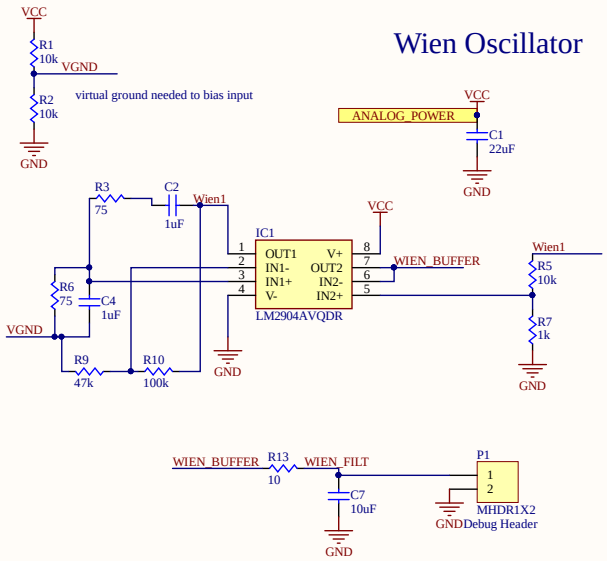
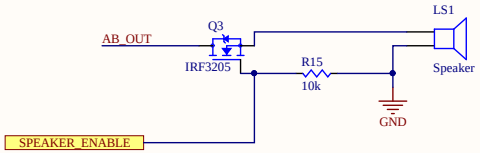
## Wien Oscillator

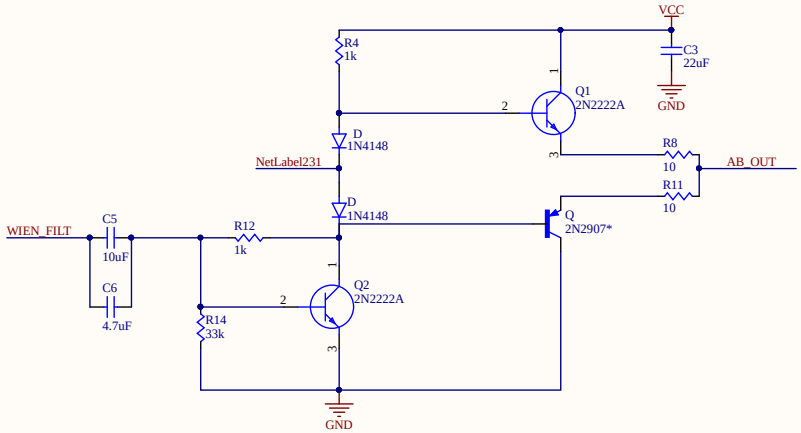



## Mosfet + Speaker




Need second mosfet to drive actual ab->speaker one with 5V for max current

## AB AMP

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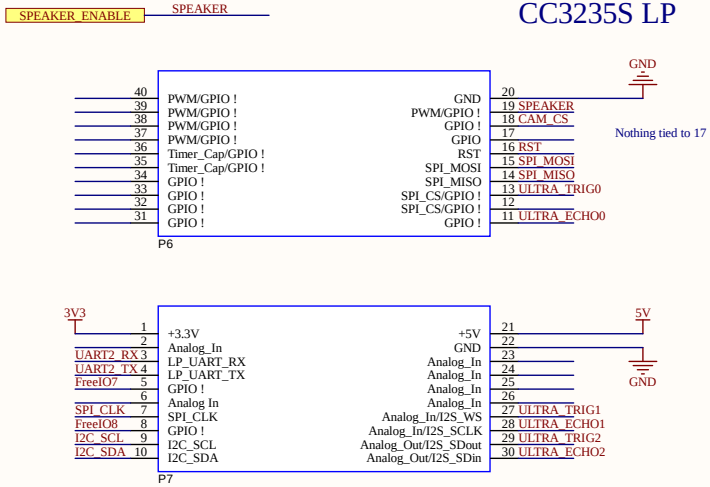
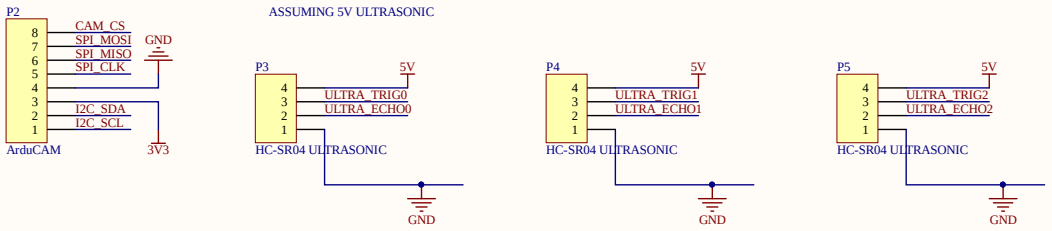
| Date: 9/24/2021 | | Sheet of |
| File: C:\Users\..\analog.SchDoc | | Drawn By: |

## CC3235S LP

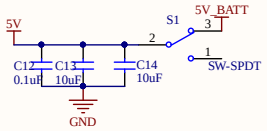



## OFF BOARD INTERFACE



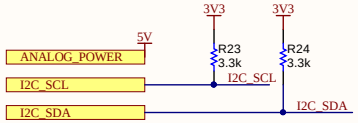

## BATTERY SWITCH

ALLOWS US TO CONNECT BOTH LAUNCHPAD 5V AND BATTERIES AT SAME TIME

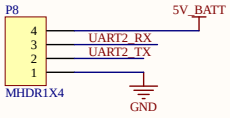



## JUMPERS

## PORTS




## MOTOR/POWER BOARD CONNECT

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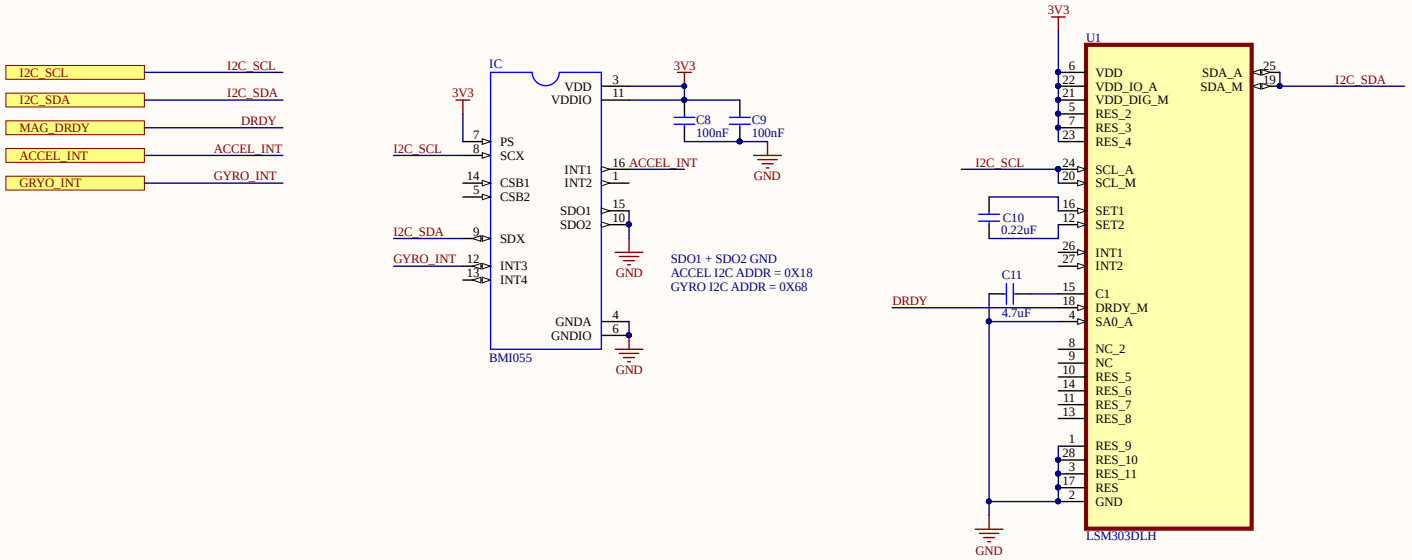
| File: C:\Users\..\mcu_main.SchDoc | | Drawn By: |

# I2C SENSORS

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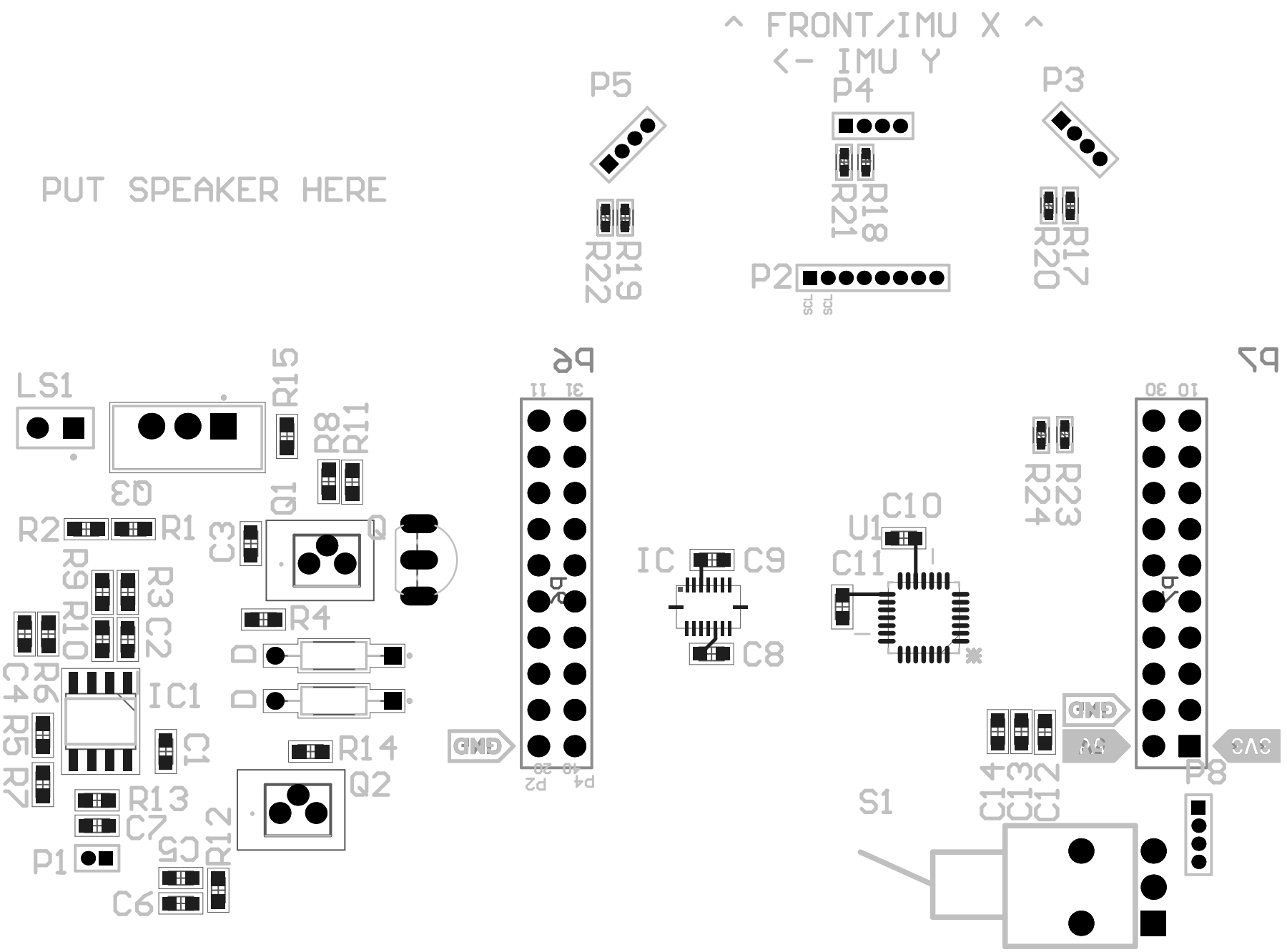
| File: C:\Users\..\sensors.SchDoc | | Drawn By: |


^ FRONT/IMU X ^
<- IMU Y
PUT SPEAKER HERE
P5
P4
P3
P2
R21
R18
R22
R19
R20
R17
LS1
R15
R8
R11
Q3
Q1
R2
R1
C3
Q
R9
R3
R10
C2
R4
D
D
C4
R6
IC1
R5
C1
R7
R14
Q2
R13
C7
C5
R12
P1
C6
P6
GND
IC
C9
C8
C10
U1
C11
R23
R24
P7
GND
5V
3V3
P8
C14
C13
C12
S1

| Comment | Description | Designator | Footprint | LibRef | Quantity |
|---|---|---|---|---|---|
| Cap | | C1, C2, C3, C4, C5, C | CAPC0603 | Cap | 14 |
| 1N4148 | DIODE FAST SIGNAL ' | D | DIOAD829W49L456D | 1N4148 | 2 |
| BMI055 | Accelerometer, Gyros | IC | QFN50P300X450X10( | BMI055 | 1 |
| LM2904AVQDR | Integrated Circuit | IC1 | SOIC127P600X175-8I | LM2904AVQDR | 1 |
| Speaker | Loudspeaker | LS1 | PIN2 | Speaker | 1 |
| MHDR1X2 | Header, 2-Pin | P1 | MHDR1X2 | MHDR1X2 | 1 |
| ArduCAM | Header, 8-Pin | P2 | MHDR1X8 | MHDR1X8 | 1 |
| HC-SR04 ULTRASONI | Header, 4-Pin | P3, P4, P5 | MHDR1X4 | MHDR1X4 | 3 |
| SSQ-110-03-T-D | Receptacle, 2.54mm, | P6 | BoosterPack_40pin_J | CMP-0078266-2 | 1 |
| SSQ-110-03-T-D | Receptacle, 2.54mm, | P7 | BoosterPack_40pin_J | CMP-0003837-2 | 1 |
| MHDR1X4 | Header, 4-Pin | P8 | MHDR1X4 | MHDR1X4 | 1 |
| 2N2907* | Bipolar _BJT_ Transist | Q | TO92-EBC-OVAL | 2N2907* | 1 |
| 2N2222A | Transistor BJT NPN | Q1, Q2 | 2N2222A | 2N2222A | 2 |
| IRF3205 | N-Channel 55V 110A | Q3 | TO254P1041X444X29 | IRF3205 | 1 |
| Res | | R1, R2, R3, R4, R5, R | RES0603 | Res | 15 |
| CRCW04023K30JNED | RES, 3.3 k, 5%, 0.063 | R23, R24 | 0402 | CMP-0026918-5 | 2 |
| SW-SPDT | SPDT Subminiature T | S1 | SW DPST jameco | SW-SPDT | 1 |
| LSM303DLH | Accelerometer, Magne | U1 | LGA28R55P7X7_500 | LSM303DLH | 1 |