

Servo Power Enable and PWM Control

Ematch 1 Enable & Fire

The diagram illustrates the circuit for Ematch 1 Enable & Fire. It features two MOSFETs, Q16 (SSM3J328R) and Q19 (NTR4003), and a third MOSFET, Q20 (SIS612EDNT-T1-GE3). The circuit is powered by BATTERY_PWR. Q16's gate is driven by a 10k resistor (R46) connected to BATTERY_PWR. Q16's drain is connected to a 12k resistor (R48) and the gate of Q19. Q19's gate is also connected to a 10k resistor (R50) connected to GND. Q16's source is connected to GND. Q19's source is connected to GND. The drain of Q19 is connected to a 10k resistor (R54) and the gate of Q20. Q20's gate is also connected to a 10k resistor (R52) connected to GND. Q20's drain is connected to a 10k resistor (R54) and the gate of Q16. Q20's source is connected to GND. The circuit is controlled by two inputs: EMATCH_1_FIRE (connected to Q19's gate) and EMATCH_1_CHECK (connected to Q20's gate). The output of the circuit is EMATCH_1_I, which is connected to a 1586038-2 component.

Ematch 2 Enable & Fire

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BATTERY_PWR

Q17

SSM3J328R

10k R47

12k R49

10k R51

10k R55

RED D13

R53

EMATCH_2_CHECK

EMATCH_2_FIRE

Q21

SIS612EDNT-T1-GE3

EMATCH_2_1586038-2

EMATCH_2_ARM

GND

Rev:
Id: 2/6

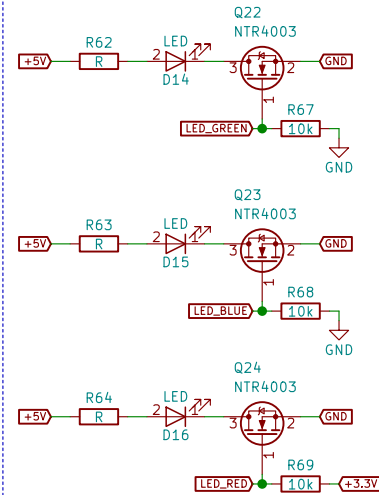
Teensy 3.6 Micocontroller

U11

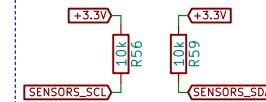


Teensy3.6

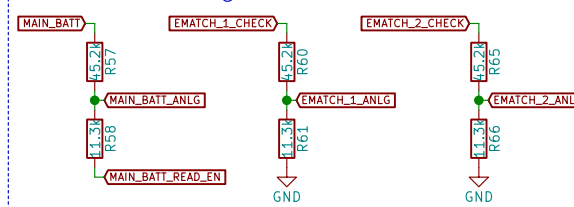
Indicator LEDs



I2C Pullup



Voltage Dividers



Sheet: /Controller/
File: Controller.sch

Title:

Size: A4

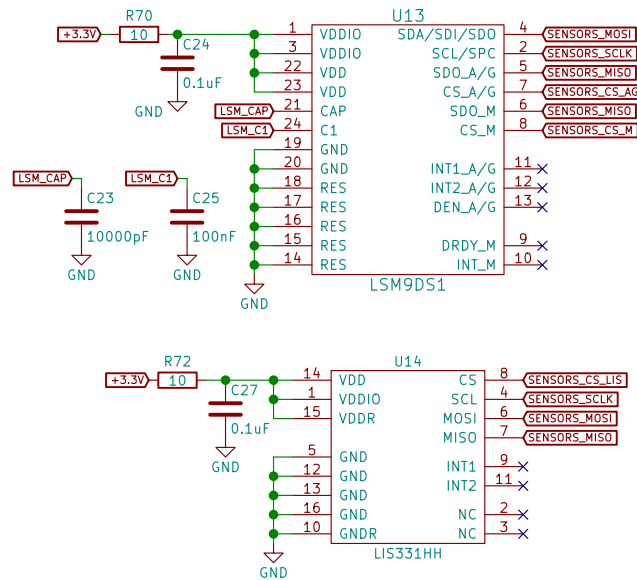
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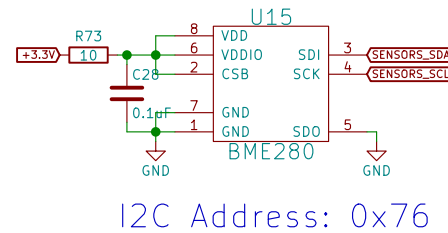
Rev:

Id: 3/6

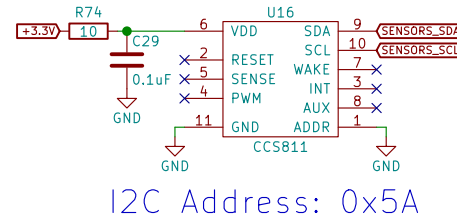
Accelerometer/ Magnetometer/ Gyro



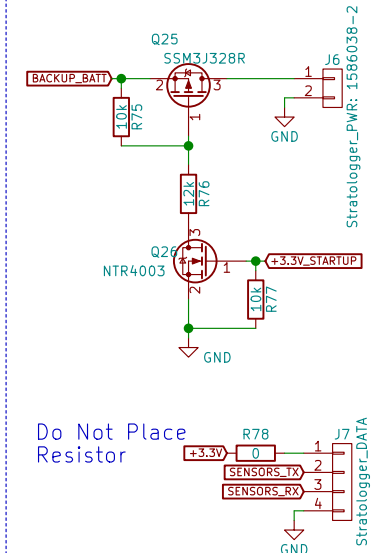
Temperature/ Pressure/ Humidity



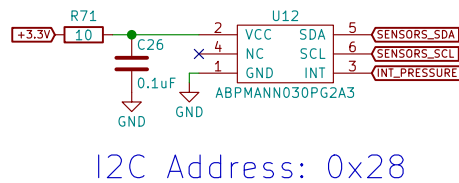
Air Quality



Stratologger Altimeter



Balloon Network Pressure



Sheet: /Sensors/
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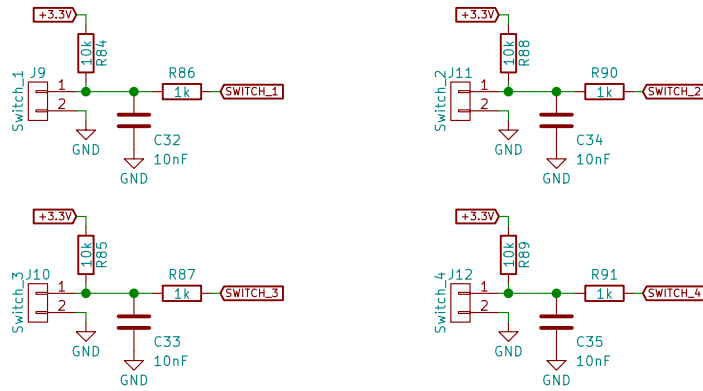
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Rev:
Id: 4/6



Rev:
Id: 5/6

Mechanical Deployment Detection Switches



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Id: 6/6