CU Boulder Space Minor Balloon Payload PCB Refactor

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March 214, 2025
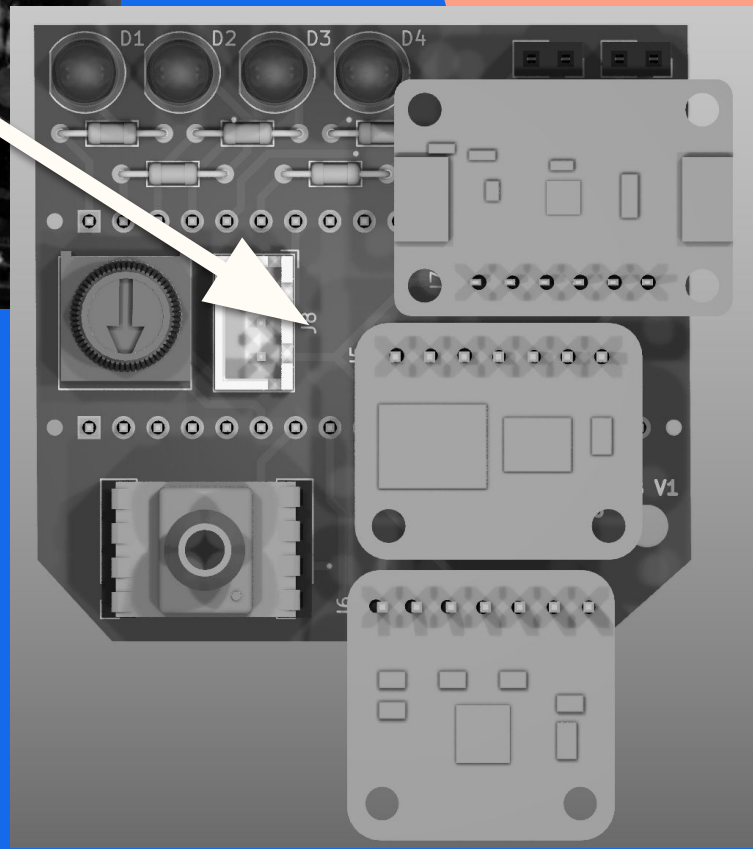
Goals:

Cheaper

$111.77 vs $147
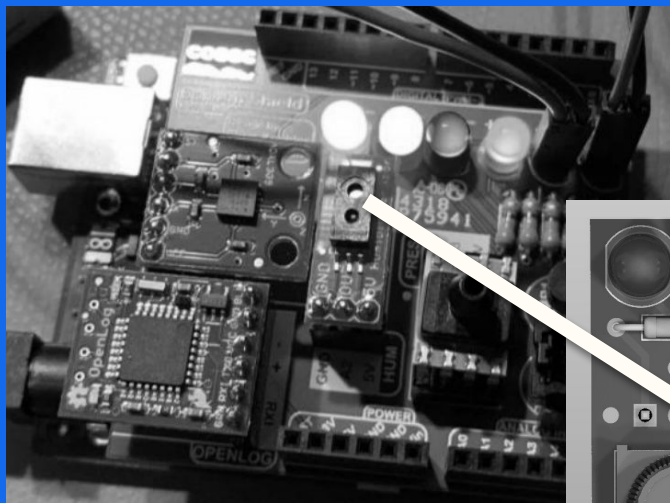
Lighter

95.37g vs 137.62g
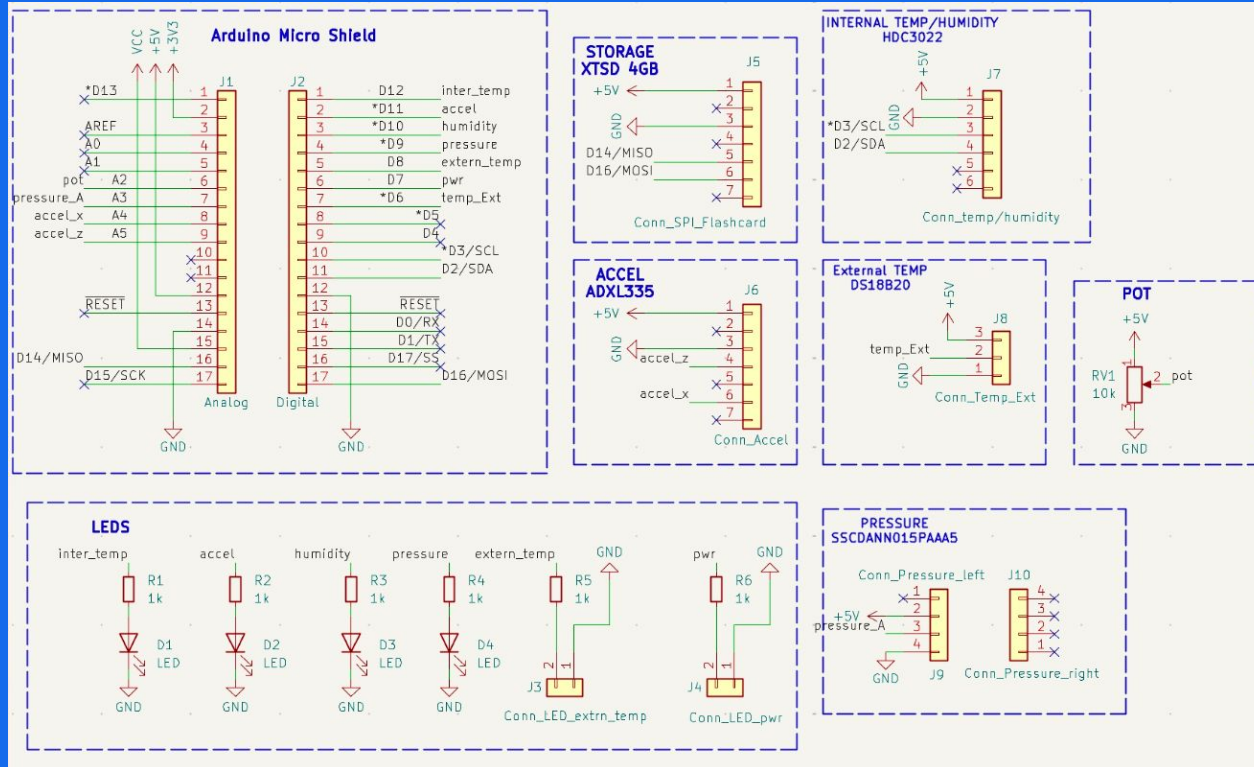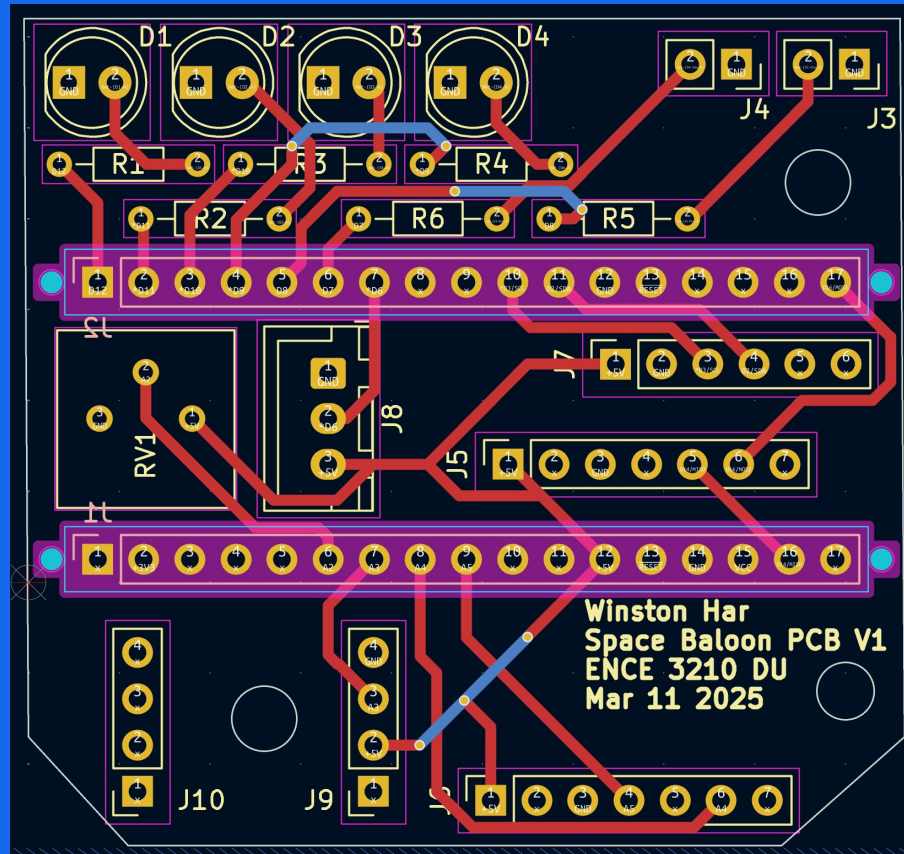
Efficiency

1.12w vs 1.19w (active)

Smaller

Components

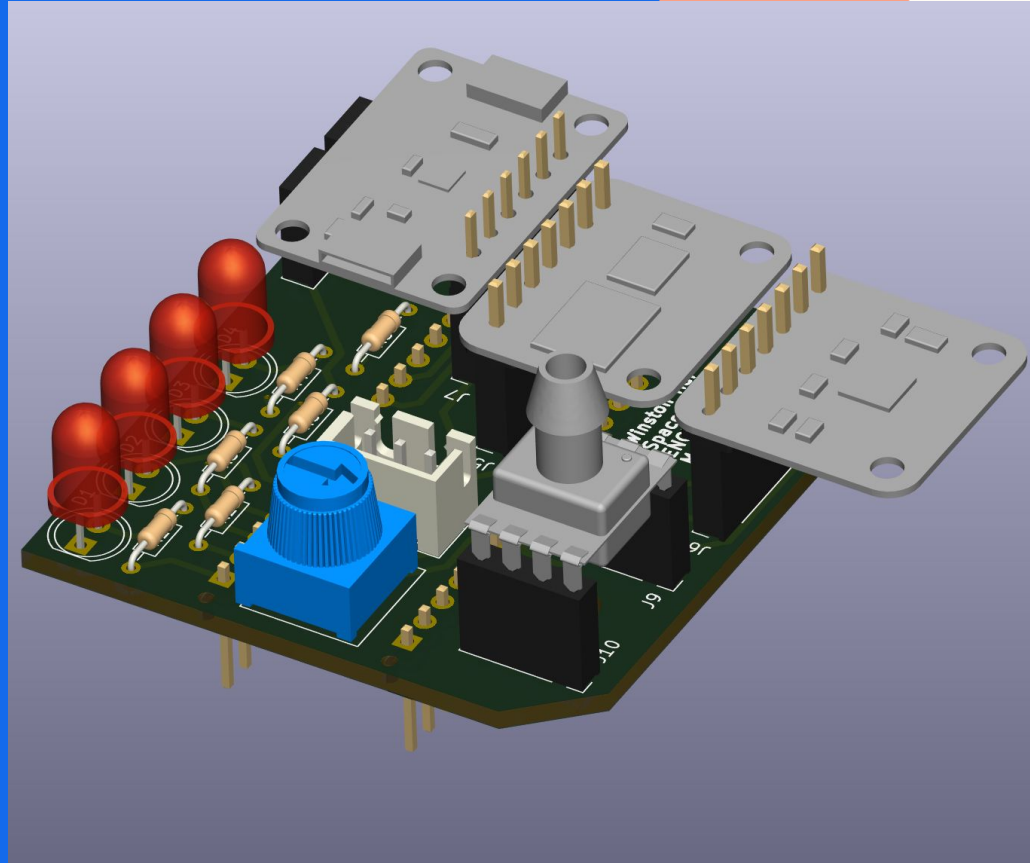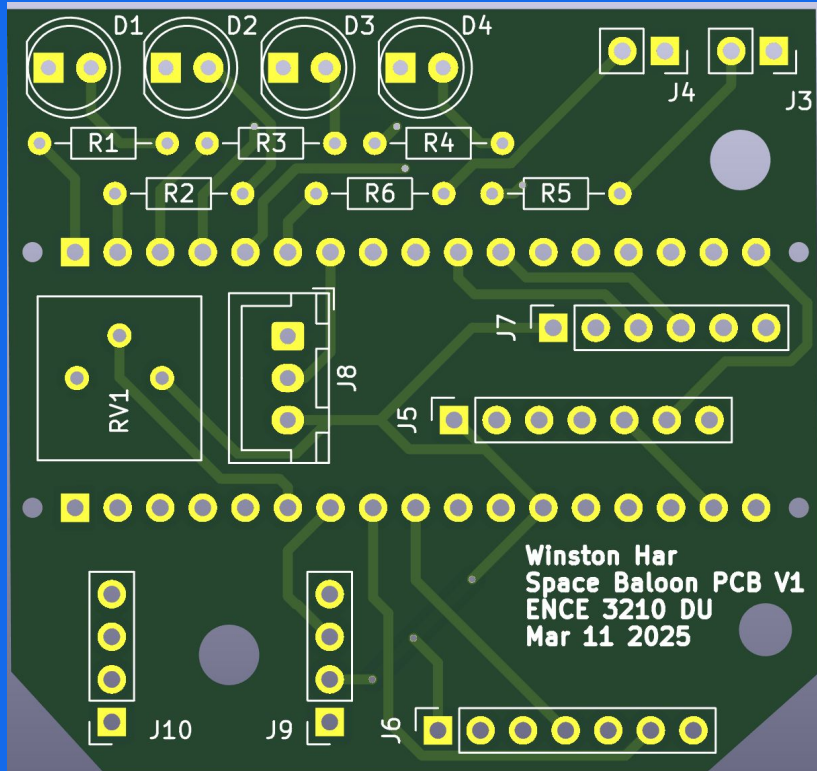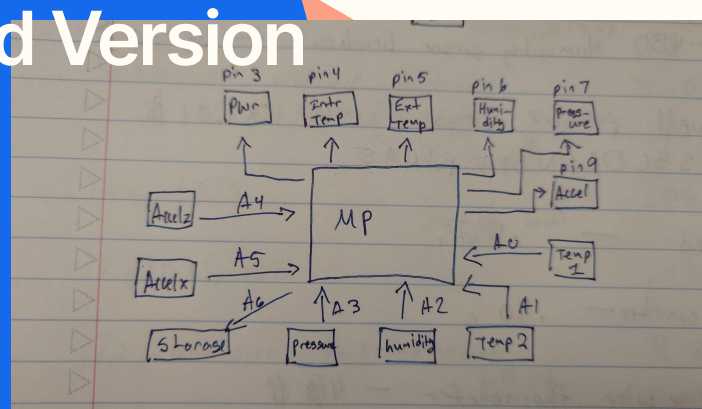|	
Power switch-barrel jack	Power switch-barrel jack
9V Alkaline Battery	9V Li-Ion Battery
Sparkfun OpenLog Data Logger	Adafruit SPI Flash XTSD 4GB
Kingston 4GB SD Card	
Sparkfun Triple Axis Gyro	Adafruit ADXL335
Sparkfun HIH-4030 Humidity Sensor	Adafruit HDC3022 Temp + Humidity Sensor
Honeywell Pressure Sensor	Honeywell Pressure Sensor
6x LED	6x LED
Pot	Pot
2x Onewire Thermometer	1x Onewire Thermometer
Arduino Uno	Arduino Micro

Schematic

PCB Layout

Renders!

Winston Har
Space Baloon PCB V1
ENCE 3210 DU
Mar 11 2025

Block/Code Diagram

Old Version

Thanks!