

MCU

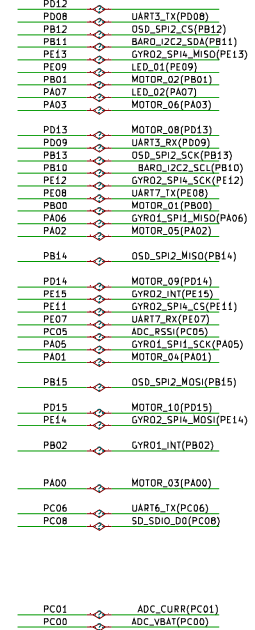
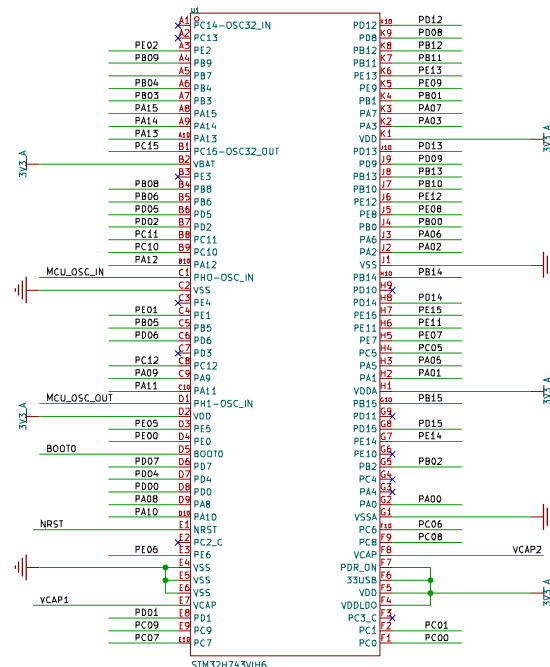
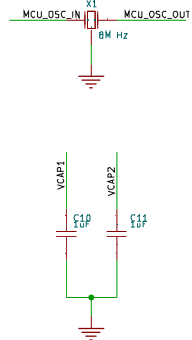
File: /Users/peter/Projects/MountainEagleH743/1_MCU.kicad_sch

POWER

File: /Users/peter/Projects/MountainEagleH743/2_POWER.kicad_sch

HARDWARE

File: /Users/peter/Projects/MountainEagleH743/3_HARDWARE.kicad_sch



Not implemented:
ADC_EXTERNAL1_AIRS(PC04)
ADC_EXTERNAL2_VB2(PA04)
ADC_EXTERNAL3_CU2(PA07)
PINIO1(PD10)
PINIO2(PD11)

The top diagram shows the LDO regulator connected to BEC_5V and 3V3_A. The input capacitors are C12 (100nF) and C13 (100nF). The output capacitors are C14 (100nF) and C15 (100nF). The output is 3V3_A.

The bottom diagram shows the LDO regulator connected to BEC_5V and 3V3_GYRO. The input capacitors are C16 (100nF) and C17 (100nF). The output capacitors are C18 (100nF) and C19 (100nF). The output is 3V3_GYRO.

BUCK(Synchronous rectification)

VIN: 4.5 ~ 30V
VOUT: 0.6 ~ 30V
Imax: 5A

BEC_5V

According to calculations, it is actually 5.05V

BEC_9V

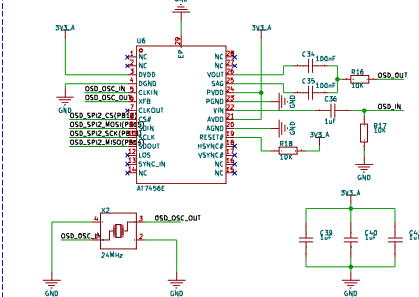
According to calculations, it is actually 8.6V

VIN: 4.5-30V
VOUT: 0.6-30V
Imax: 5A

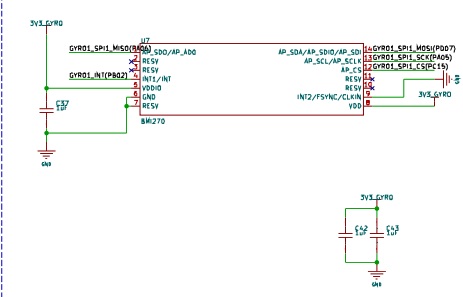
According to calculations,
it is actually 5.05V

According to calculations
it is actually 8.6V

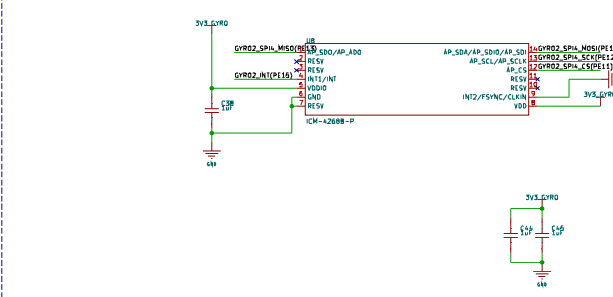
Video AT7456E (SPI2)



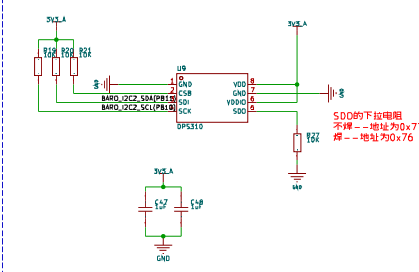
Gyro BMI270 (SPI1)



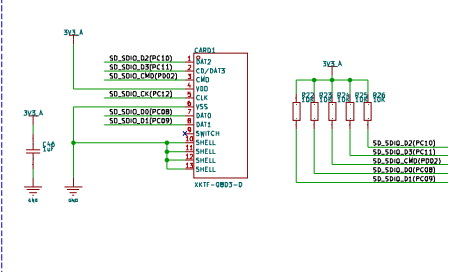
Gyro ICM42688P (SPI4)



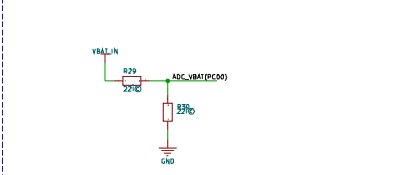
Barometer DPS310(I2C2)



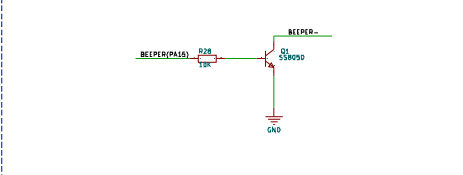
TF Card Slot (SDIO)



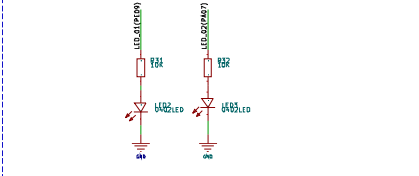
Battery Voltage Sensing



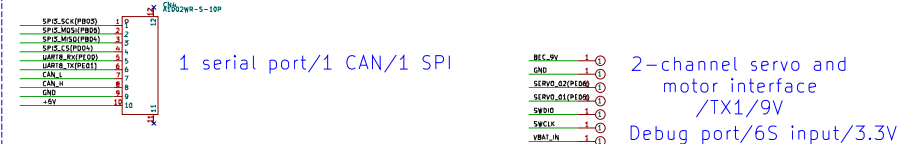
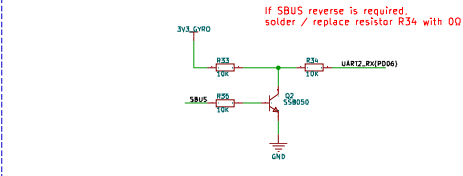
Active Buzzer



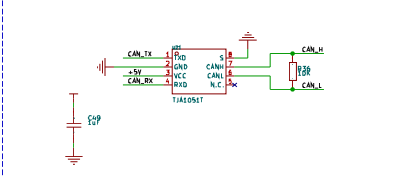
Indication LEDs



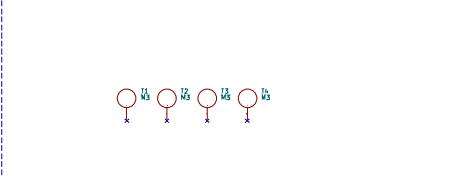
SBUS inversion



CAN



Screw Holes



Not Implemented:
ADC_EXTERNAL1_IN(PA04)
ADC_EXTERNAL1_OUT(PA05)
ADC_EXTERNAL3_IN(PA07)
PIND0(PD01)
PIND0(PD11)