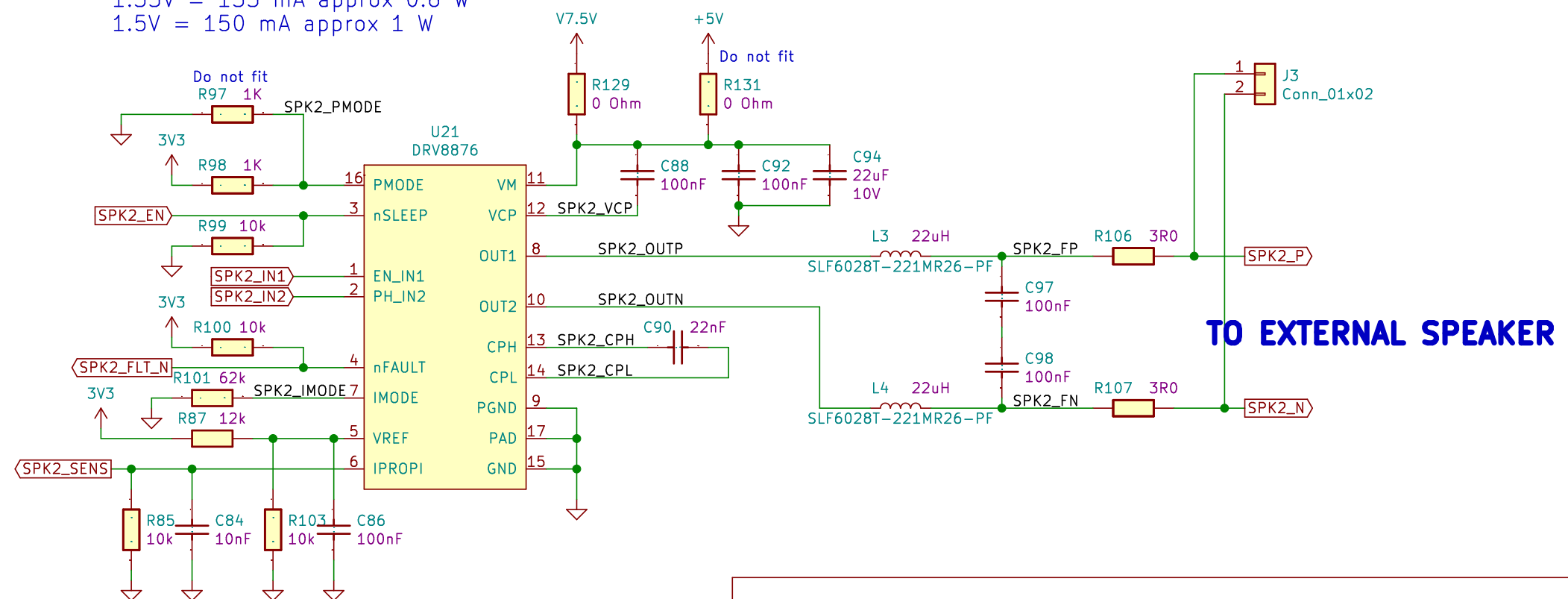
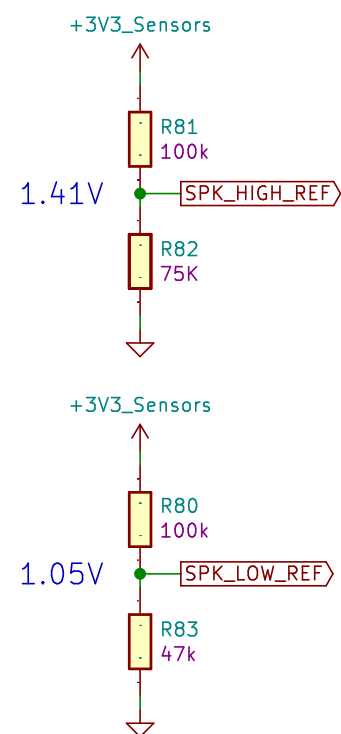
Size: A4 Date: 2020-10-20

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**Rev: A**

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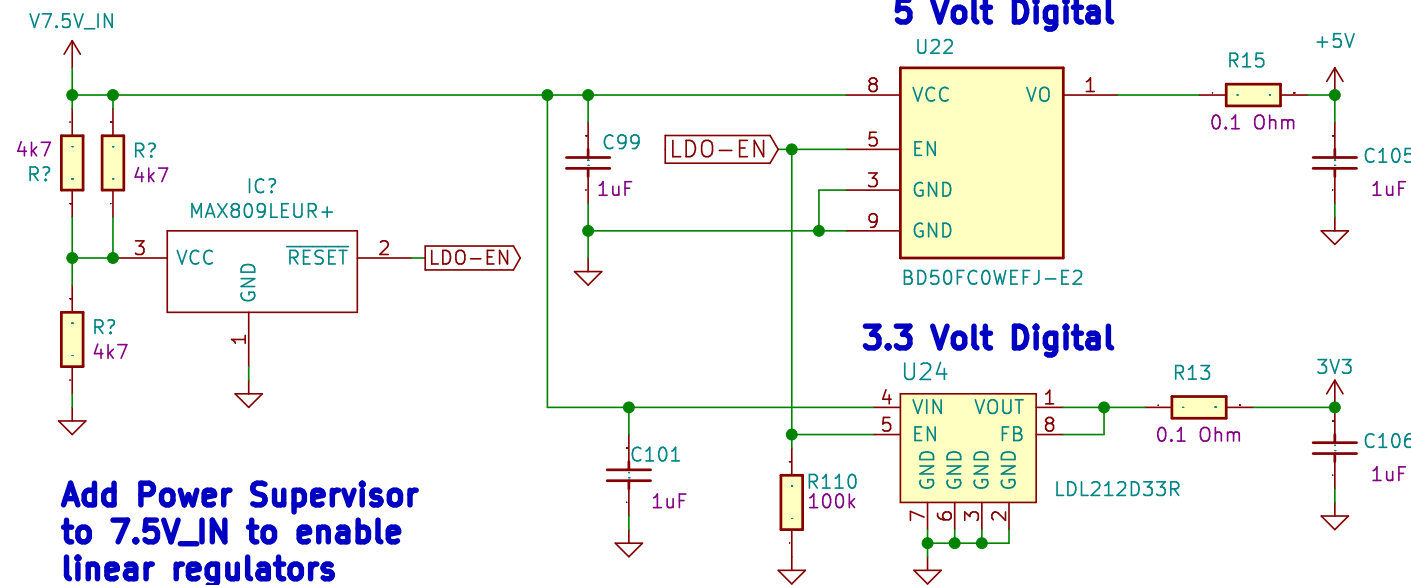
nSLEEP	IN1	IN2	OUT1	OUT2	DESCRIPTION
0	X	X	Hi-Z	Hi-Z	Sleep, (H-bridge Hi-Z)
1	0	0	Hi-Z	Hi-Z	Coast, (H-Bridge Hi-Z)
1	0	1	L	H	Reverse (OUT2->OUT1)
1	1	0	H	L	Forward (OUT1->OUT2)
1	1	1	L	L	Brake, (Low-Side Slow Decay)

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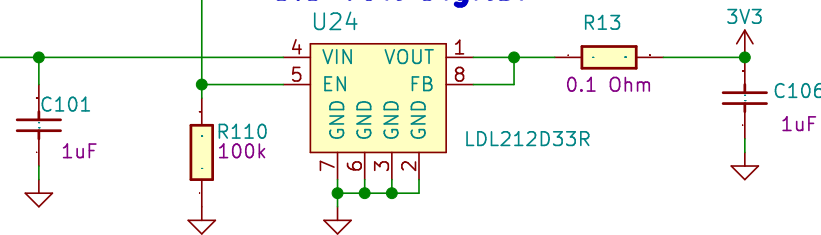


## 5 Volt Digital

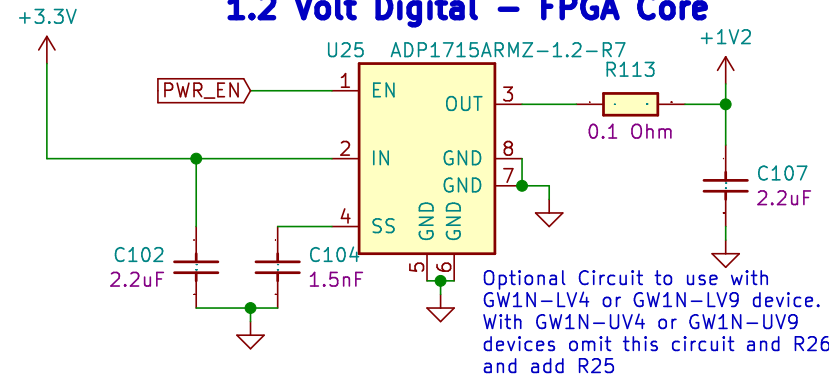


motorcurrent has to go to fpga VIA ADC  
(NO NEED TO AMPLIFY) RANGES FROM  
0 V TO 5 V DEPENDING ON THE CURRENT GOING TO THE MOTOR

### 3.3 Volt Digital

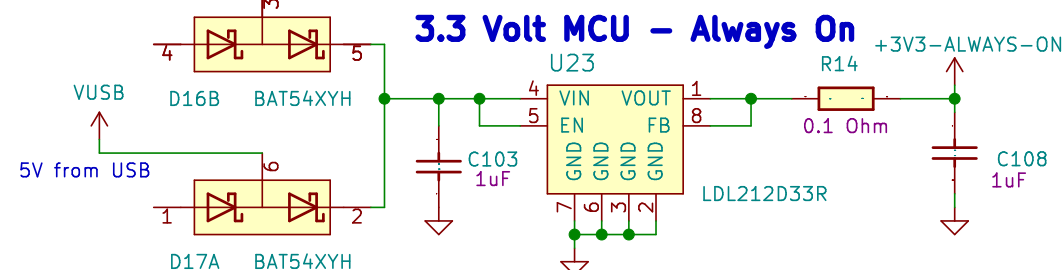


## 1.2 Volt Digital – FPGA Core

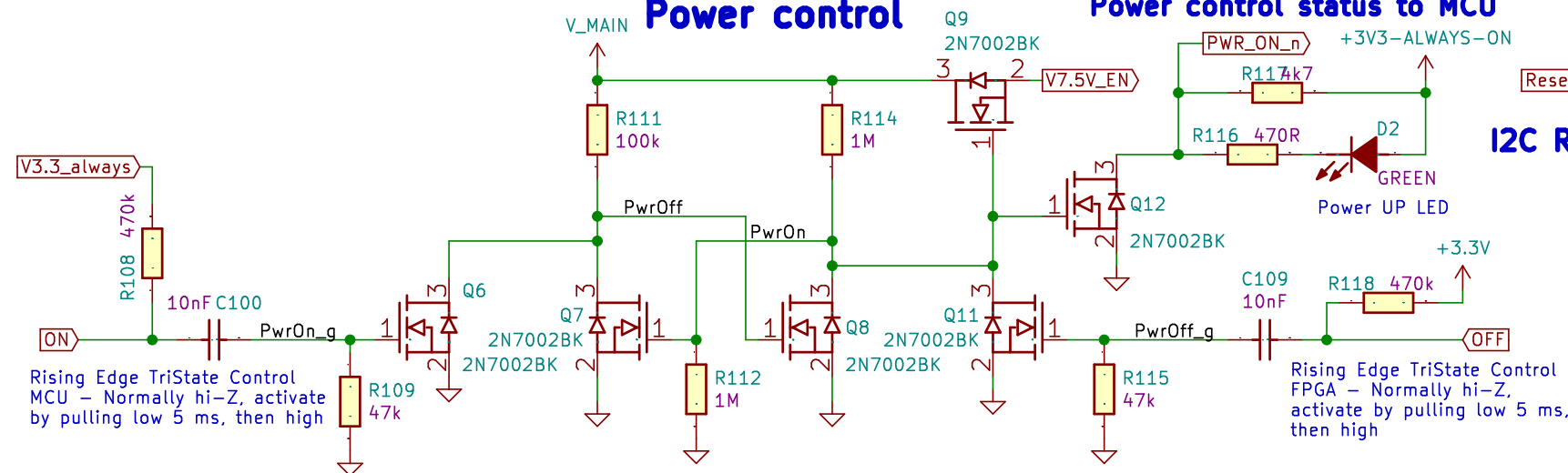


Optional Circuit to use with  
GW1N-LV4 or GW1N-LV9 device.  
With GW1N-UV4 or GW1N-UV9  
devices omit this circuit and R26  
and add R25

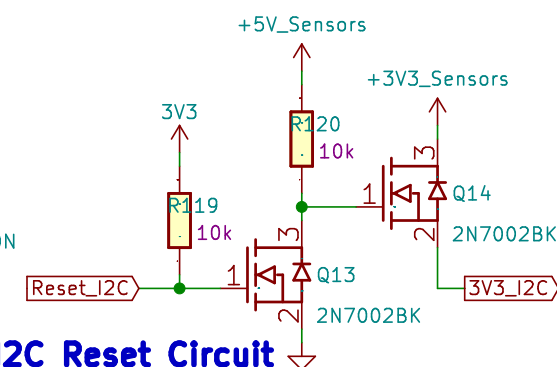
### 3.3 Volt MCU – Always On



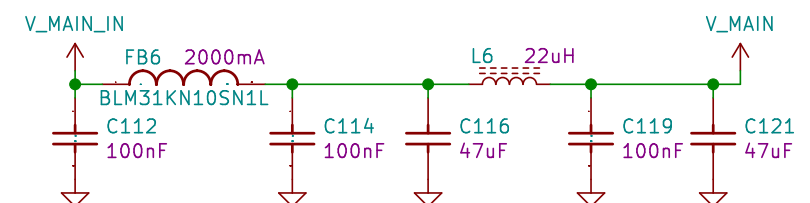
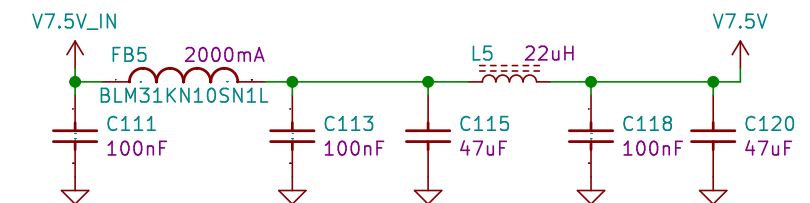
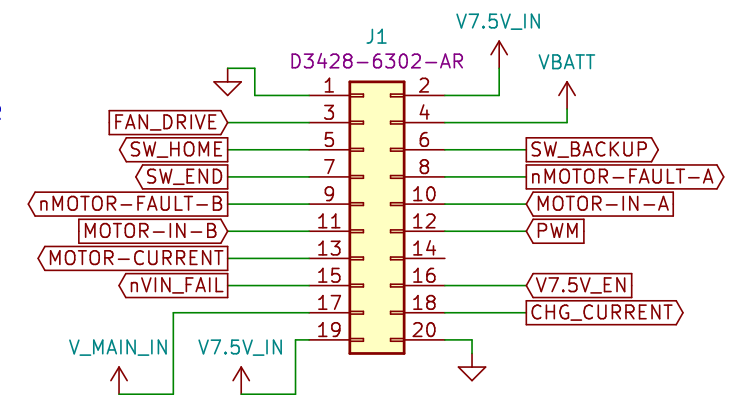
## Power control



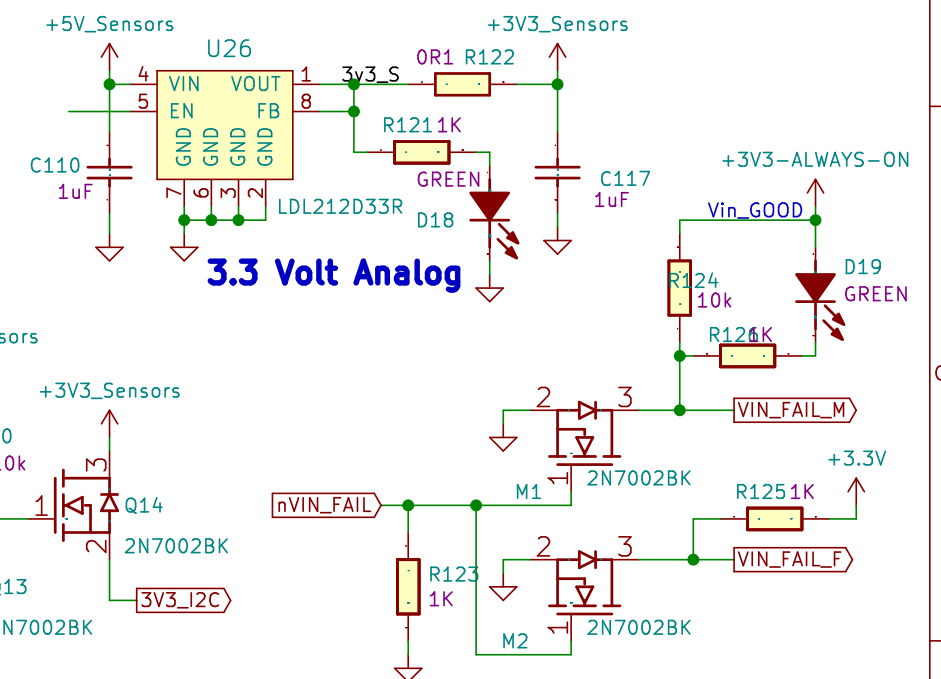
## Power control status to MCU



## I2C Reset Circuit



### 3.3 Volt Analog



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**Title: OpenVent Control Board**

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