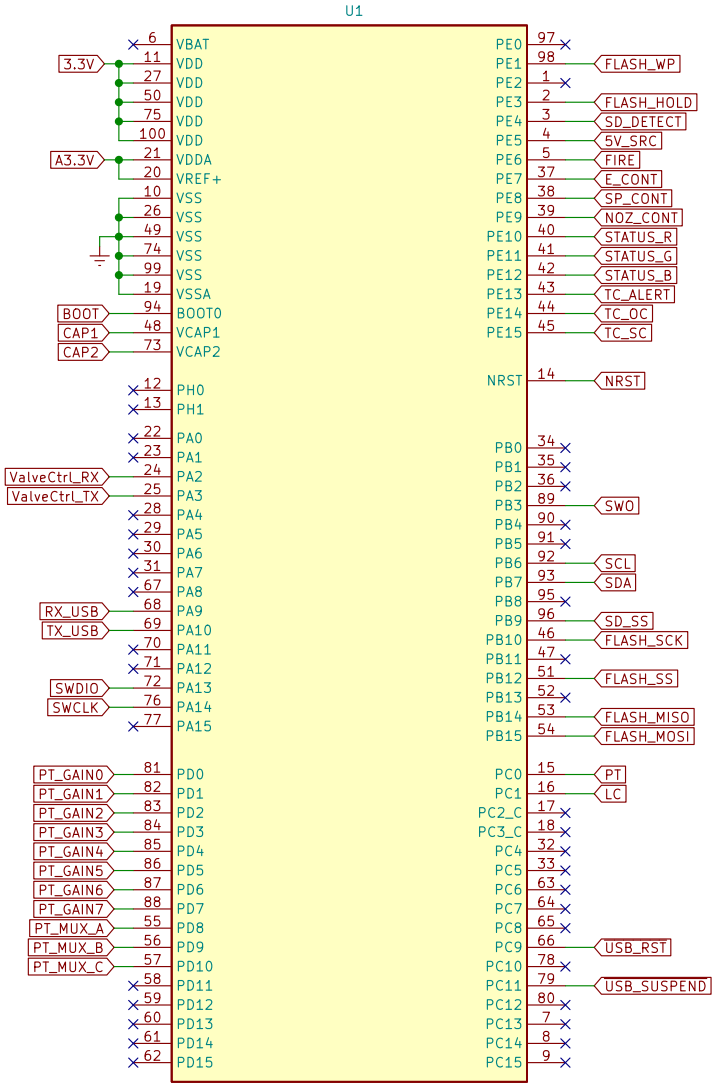
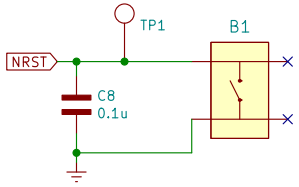
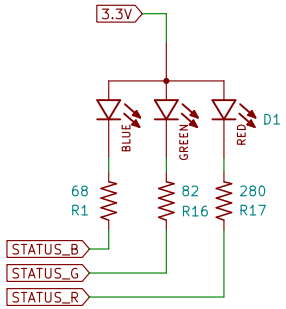
Microcontroller



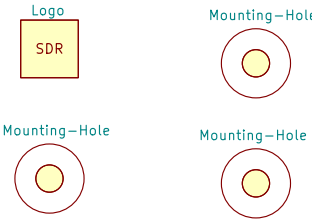
MCU Reset



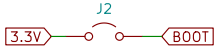
Firmware Status LED



Miscellaneous



Boot Setting



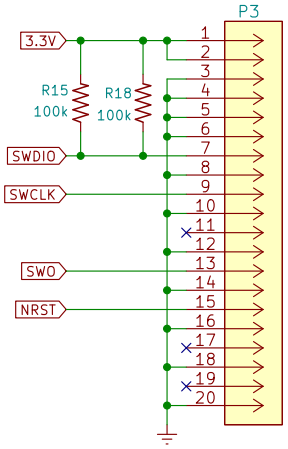
Power

File: power.kicad_sch

Sensors

File: Sensors.kicad_sch

SWD Programmer



Flash

USB

SD Card

Ignition

Valve Controller

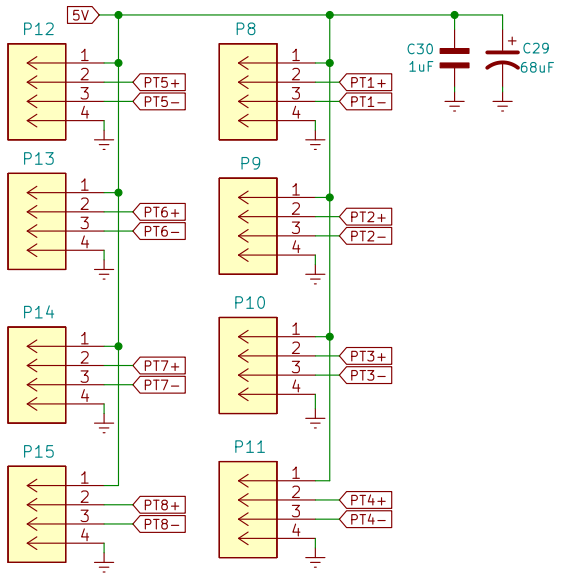
Author: Colton Acosta
Sun Devil Rocketry

Sheet: /
File: Engine-Controller.kicad_sch

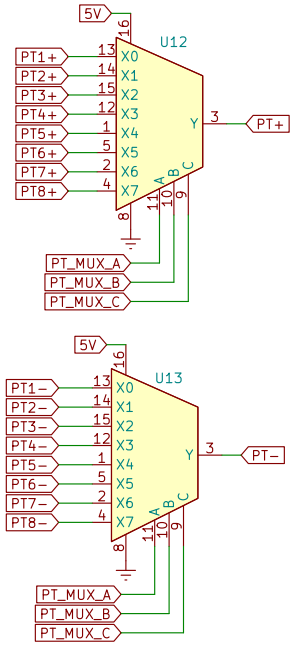
Title: Engine Controller Microcontroller Board

Size: A4	Date: 2021-06-26	**Rev: 1.0**
KiCad E.D.A. kicad (6.0.5)		Id: 1/4

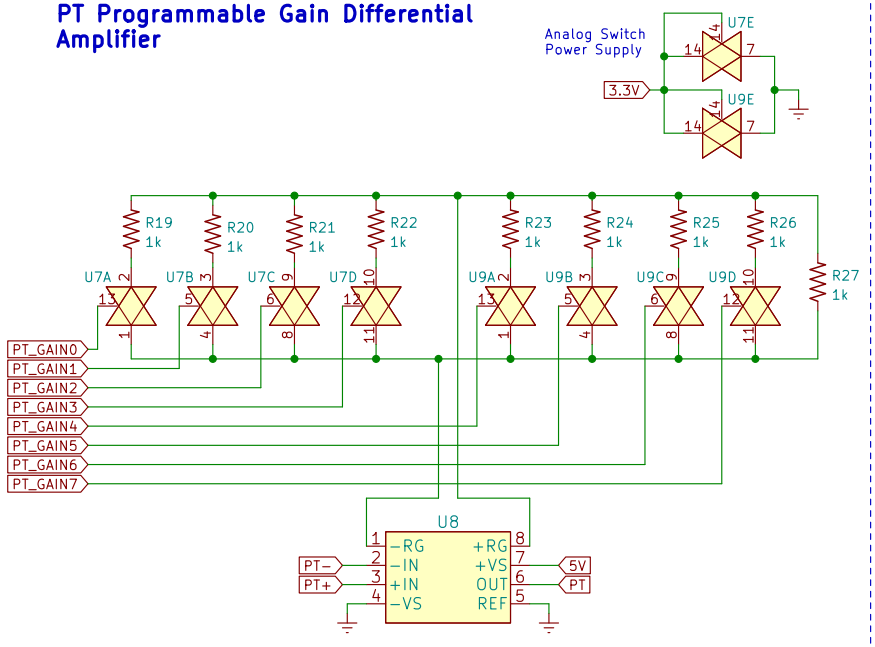
Pressure Transducer Connectors



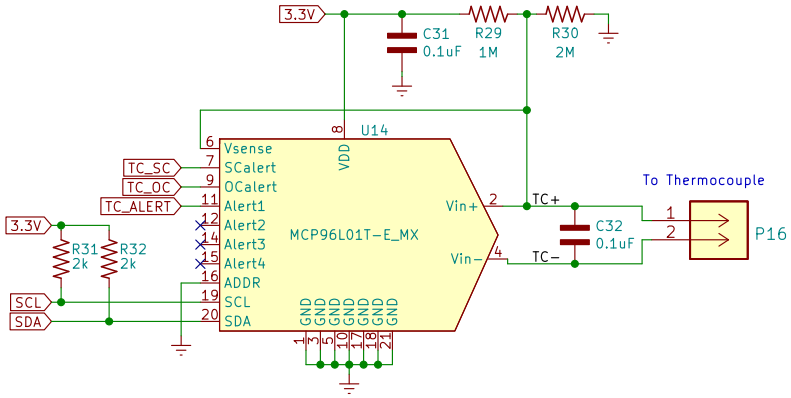
PT Analog Multiplexers



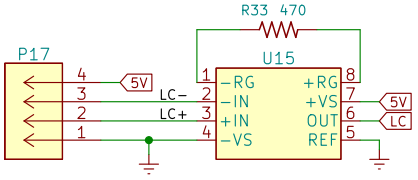
PT Programmable Gain Differential Amplifier



Thermocouple Cold Junction Compensation



Load Cell Amplifier



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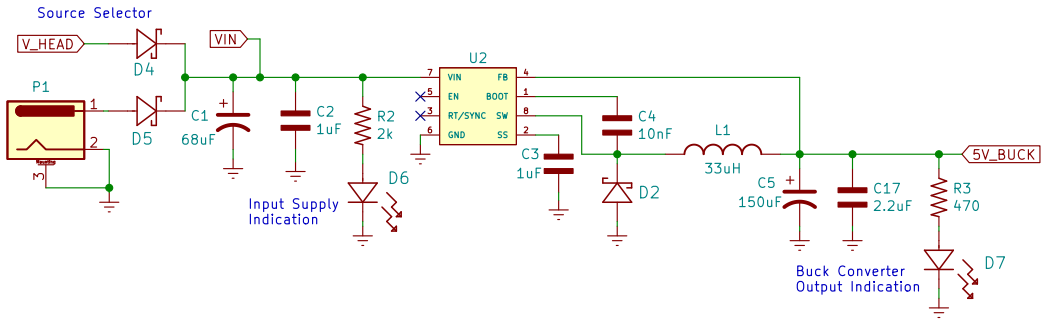
File: Sensors.kicad_sch

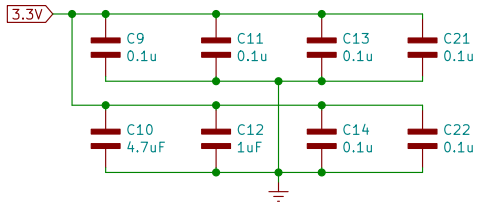
Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (6.0.5)		Id: 4/4

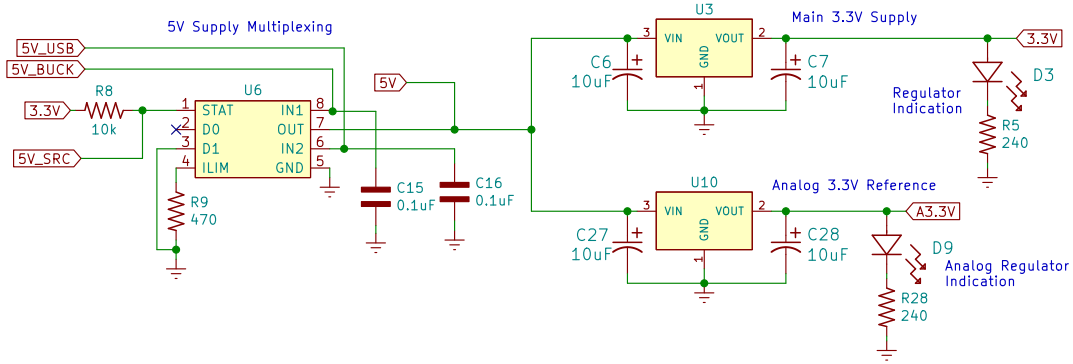
5V Buck Converter



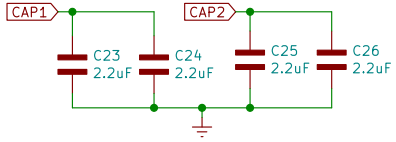
Microcontroller Decoupling Caps



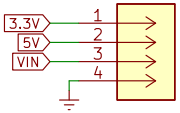
3.3V Supply



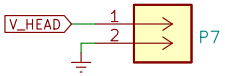
MCU Internal Regulator Caps



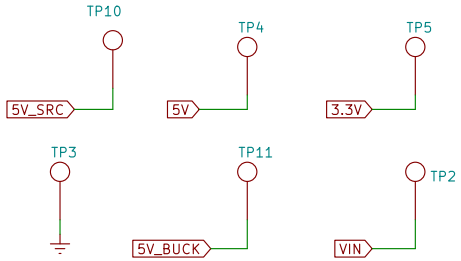
Power Pin Header



Power Connector



Test Points

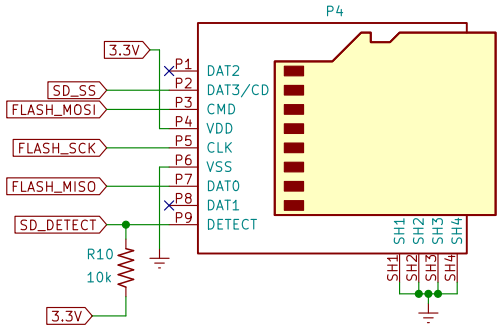


Author: Colton Acosta
Sun Devil Rocketry
Sheet: /Power/
File: power.kicad_sch

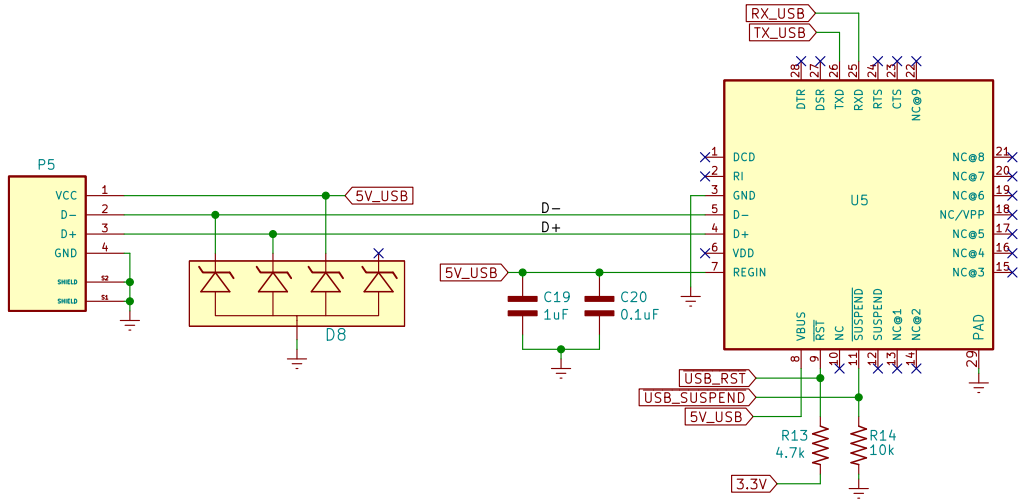
Title: Engine Microcontroller Power Supply

Size: A4	Date:	**Rev: 1.0**
KiCad E.D.A. kicad (6.0.5)		Id: 6/4

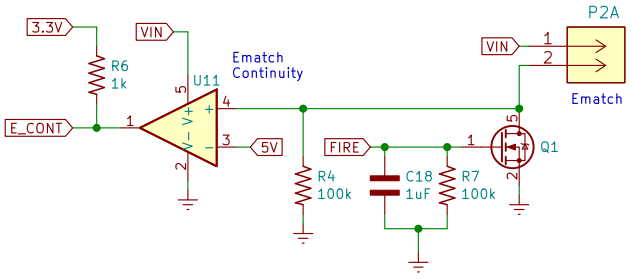
SD Card



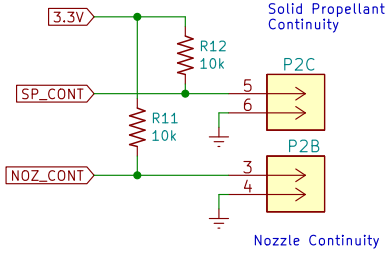
USB Transciever



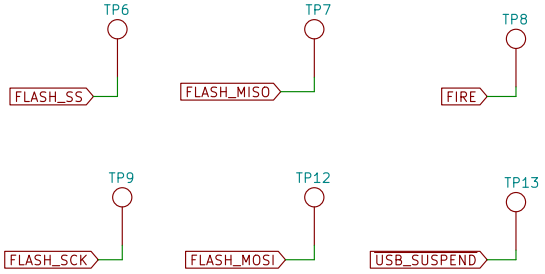
Ignition



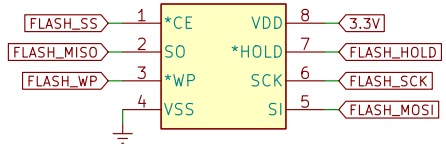
Ignition Continuity



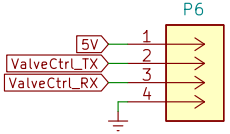
Test Points



Flash



Valve Controller Serial Interface



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File: Page2.kicad_sch

Title:

Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad (6.0.5)		Id: 6/4