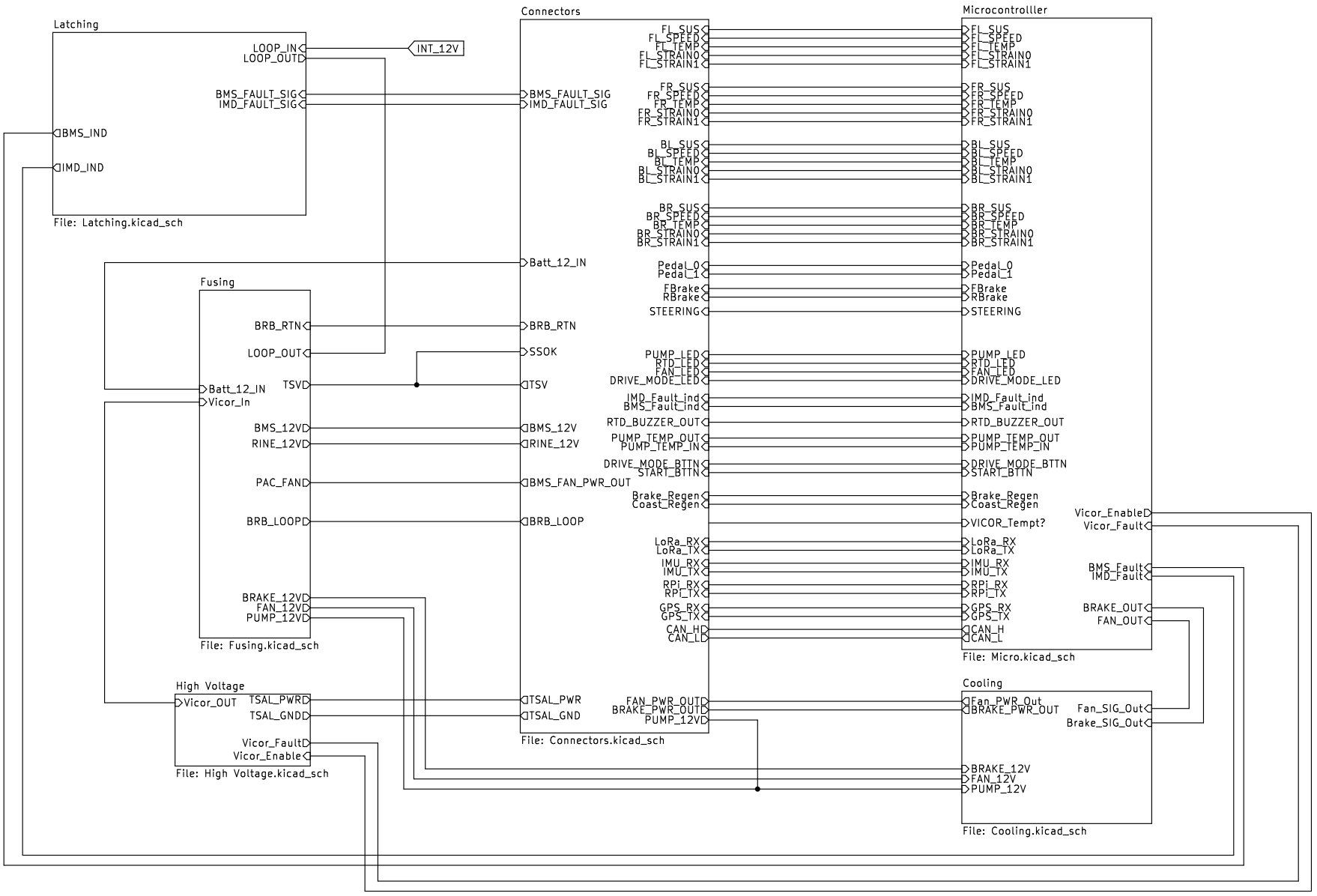
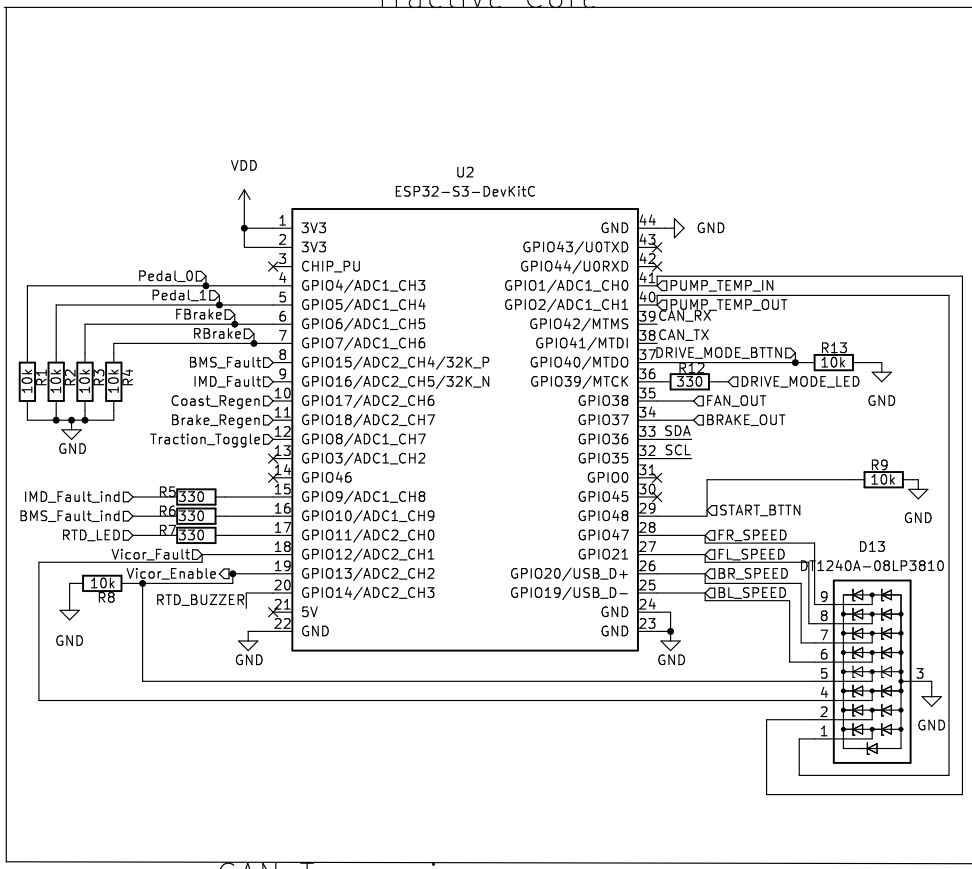


Description:

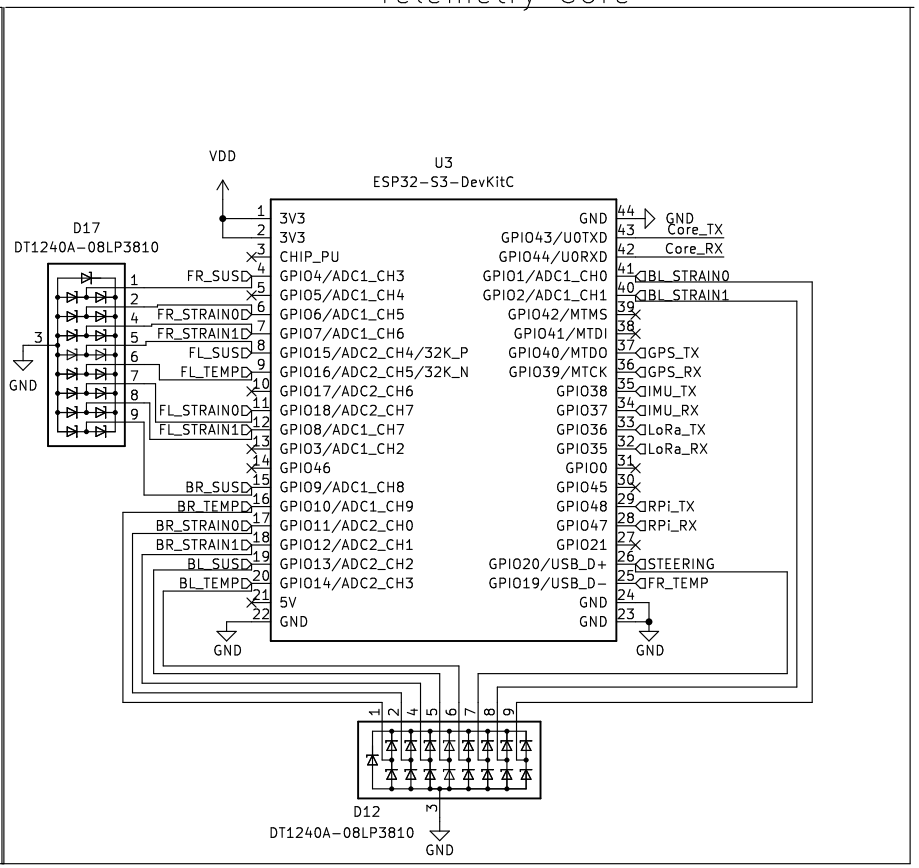
Main board that do it all.
Functions: Safetey loop, Fusing, 2 Microcontrollers, Sensor input, precharge. ect... LV and HV seperated by space

Title: DADDY BOARD	**Designer: Colin Grund**	
Sheet:	File: Big Daddy.kicad_sch	
Size: A	Date: 2023-05-15	**Rev: V 1.1**
AERO	KiCad E.D.A. kicad 7.0.8	Id: 1/10

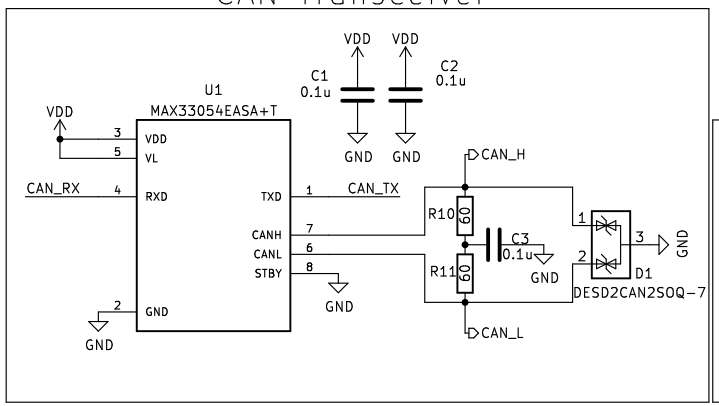
Tractive Core



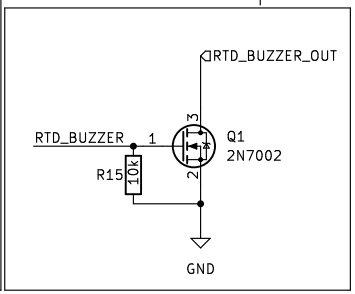
Telemetry Core



CAN Transceiver



Buzzer Output

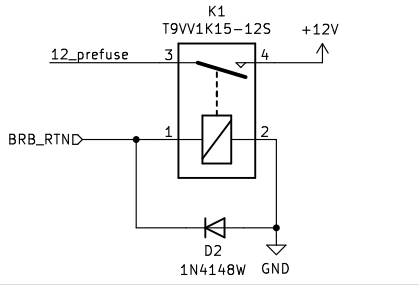


Description:
Two Cores: Telemetry deals with sensors and non mission critical
Tractive deals with all mission critical must work to drive

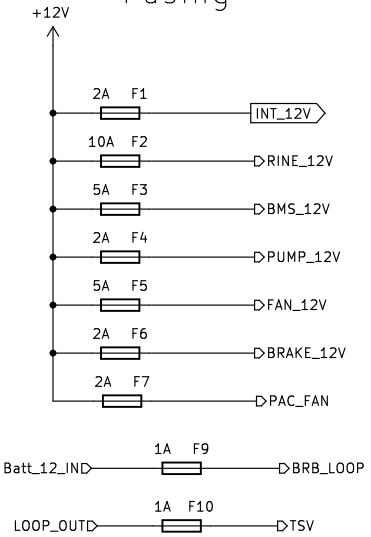
Title: Dual Core **Designer: Colin Grund**

Sheet: Microcontrollller	File: Micro.kicad_sch	
Size: A	Date: 2023-05-15	**Rev: V 1.1**
AERO	KiCad E.D.A. kicad 7.0.8	Id: 2/10

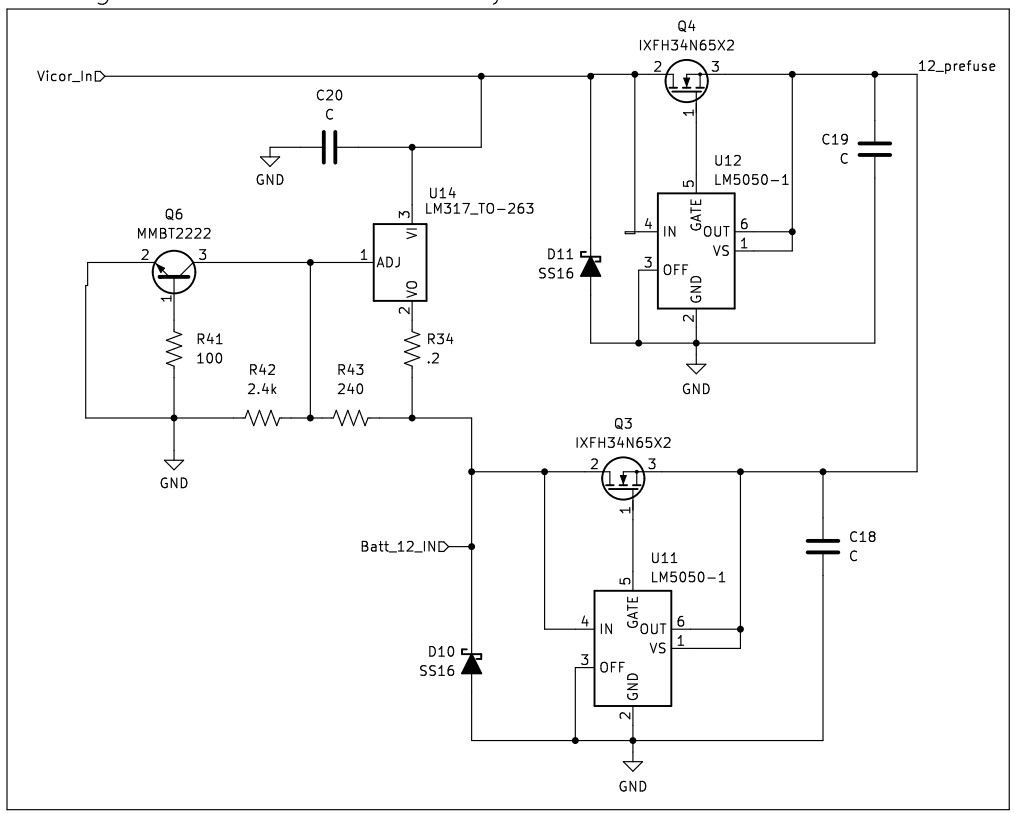
Main relay for LV



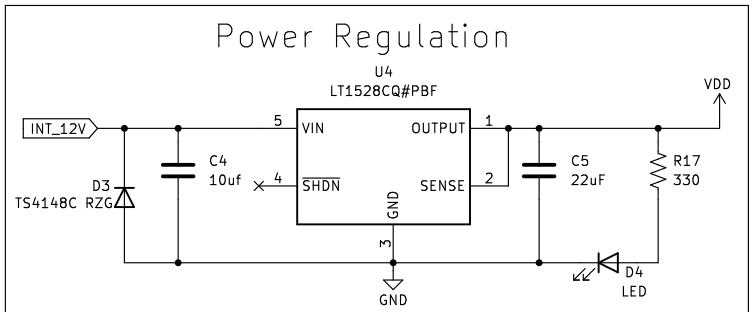
Fusing



Charger For Vicor to Battery

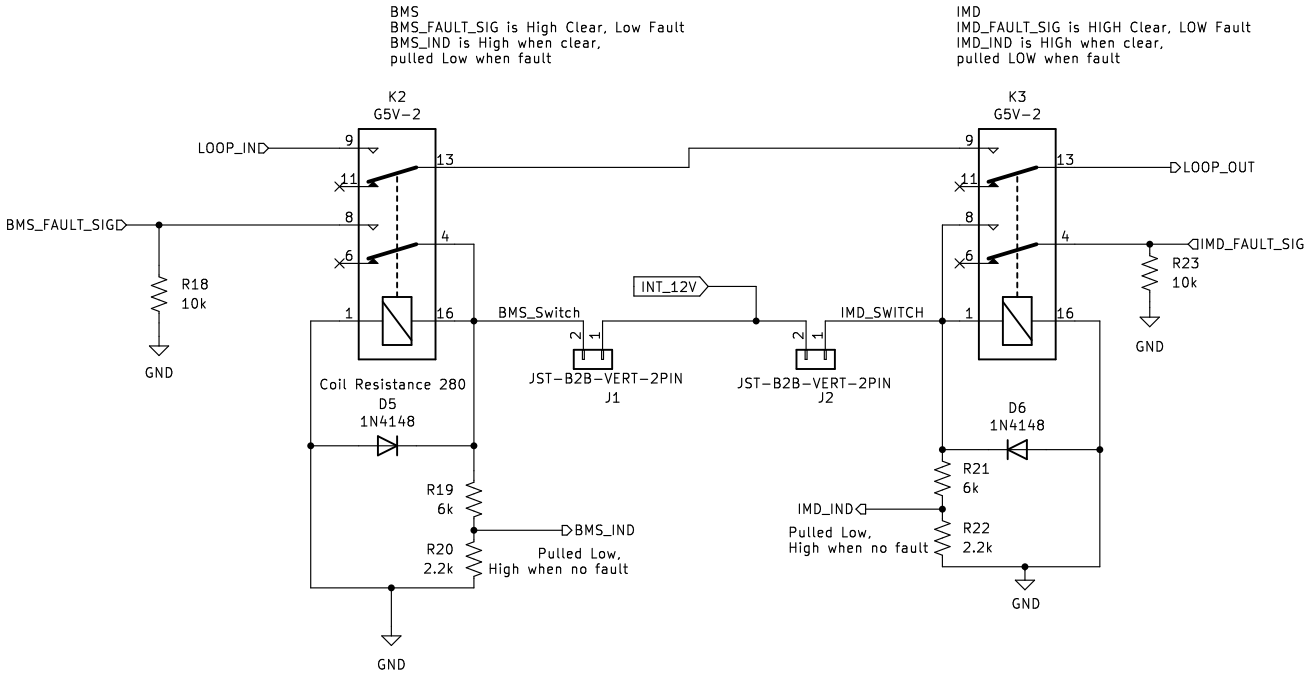


Power Regulation



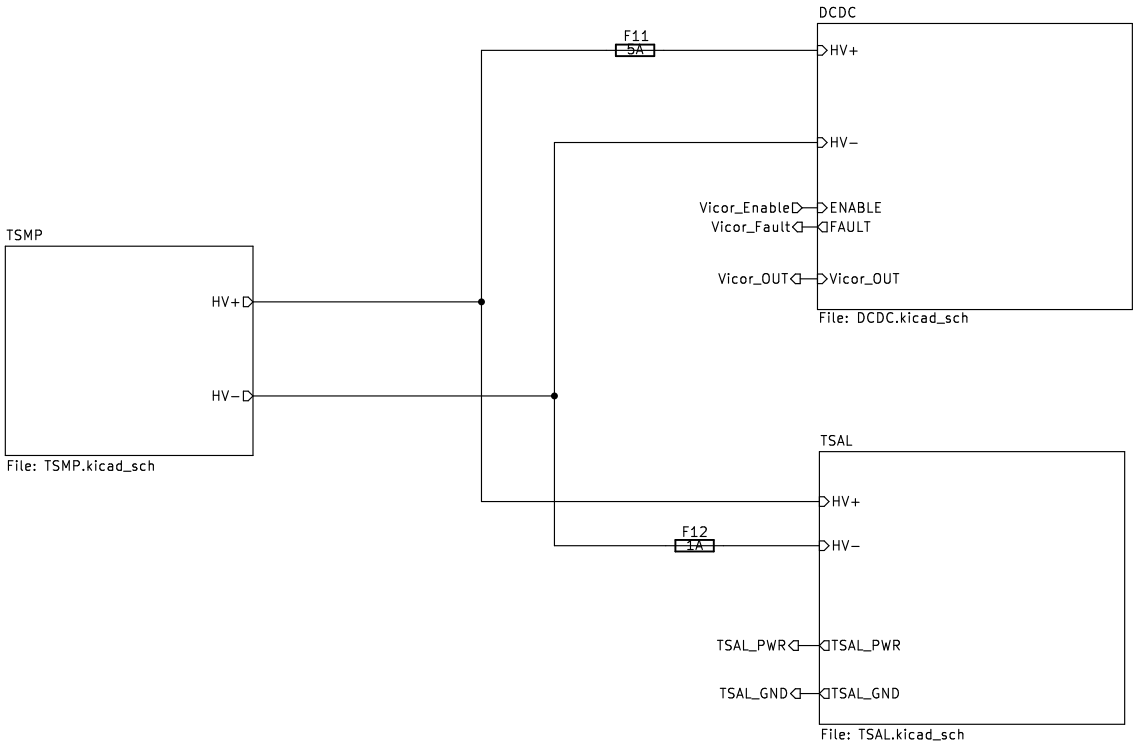
Description:
Main board that do it all.

Title: FUSING	**Designer: Colin Grund**	
Sheet: Fusing	File: Fusing.kicad_sch	
Size: A	Date: 2023-05-15	**Rev: V 1.1**
AERO	KiCad E.D.A. kicad 7.0.8	Id: 3/10



Description:
Main board that do it all.

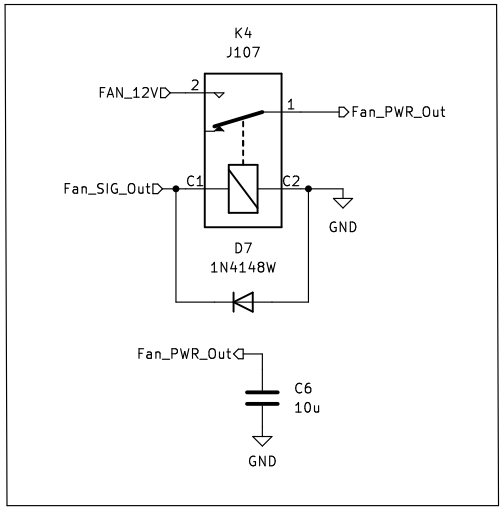
Title:	**Designer: Colin Grund**	
Sheet: Latching	File: Latching.kicad_sch	
Size: A	Date: 2023-05-15	**Rev: V 1.1**
AERO	KiCad E.D.A. kicad 7.0.8	Id: 4/10



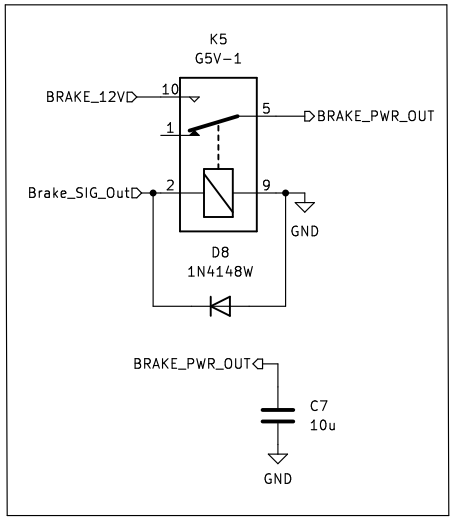
Description:
Main board that do it all.

Title:	**Designer: Colin Grund**	
Sheet: High Voltage	File: High Voltage.kicad_sch	
Size: A	Date: 2023-05-15	**Rev: V 1.1**
AERO	KiCad E.D.A. kicad 7.0.8	Id: 6/10

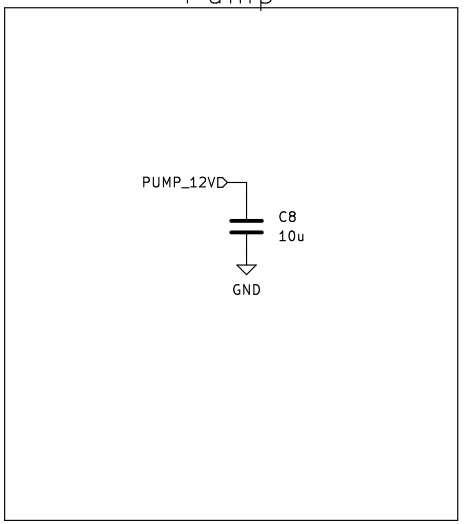
FAN



Brake



Pump

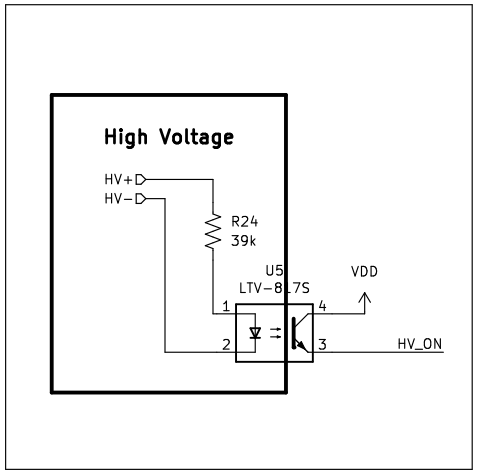


Description:

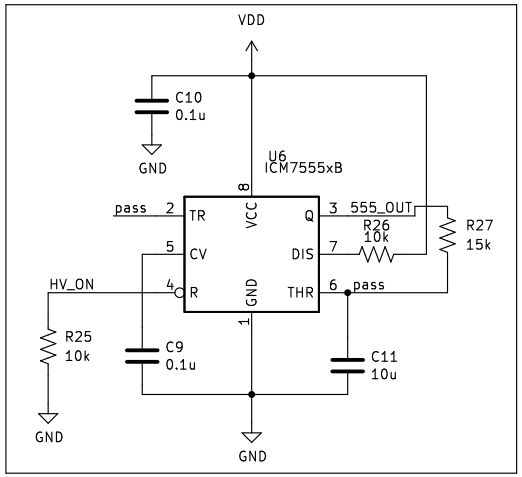
Main board that do it all.
Pump always on, Fans temp controlled by microprosessor
Brake low power relay

Title: Cooling	**Designer: Colin Grund**	
Sheet: Cooling	File: Cooling.kicad_sch	
Size: A	Date: 2023-05-15	**Rev: V 1.1**
AERO	KiCad E.D.A. kicad 7.0.8	Id: 7/10

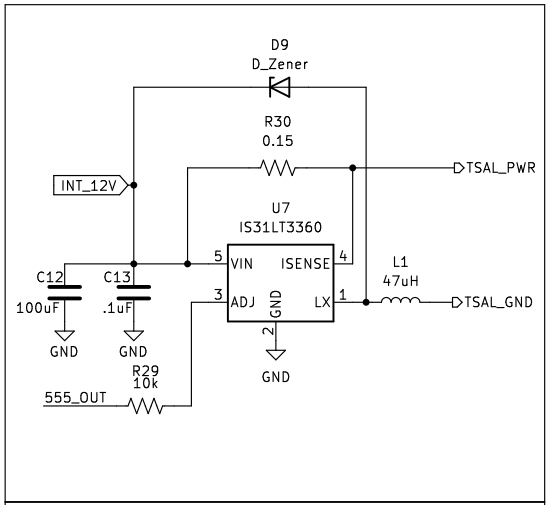
HV Input

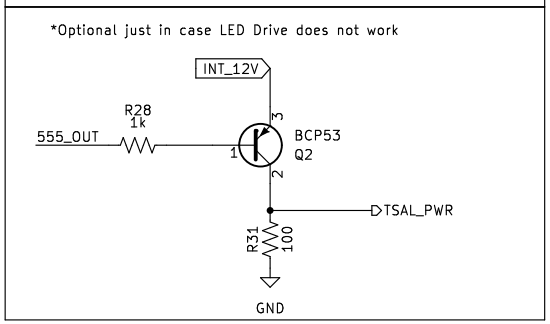


Timer



LED Driver



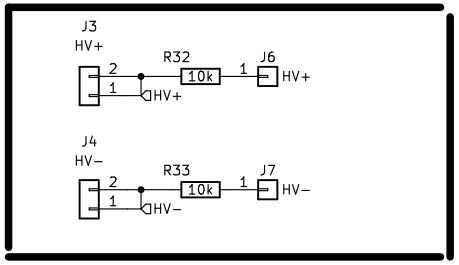


Description:
TSAL flashes around 4 Hz

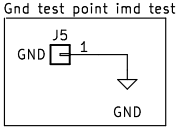
Title:	**Designer: Colin Grund**	
Sheet: TSAL	File: TSAL.kicad_sch	
Size: A	Date: 2023-05-15	**Rev: V 1.1**
AERO	KiCad E.D.A. kicad 7.0.8	Id: 8/10

TSMP!

Power Resistors 10k Wirewound

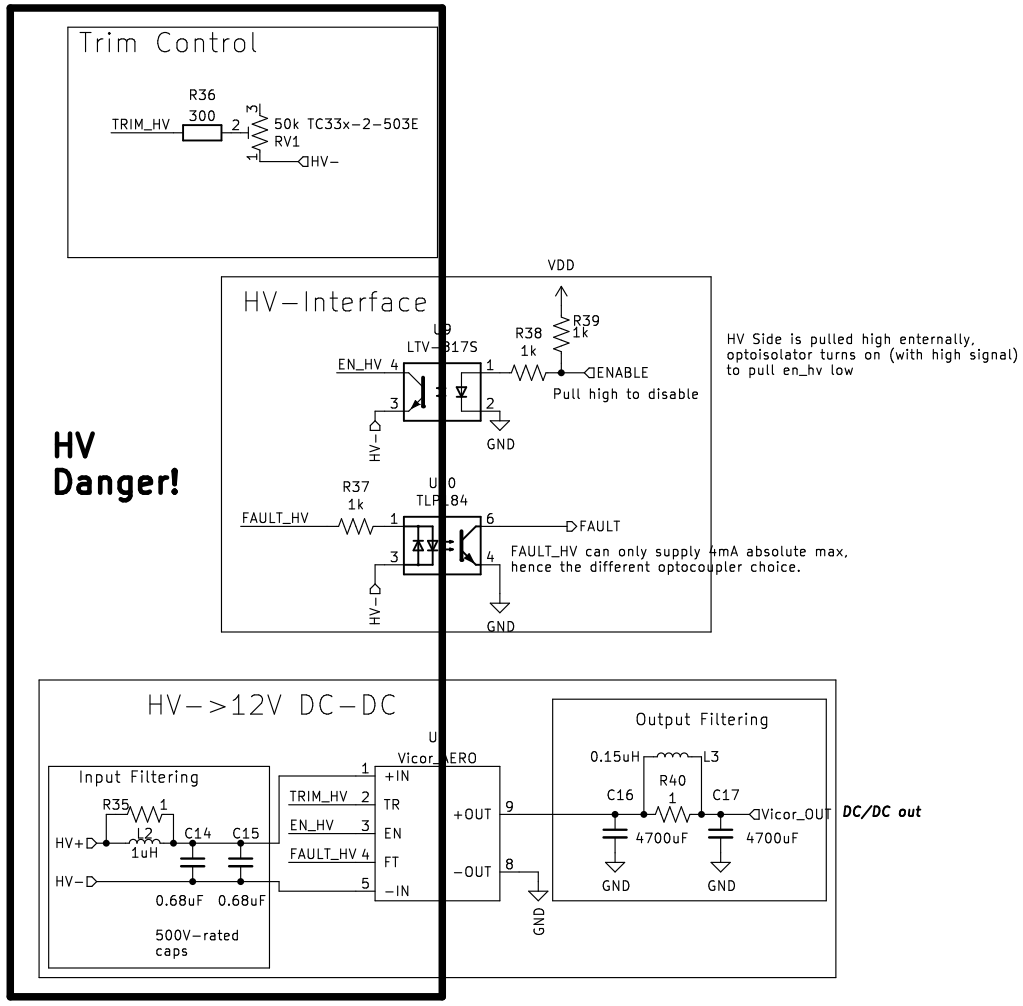


Gnd test point imd test



Description:
High voltage connnection to board as well as TSMP and gnd

Title: TSMP	**Designer: Colin Grund**	
Sheet: TSMP	File: TSMP.kicad_sch	
Size: A	Date: 2023-05-15	**Rev: V 1.1**
AERO	KiCad E.D.A. kicad 7.0.8	Id: 9/10



Description: DC/DC input	Willem Hillier UVM AERO 3/5/2019	
Title:	**Designer: Willem Hillier**	
Sheet: DCDC	File: DCDC.kicad_sch	
Size: A	Date: 2023-05-15	**Rev: V 1.1**
AERO	KiCad E.D.A. kicad 7.0.8	Id: 9/10

Power

J8
Conn_01x14

14	Batt_12_IN
13	Batt_12_IN
12	Batt_12_IN
11	Batt_12_IN
10	BRAKE_PWR_OUT
9	
8	GND
7	
6	FAN_PWR_OUT
5	RINE_12V
4	BMS_12V
3	
2	PUMP_12V
1	BMS_FAN_PWR_OUT

Other Sensor Input

J13
Conn_01x14

14	LoRa_RX
13	LoRa_TX
12	GPS_RX
11	BL_STRAIN0
10	Pedal_1
9	IMU_RX
8	GPS_TX
7	RBrake
6	PUMP_TEMP_OUT
5	IMU_TX
4	BL_STRAIN1
3	FBrake
2	Pedal_0
1	PUMP_TEMP_IN

Wheel Sensors

J11
Conn_01x23

23	BL_SPEED
22	BR_SPEED
21	FR_SPEED
20	GND
19	BR_STRAIN0
18	FL_STRAIN1
17	FL_SUS
16	FR_SUS
15	FL_SPEED
14	FR_TEMP
13	BR_STRAIN1
12	RPi_RX
11	RPi_TX
10	FL_STRAIN0
9	FR_STRAIN0
8	BL_TEMP
7	BL_SUS
6	STEERING
5	BR_TEMP
4	BR_SUS
3	GND
2	FL_TEMP
1	FR_STRAIN1

Saftey Loop

J9
Conn_01x08

8	IMD_FAULT_SIG
7	BRB_RTN
6	BMS_FAULT_SIG
5	TSV
4	SSOK
3	BRB_LOOP
2	TSAL_GND
1	TSAL_PWR

Dash I/O

J12
Conn_01x14

14	Coast_Regen
13	Brake_Regen
12	
11	GND
10	RTD_BUZZER_OUT
9	IMD_Fault_ind
8	BMS_Fault_ind
7	GND
6	RTD_LED
5	DRIVE_MODE_BTTN
4	DRIVE_MODE_LED
3	START_BTTN
2	CAN_H
1	CAN_L

CAN Test Point

Conn_01x02
J10

2	CAN_H
1	CAN_L

GND

Conn_01x02
J15

2	
1	GND

Description:
All Connectors in and out

Title:	**Designer: Colin Grund**	
Sheet: Connectors	File: Connectors.kicad_sch	
Size: A	Date: 2023-05-15	**Rev: V 1.1**
AERO	KiCad E.D.A. kicad 7.0.8	Id: 10/10