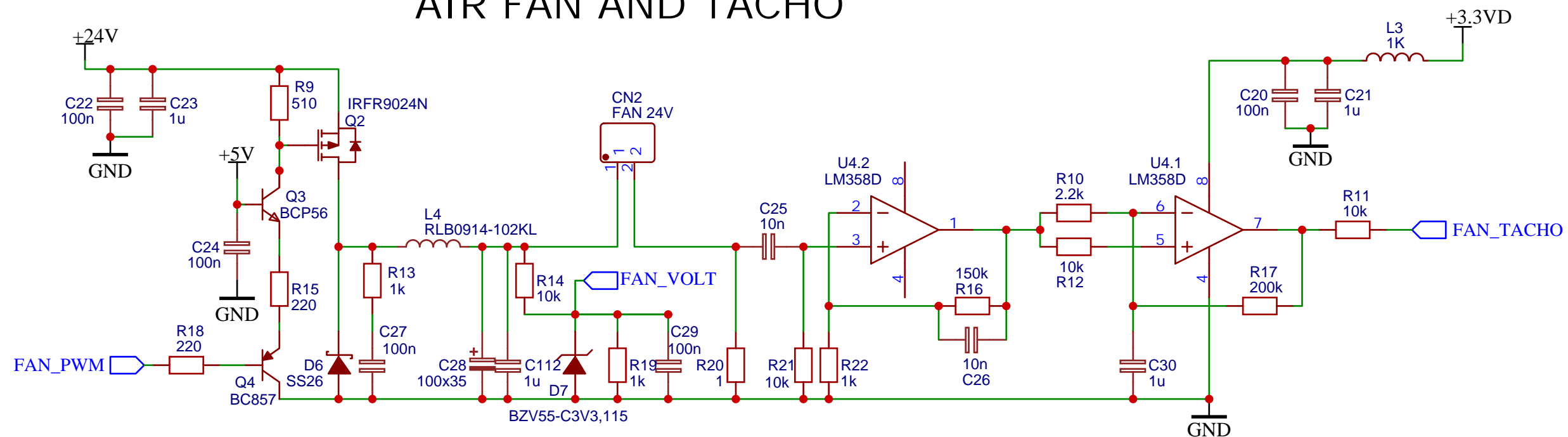
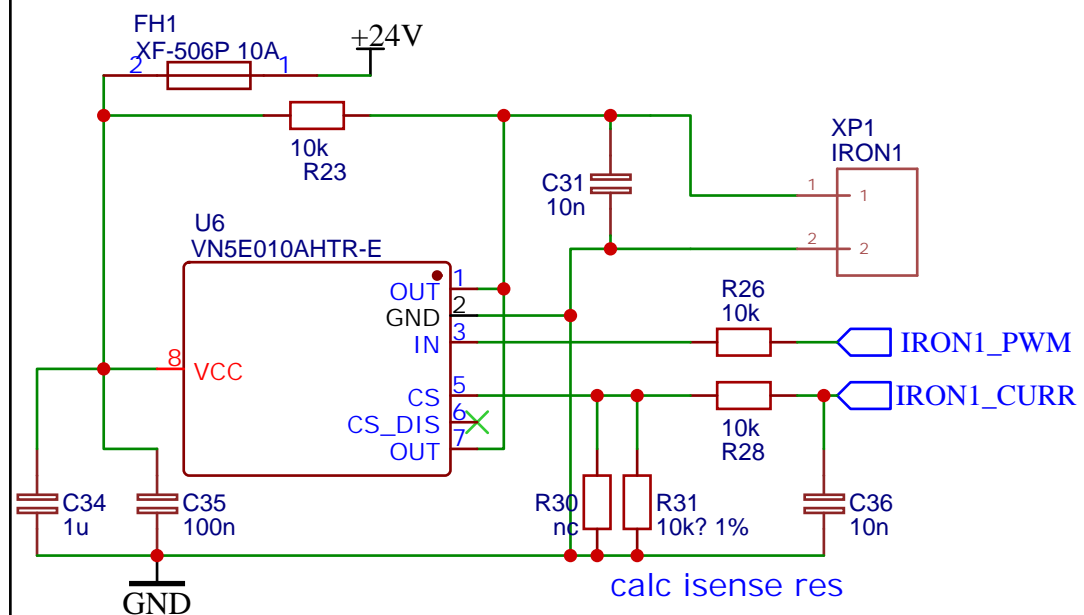




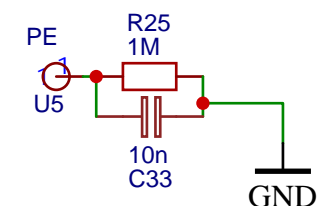
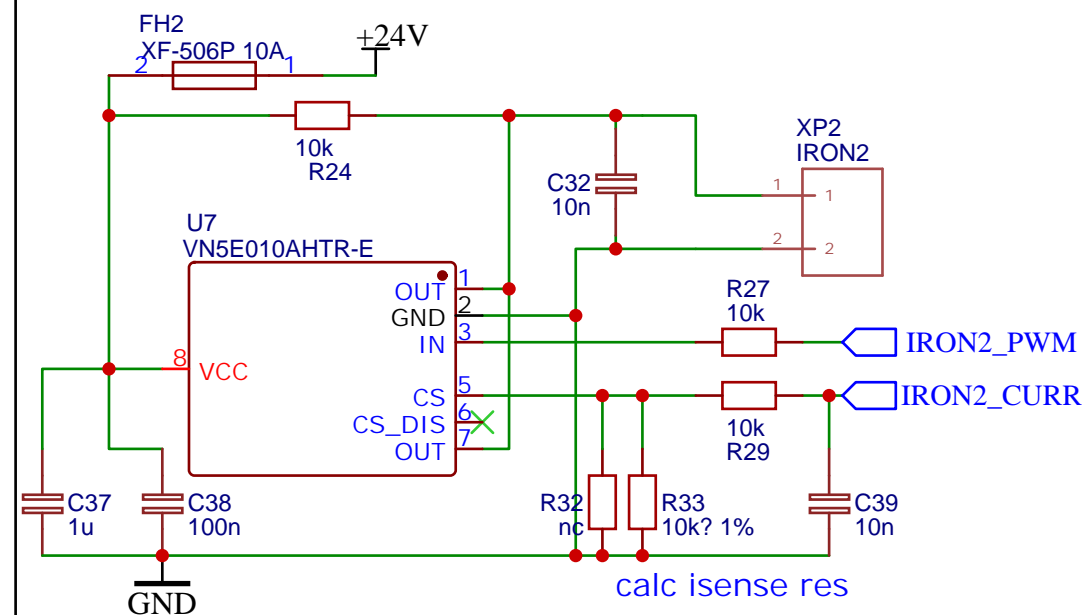
# AIR FAN AND TACHO



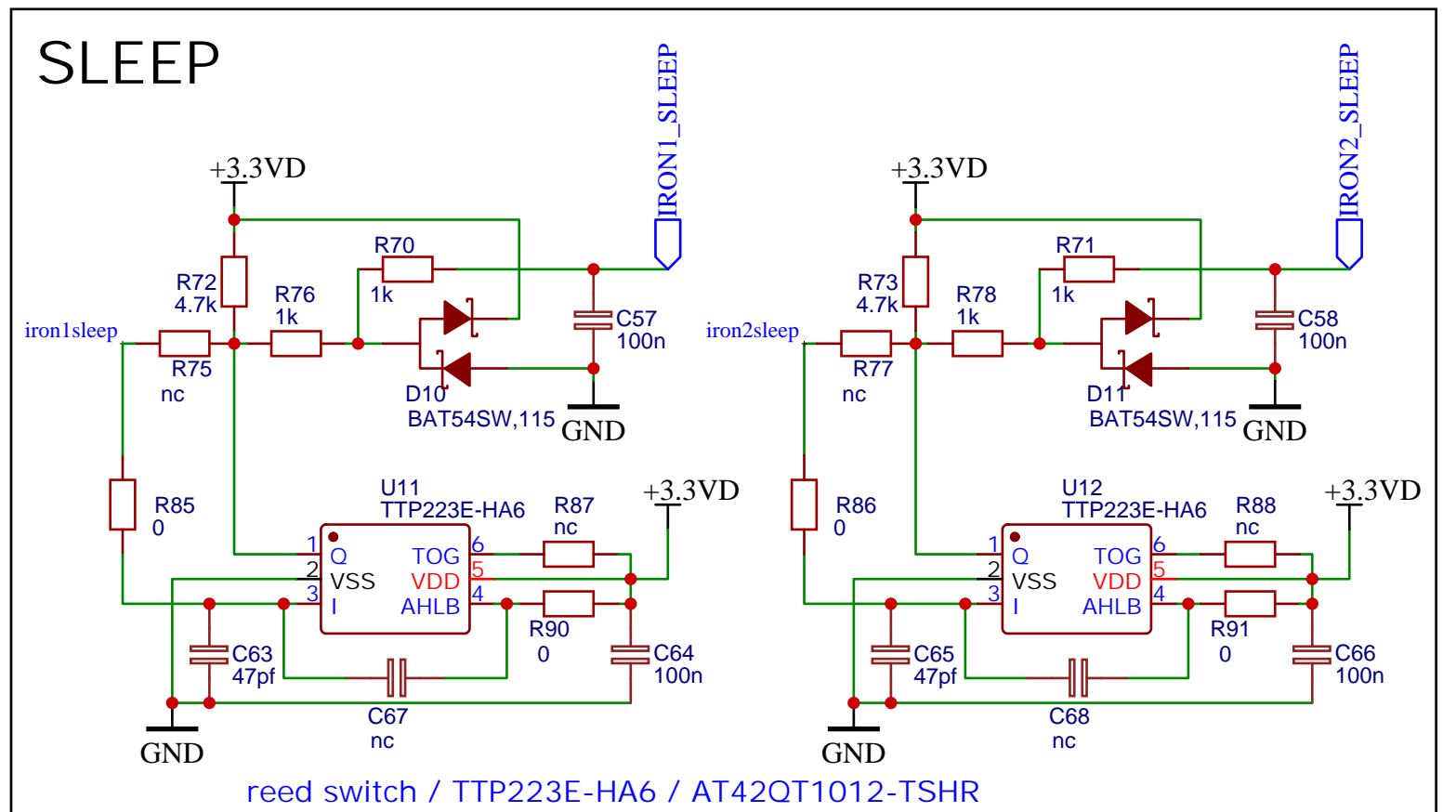
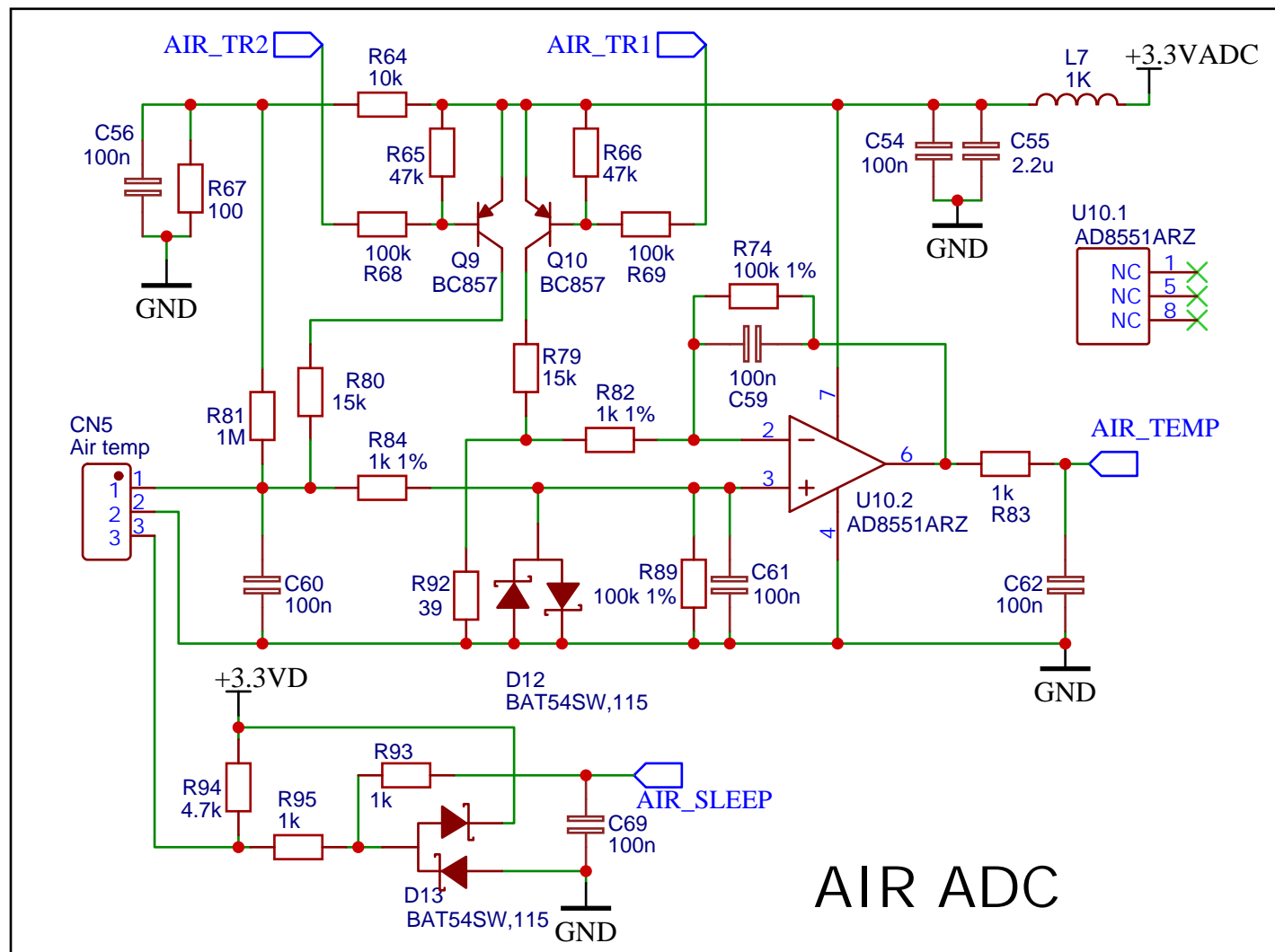
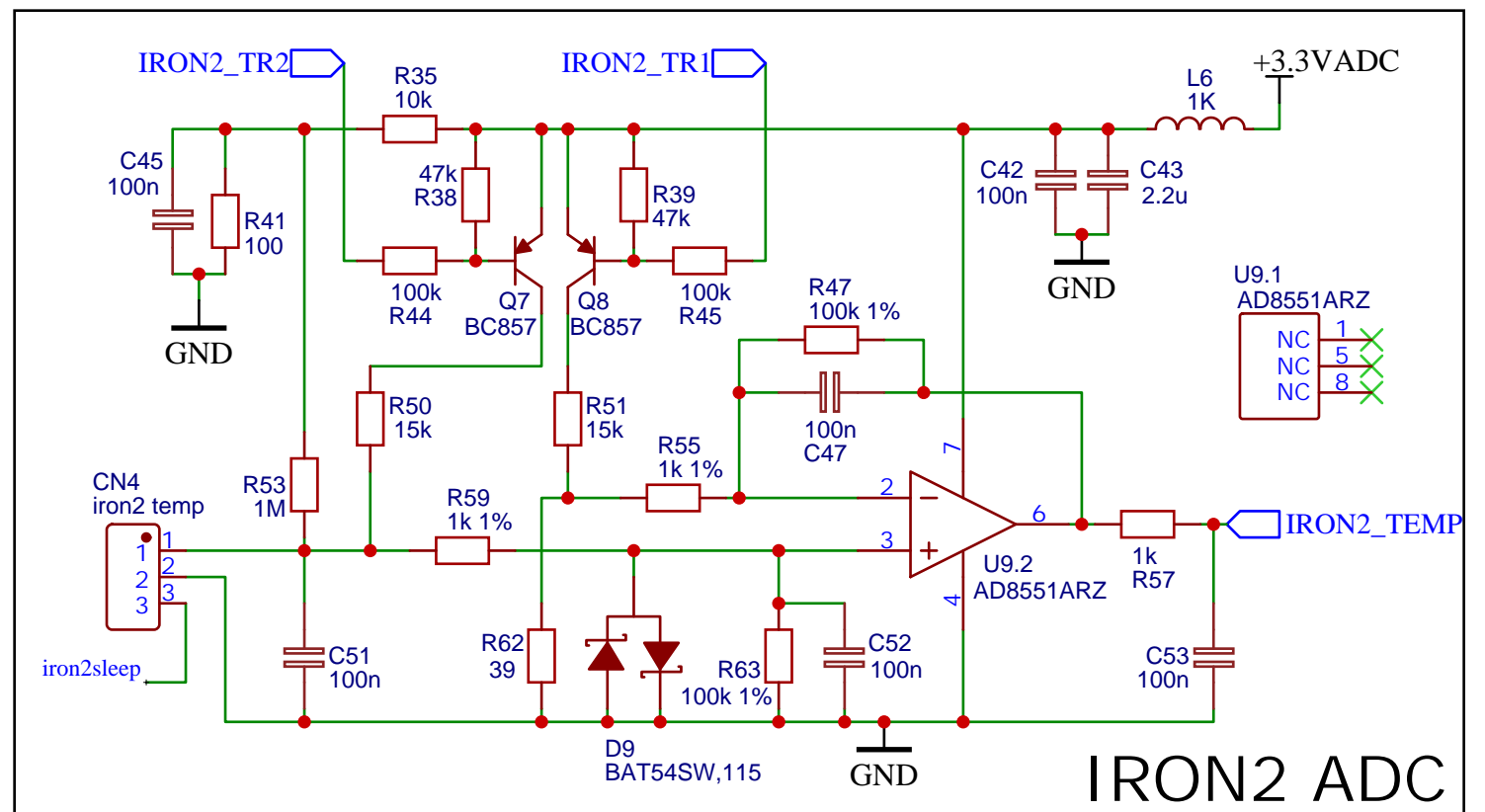
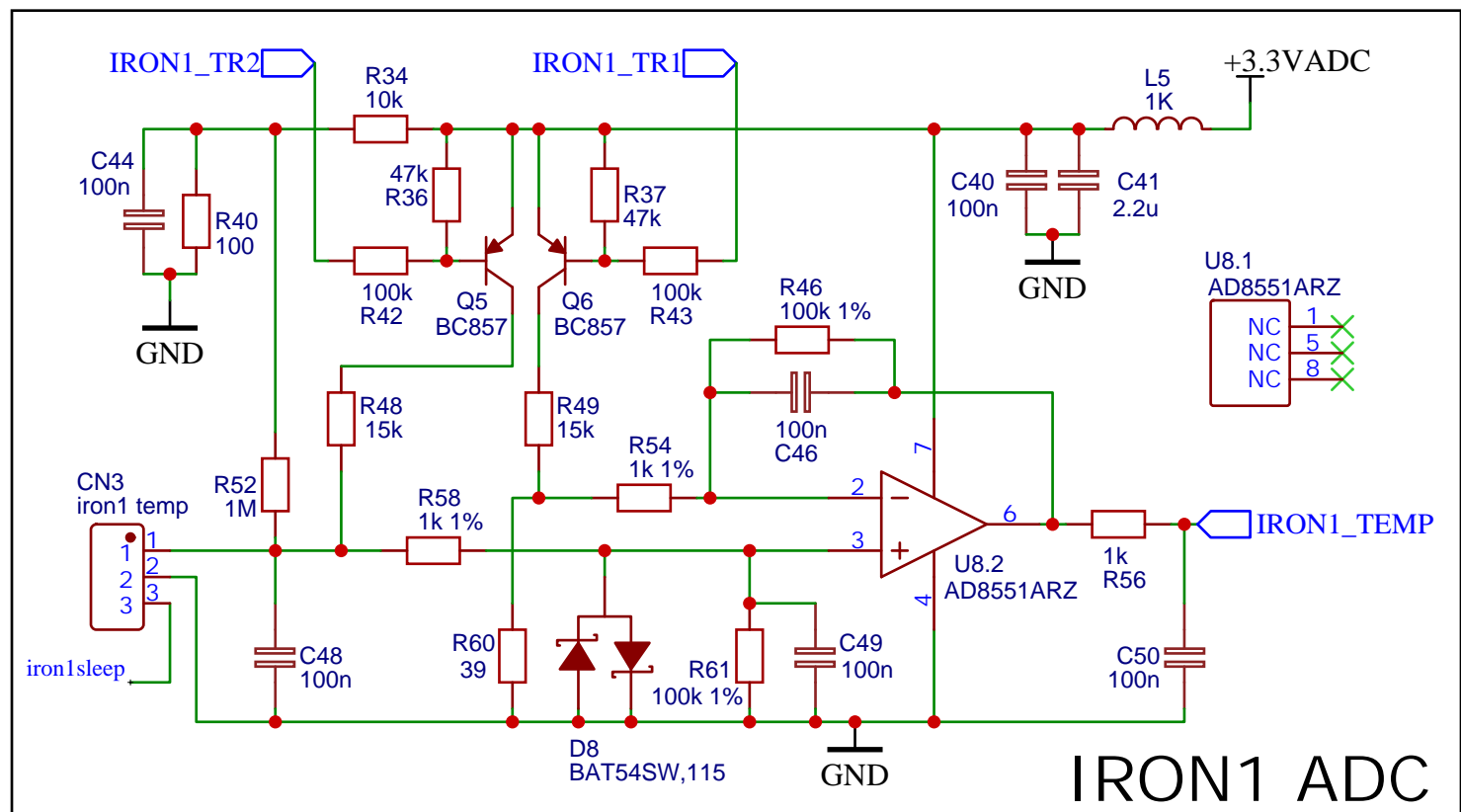
## IRON1 HEATER



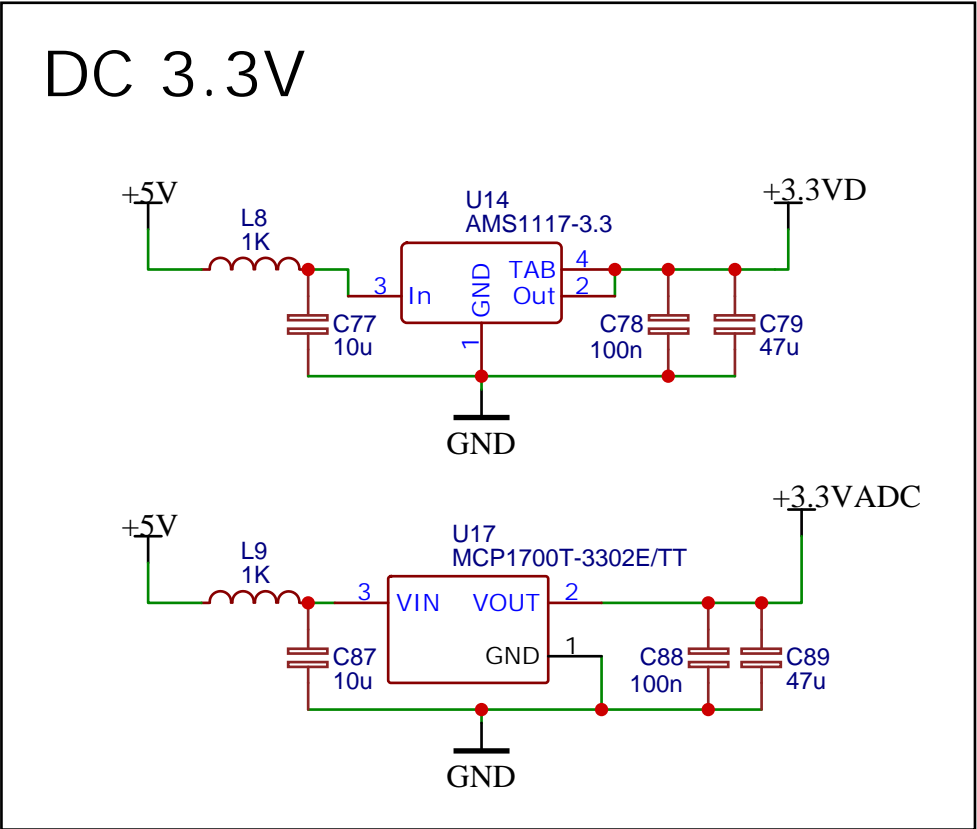
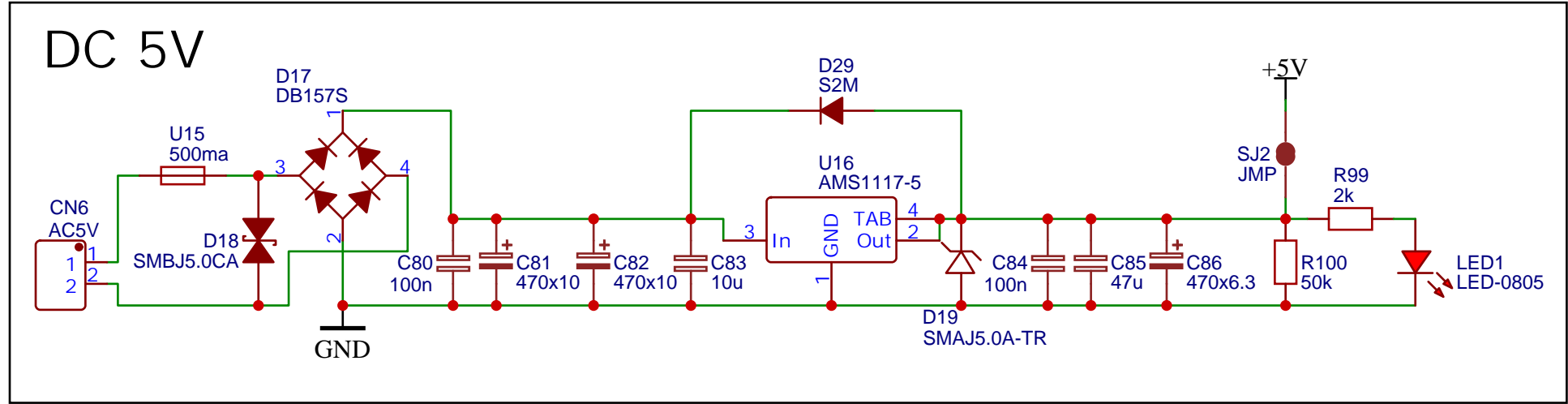
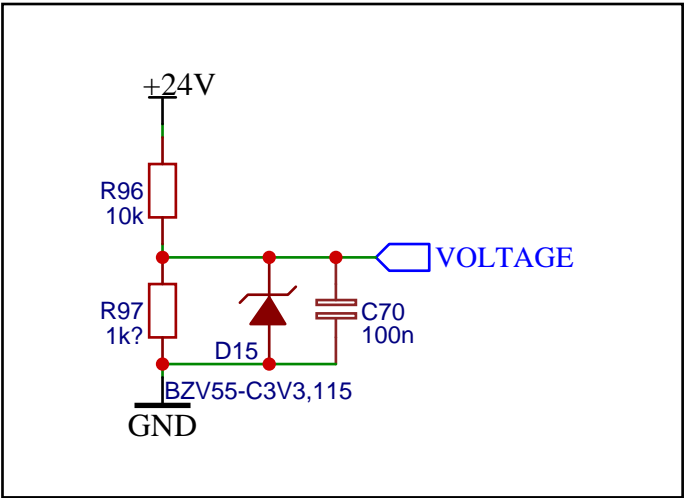
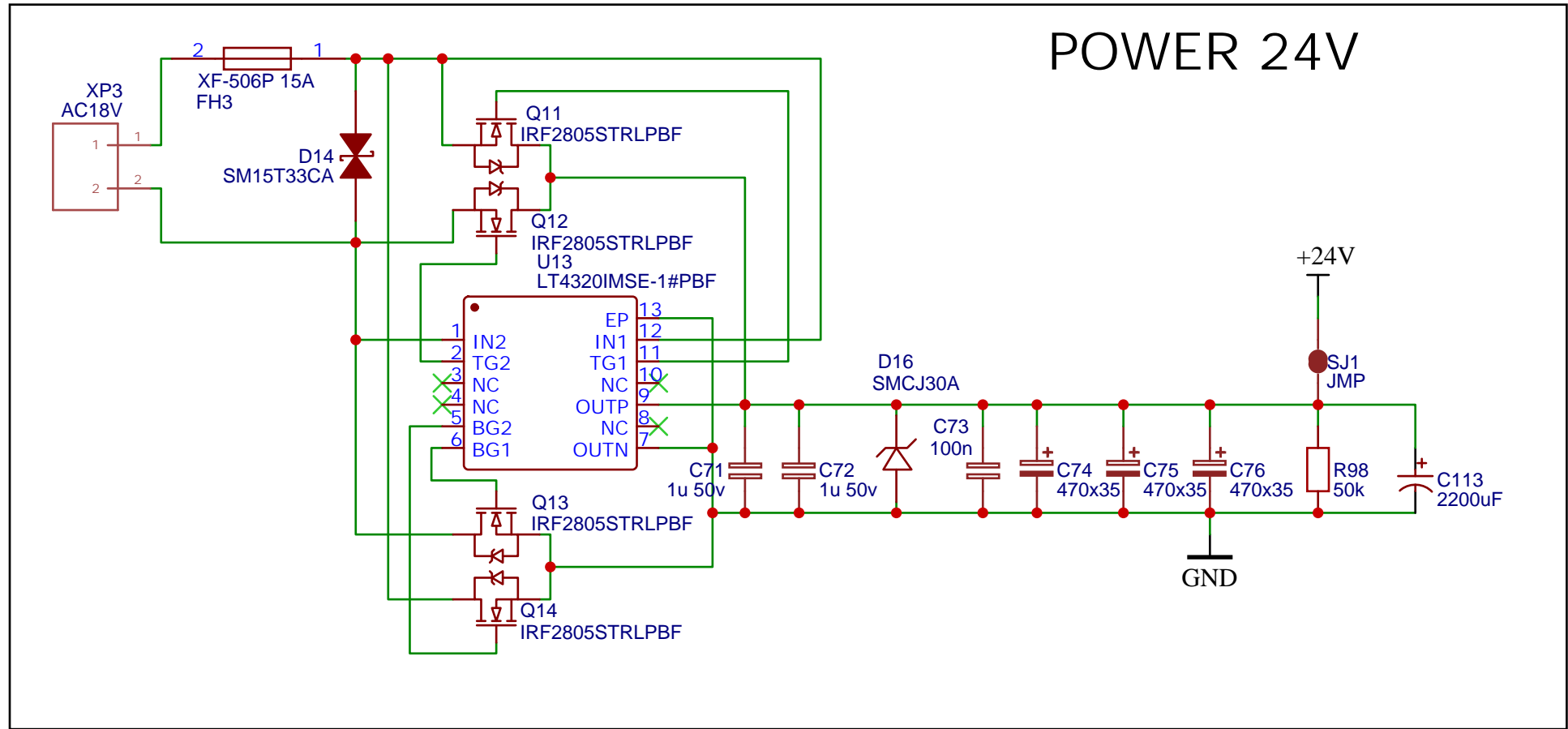
## IRON2 HEATER

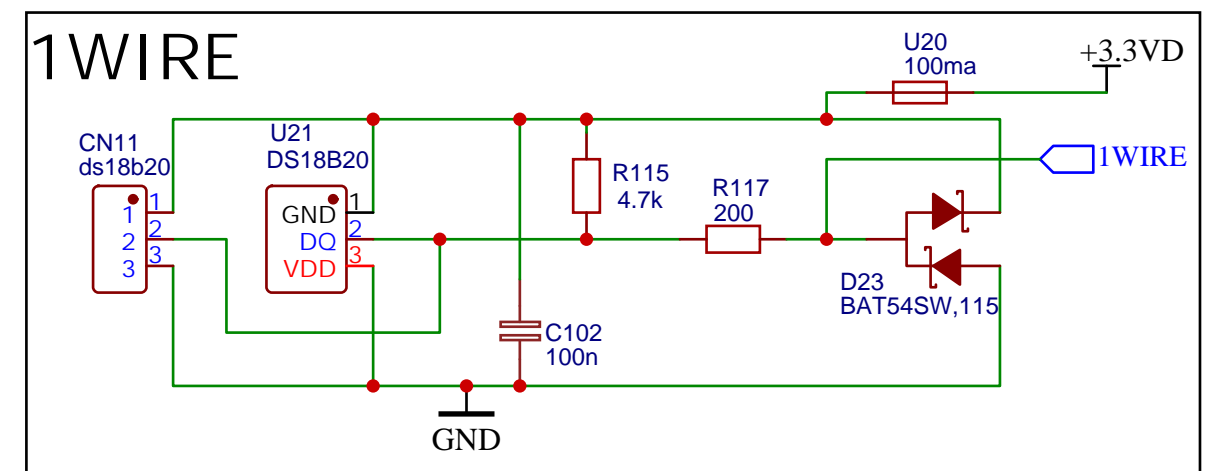
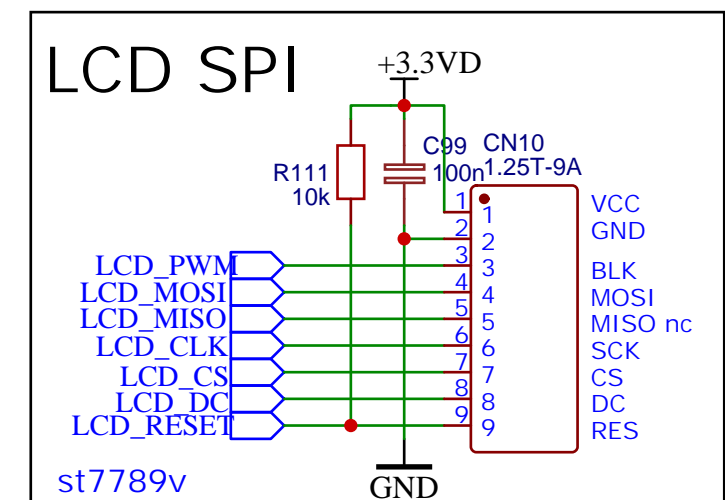
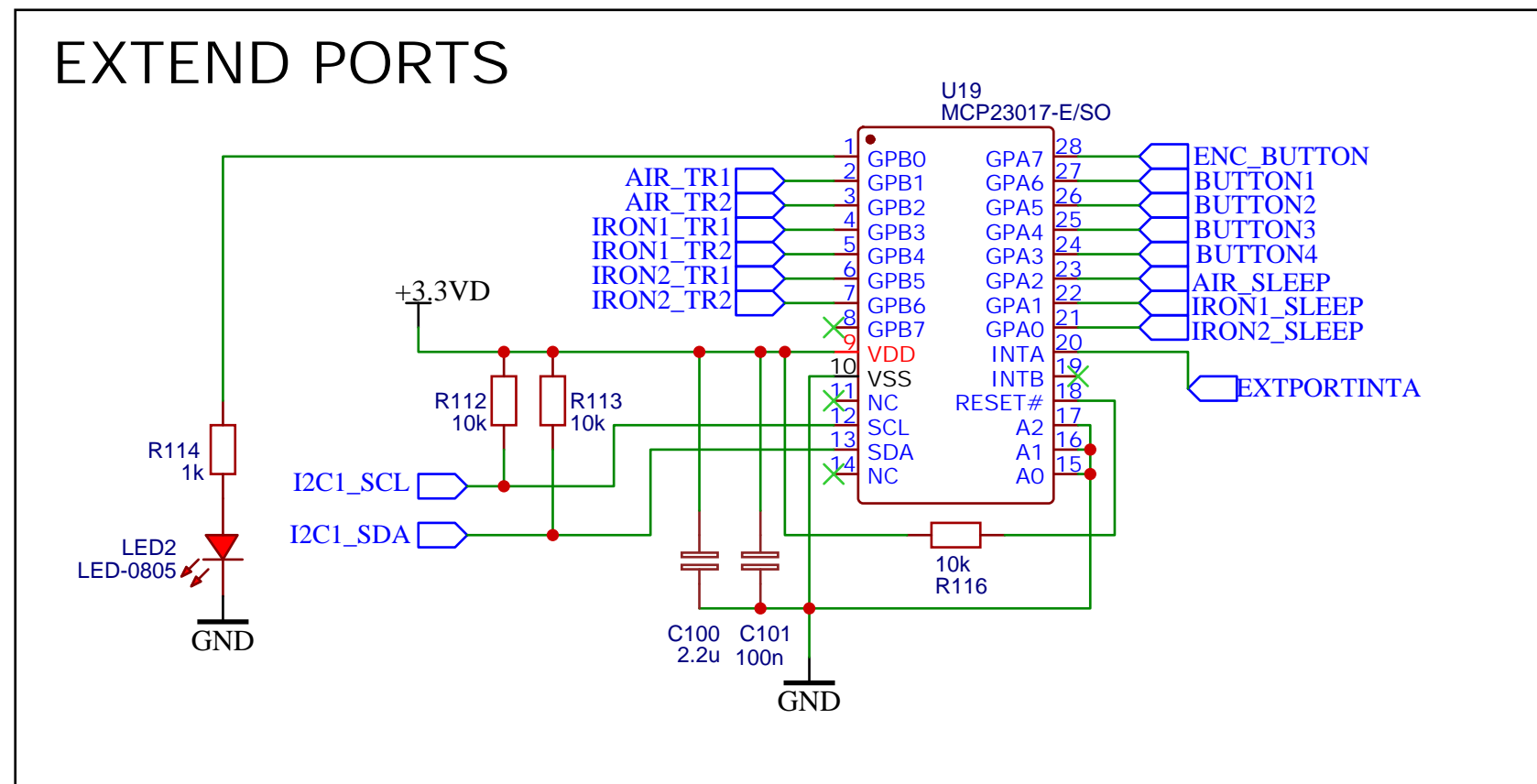
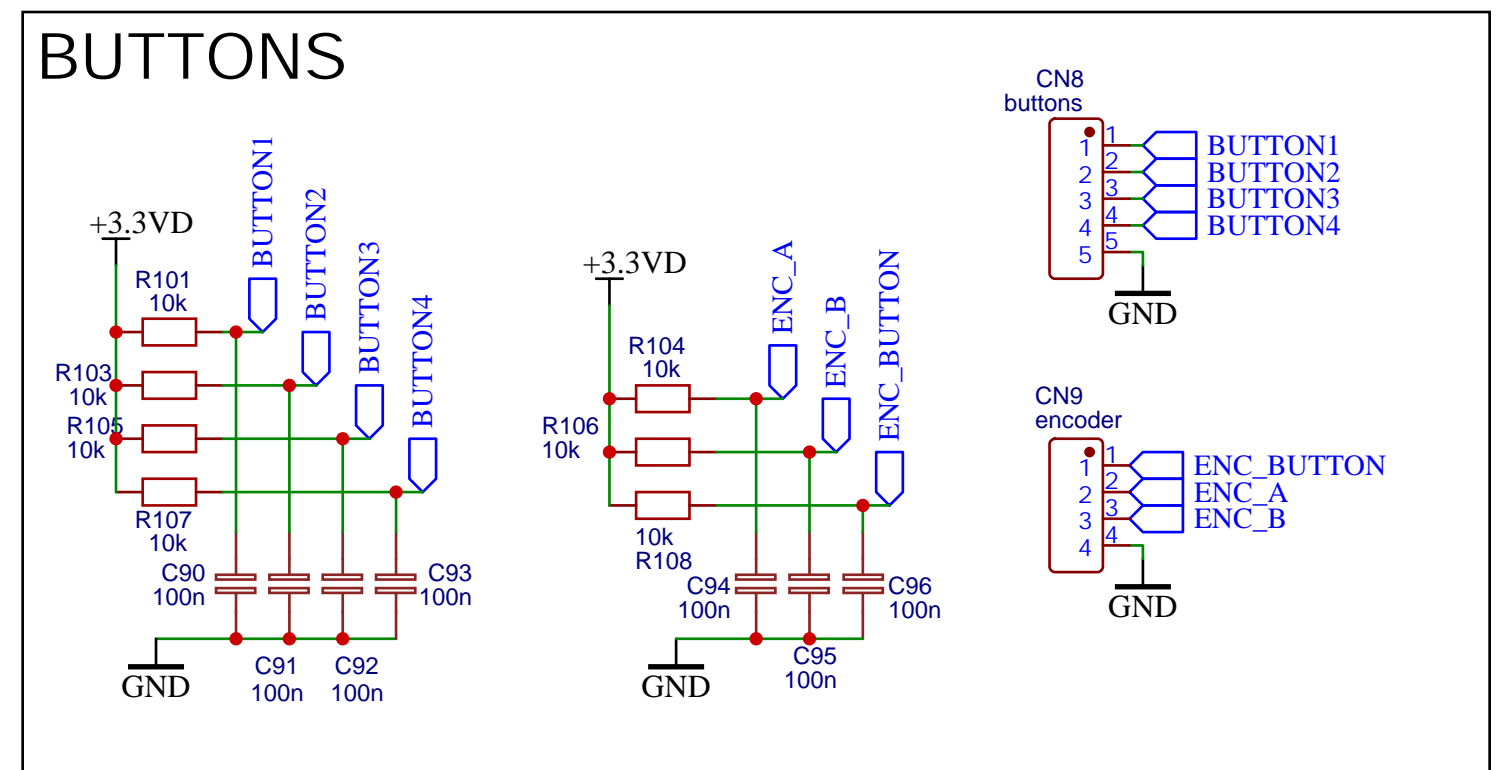
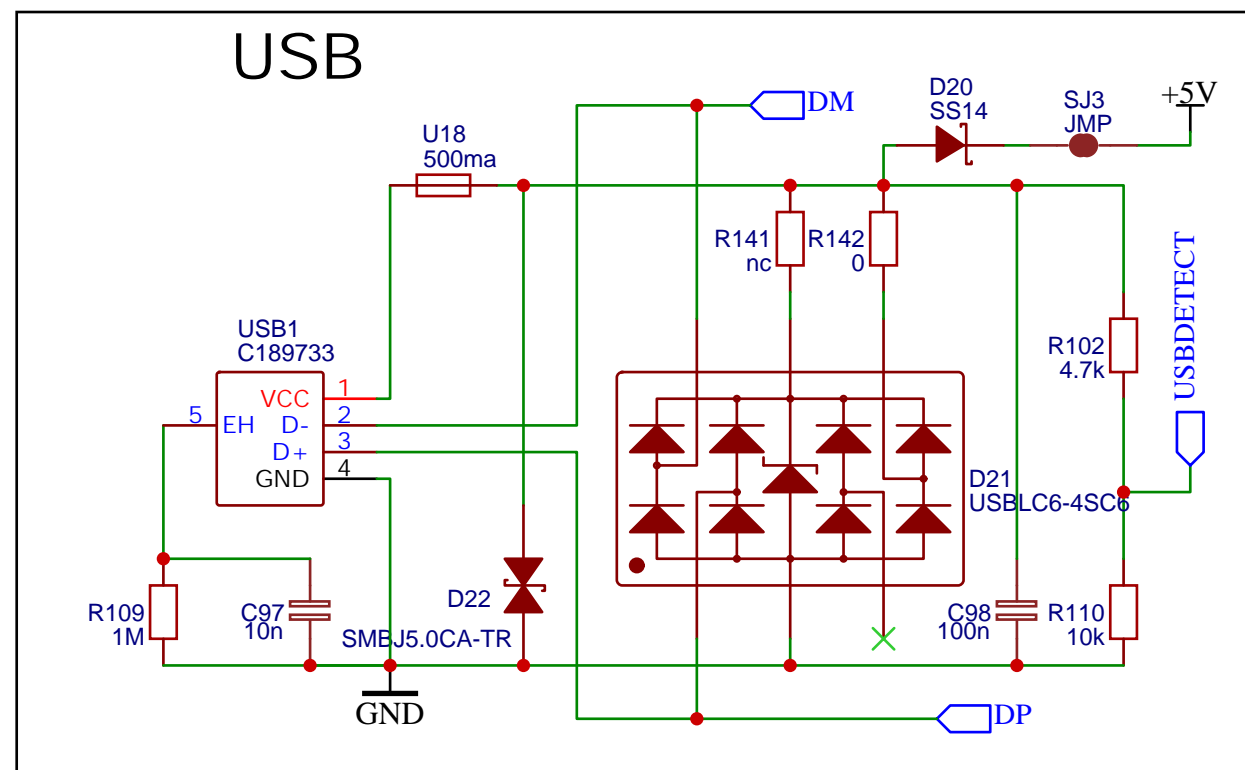


TITLE: power irons, tacho		REV: 1.0
EasyEDA	Company: none	Sheet: 1/1
	Date: 2021-08-06	Drawn By: xseregax



TITLE: adcs		REV: 1.0
EasyEDA	Company: none	Sheet: 1/1
	Date: 2021-08-06	Drawn By: xseregax



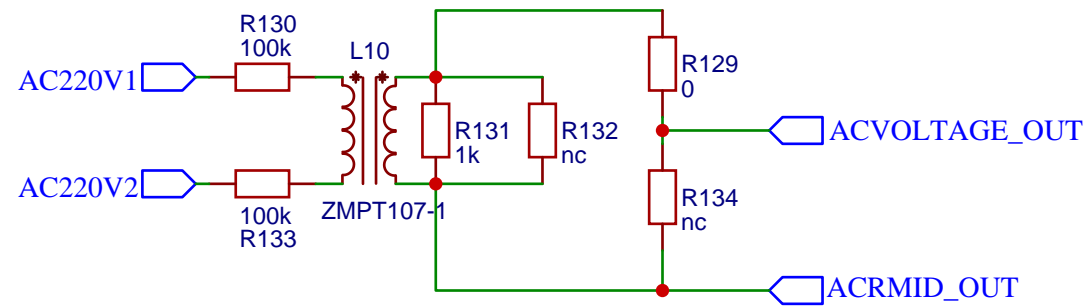
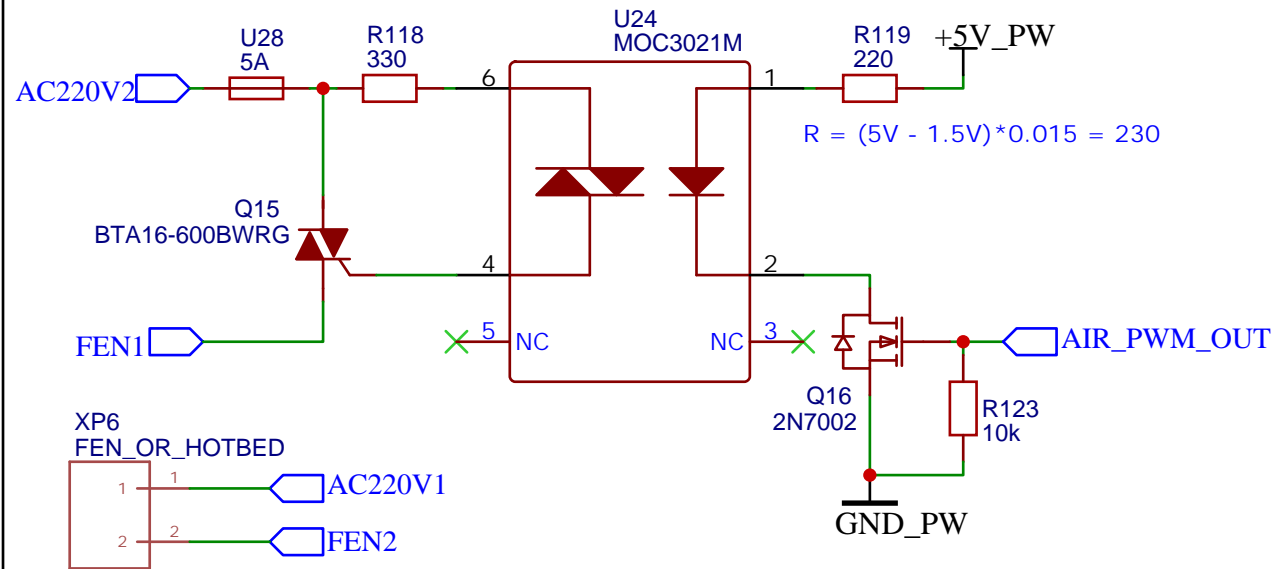


TITLE: buttons		REV: 1.0
	Company: none	Sheet: 1/1
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# FEN 220V PWM

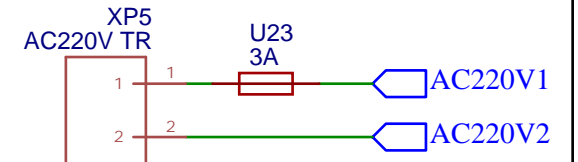
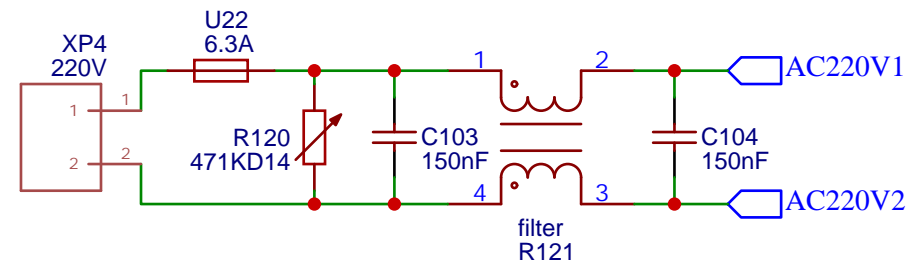
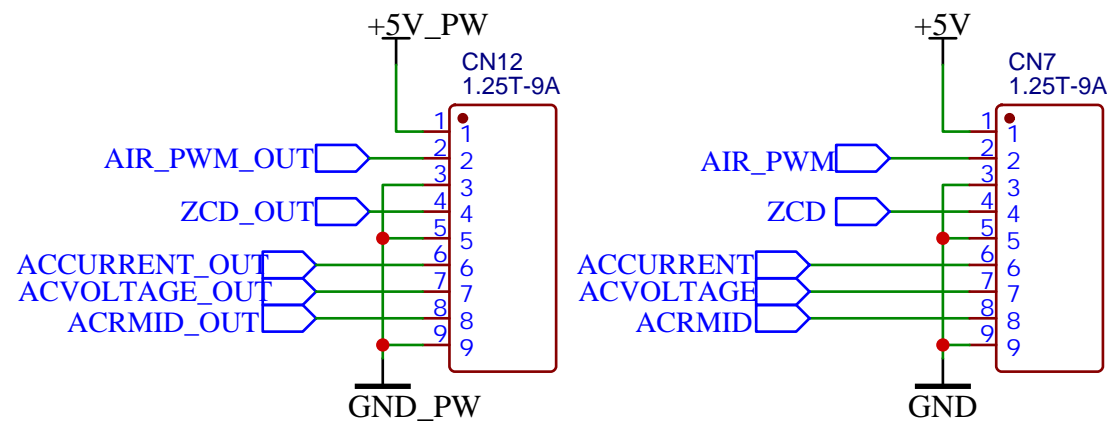
$$R = 230V \times 1.414 / 1A = 325$$

$$V_{min} = R \times I_{GT} + V_{GT} + V_{TM} = 330 \times 0.05A + 1.3V + 3V = 20.8V$$

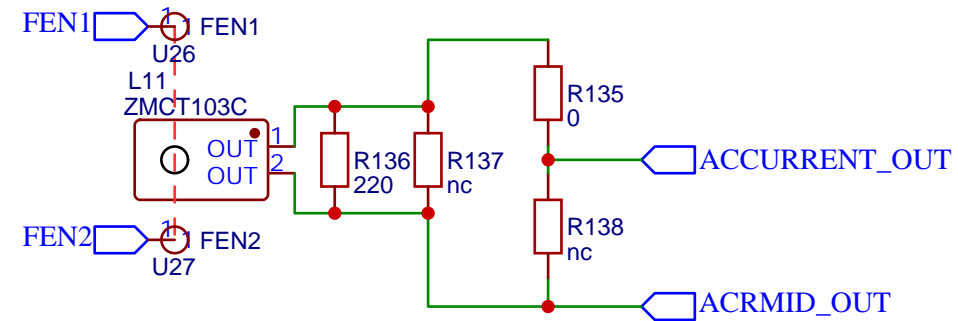
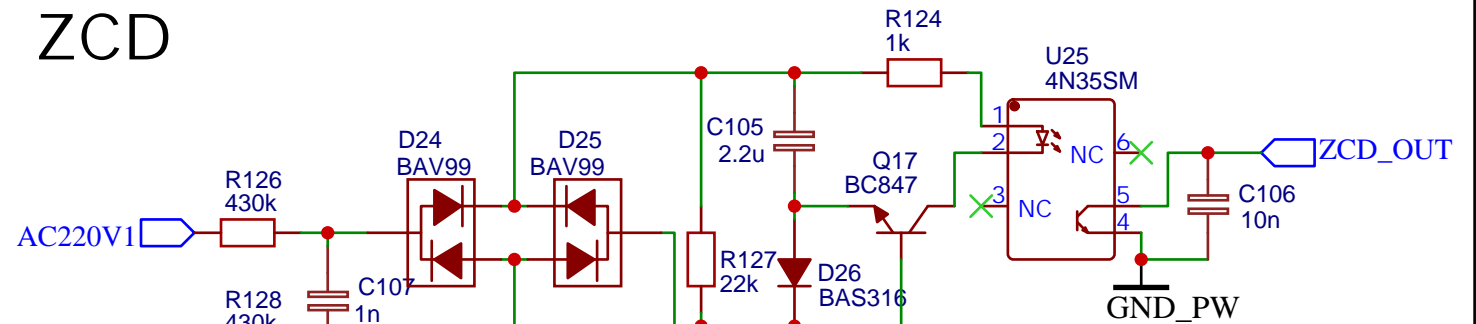


ZMPT107  
1000:1000, 2mA:2mA, 50  
 $V_{Outmax} = (\text{Peak Voltage}) / (2 \times 2) = 3.3V / (2 \times 2) = 1.167V$   
 $R_{in} = V_{in} / I = 230V / 1.15mA = 200k$   
 $R_{burden} = (V_{Outmax} / V_{in}) \times R_{in} = (1.167V / 230V) \times 200k = 1014$   
1k :  $V_{out} = 1.15V$

$V_{out} = 230 / 2 = 115k$   
 $R_{bud} = 580$

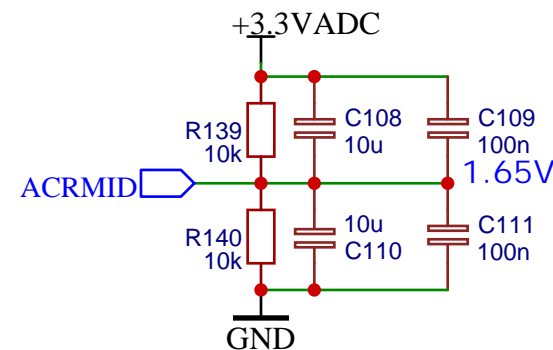


## ZCD



ZMCT103C  
1000:1, max 5A:5mA, 50

<https://learn.openenergymonitor.org/electricity-monitoring/ct-sensors/interface-with-arduino>  
<https://tyler.anairo.com/projects/open-energy-monitor-calculator>  
 $\text{burden\_resistor} = (\text{system\_voltage} / 2.0) / ((I_{RMS} \times 2) / \text{ct\_turns}) = 233$



TITLE: ac		REV: 1.0
EasyEDA	Company: none	Sheet: 1/1
	Date: 2021-08-27	Drawn By: xseregax