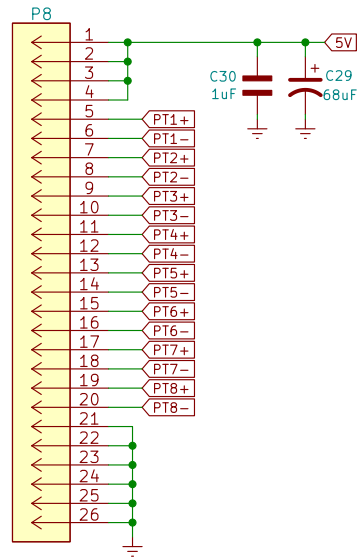
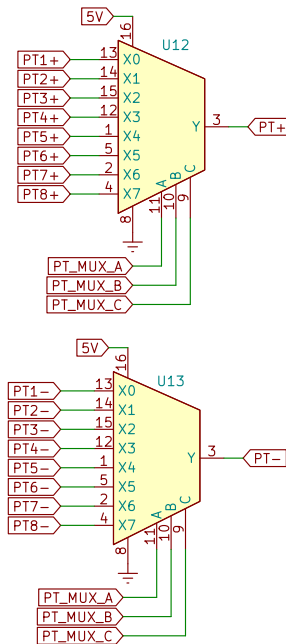


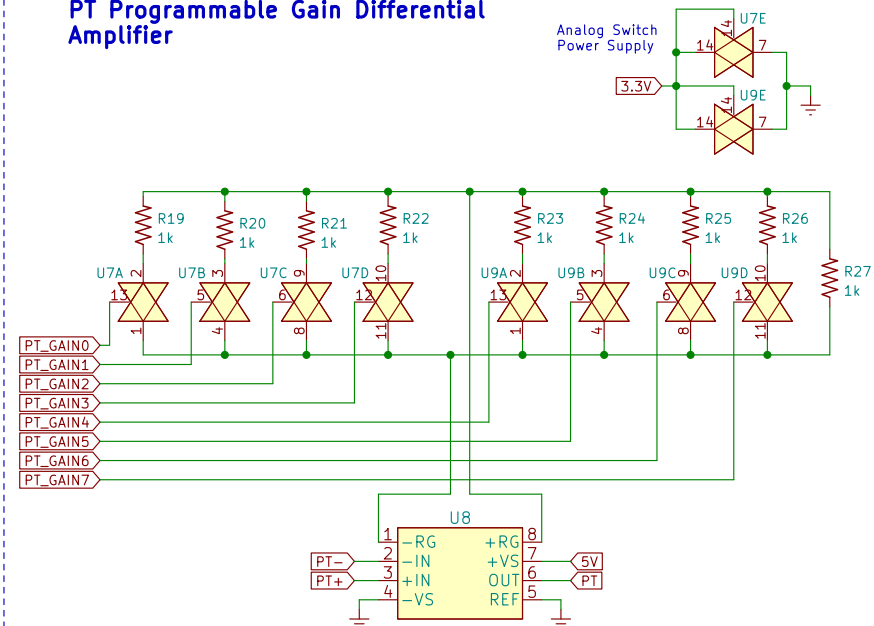
## Pressure Transducer Connectors



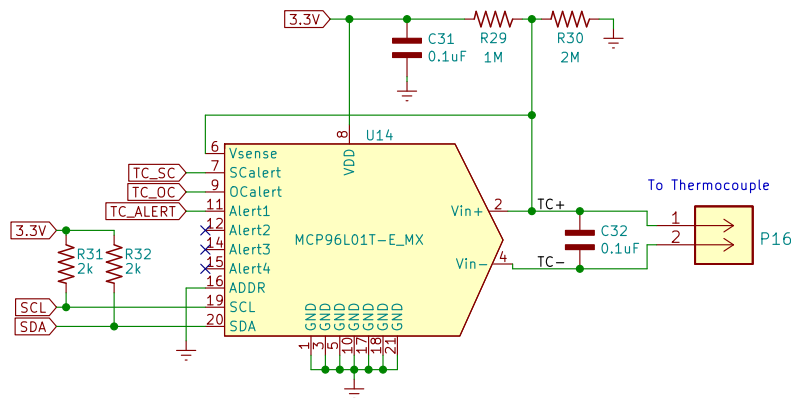
## PT Analog Multiplexers



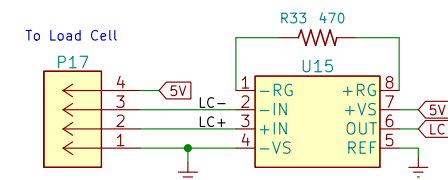
## PT Programmable Gain Differential Amplifier



## Thermocouple Cold Junction Compensation



## Load Cell Amplifier



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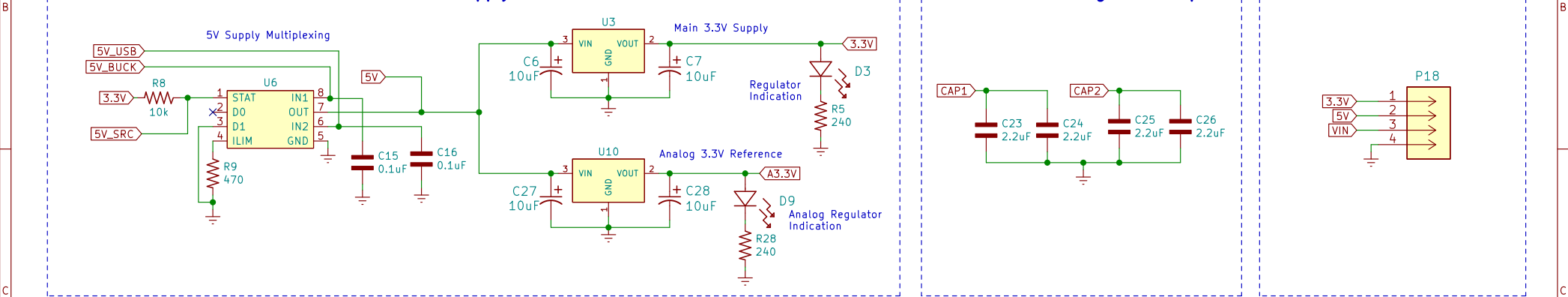
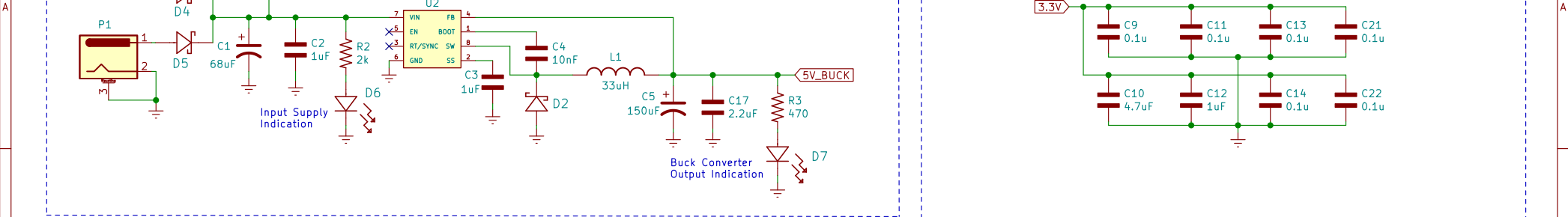
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The image contains two circuit diagrams. The left diagram is a 5V Buck Converter. It features a source selector with two inputs, V\_HEAD and a ground connection, each passing through a diode (D4, D5) to the VIN pin of a buck converter IC (U2). The IC has pins for VIN, EN, FB, BOOT, RT/SYNC, SW, and GND. Input components include a 68uF capacitor (C1), a 1uF capacitor (C2), and a 2k resistor (R2) in series with the VIN pin. A diode (D6) is connected to the SW pin. The output of the converter is taken from the SW pin, passing through a 10nF capacitor (C4) and a 33uH inductor (L1) to a 150uF output capacitor (C5). The output is also connected to a 470 ohm resistor (R3) and a diode (D7) for output indication. The right diagram shows microcontroller decoupling caps. It features a 3.3V input connected to a network of capacitors: C9 (0.1uF), C10 (4.7uF), C11 (0.1uF), C12 (1uF), C13 (0.1uF), C14 (0.1uF), C21 (0.1uF), and C22 (0.1uF).



## Power Connector

The diagram shows a power connector labeled 'P7' with two pins. Pin 1 is connected to a component labeled 'V\_HEAD'. Pin 2 is connected to a ground symbol.

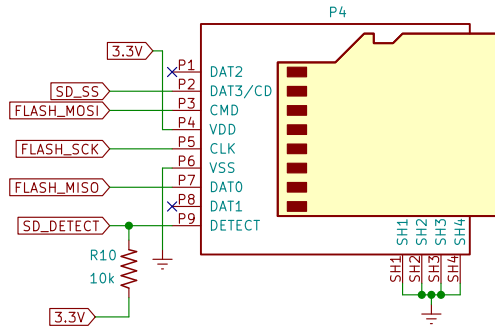
## Test Points

The diagram shows the power supply section of the PCB with the following test points and connections:

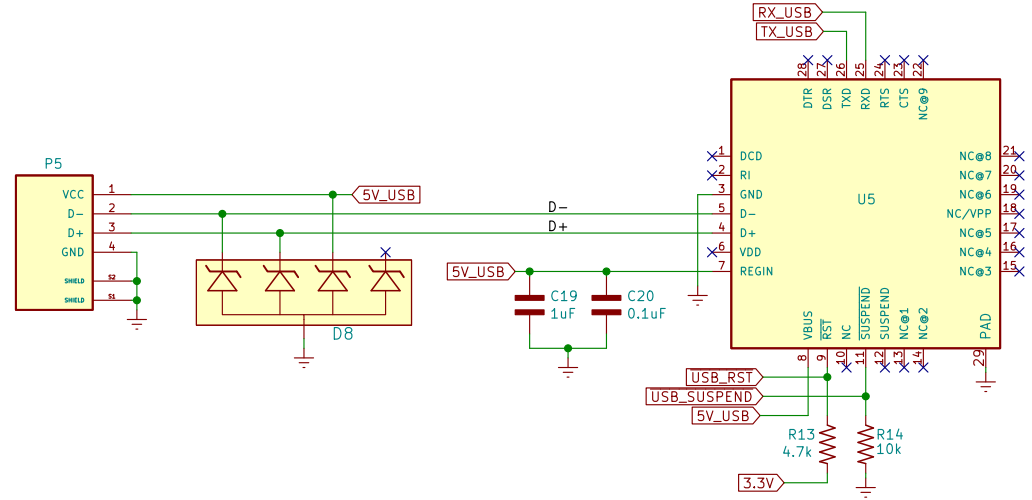
- TP10**: Connected to the **5V\_SRC** pin.
- TP4**: Connected to the **5V** pin.
- TP5**: Connected to the **3.3V** pin.
- TP3**: Connected to the **GND** pin.
- TP11**: Connected to the **5V\_BUCK** pin.
- TP2**: Connected to the **VIN** pin.

Author: Colton Acosta		
<b>Sun Devil Rocketry</b>		
Sheet: /Power/		
File: power.kicad_sch		
<b>Title: Engine Microcontroller Power Supply</b>		
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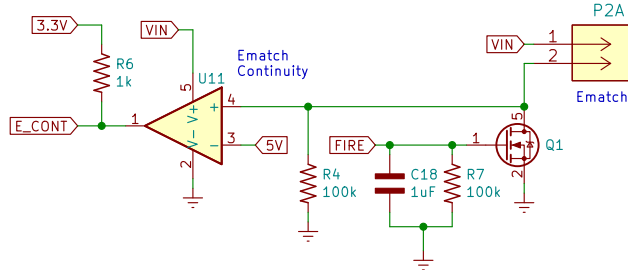
## SD Card



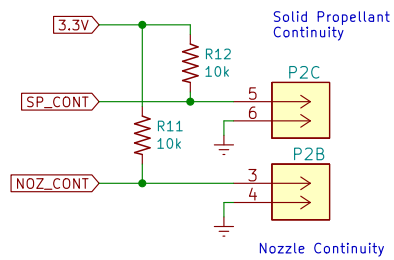
## USB Transceiver



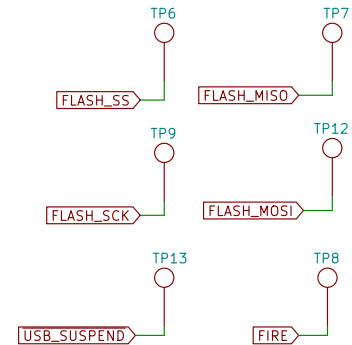
## Ignition



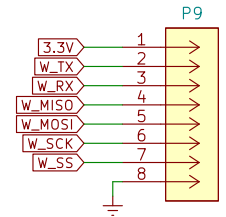
## Ignition Continuity



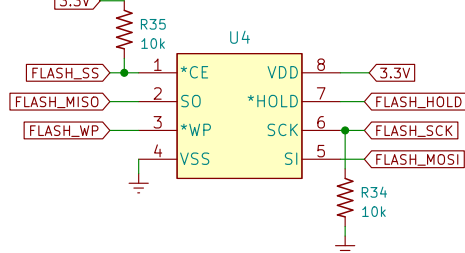
## Test Points



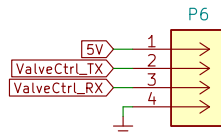
## Wireless Interface



## Flash



## Valve Controller Serial Interface



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