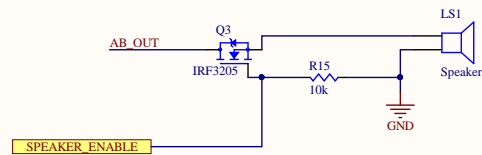
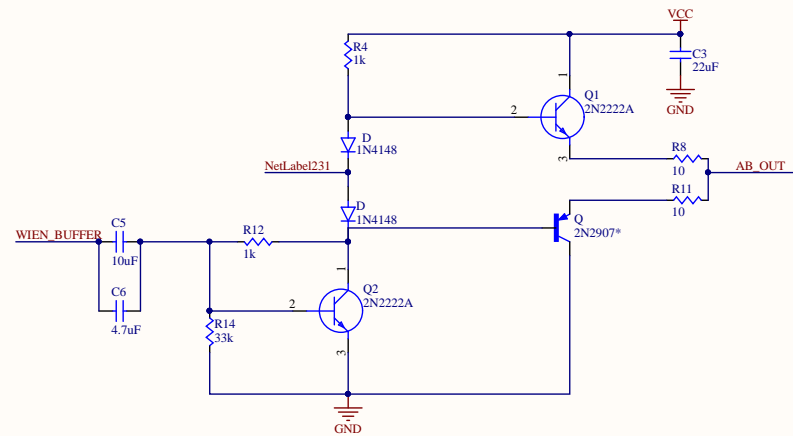


Mosfet + Speaker

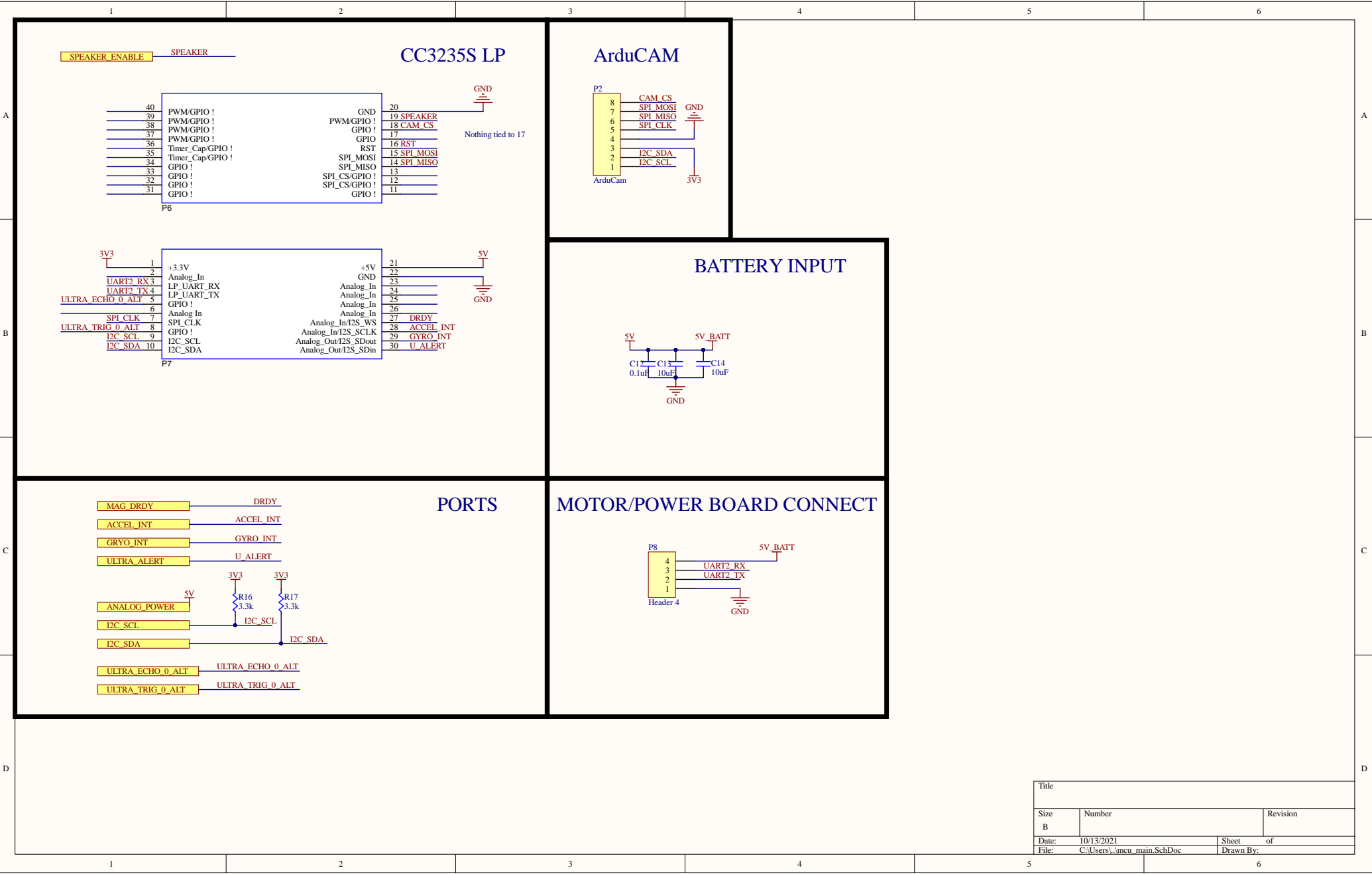


Need second mosfet to drive actual ab->speaker one with 5V for max current

AB AMP

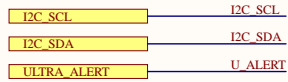


Title			
Size B	Number		Revision
Date:	10/13/2021	Sheet	of
File:	C:\Users\analag\SchDoc	Drawn By:	

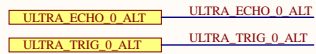


Title		
Size	Number	Revision
B		
Date:	10/13/2021	Sheet of
File:	C:\Users\jmcu_main\SchDoc	Drawn By:

PORTS

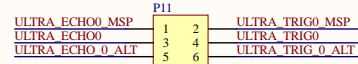
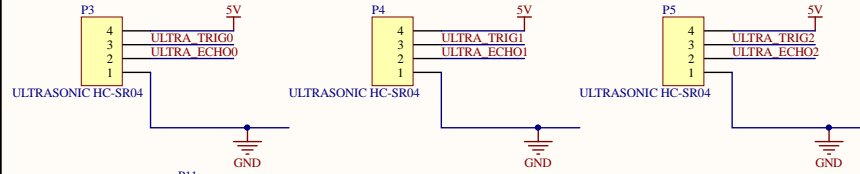


U_ALERT SHOULD GO HIGH IF OBSTACLE DETECTED



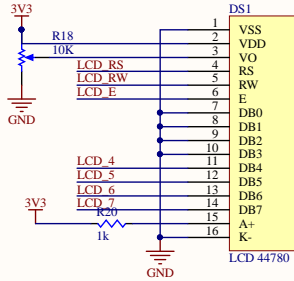
Ultra Sonic Sensors

ASSUMING 5V ULTRASONIC

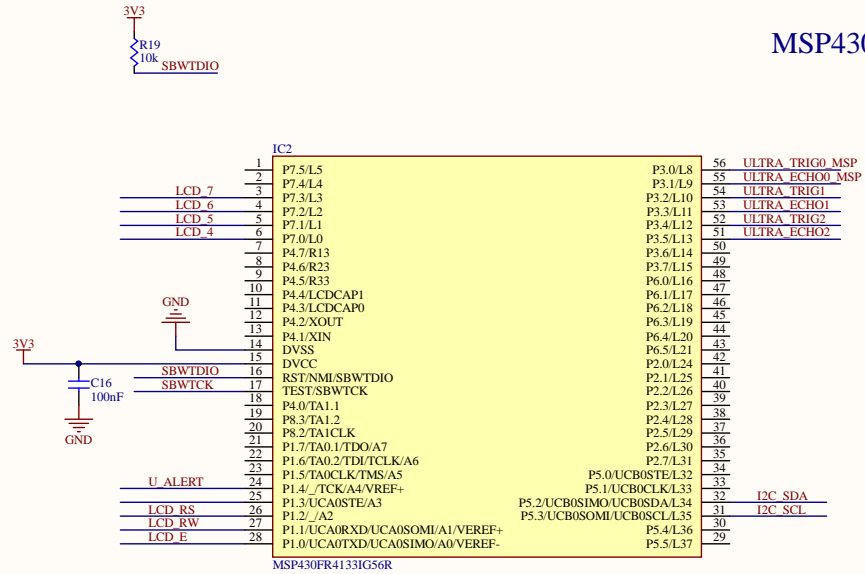


Header 112a 0 has alternative option to connect to CC3235 directly

LCD



MSP430



MSP430 PROGRAMMER

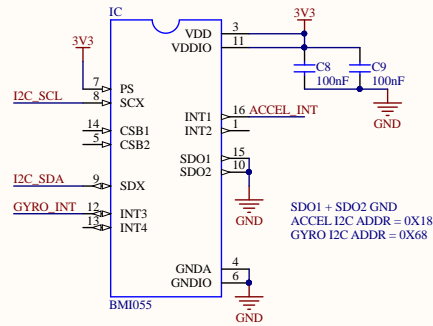
PINS TIED TO LAUNCHPAD VIA JUMPER WIRES FOR PROGRAMMING



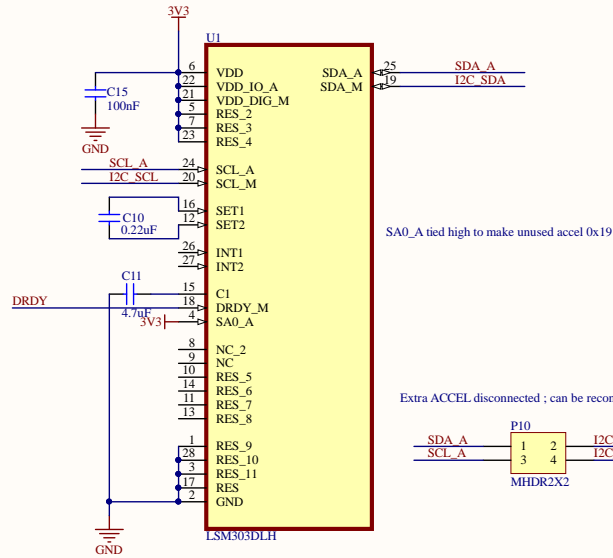
Title		
Size	Number	Revision
B		
Date:	10/13/2021	Sheet of
File:	C:\Users\j_msp430\SchDoc	Drawn By:

I2C SENSORS

ACCEL/GYRO : ADDR = 0x18/0x68



MAGNETOMETER : ADDR = 0x1E



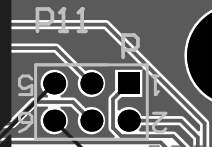
Extra ACCEL disconnected ; can be reconnected via jumpers



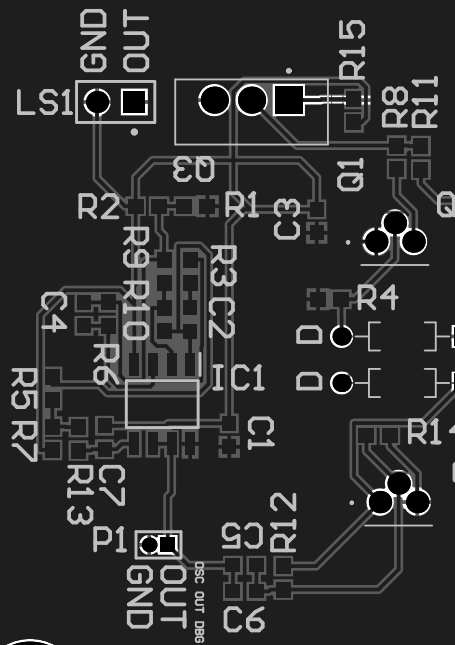
Title		Revision	
Size	Number		
B			
Date:	10/13/2021	Sheet	of
File:	C:\Users\...sensors\SchDoc	Drawn By:	

DS1

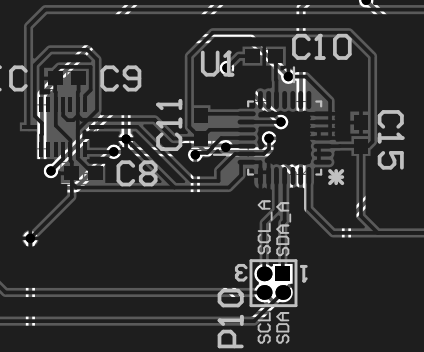
^ FRONT/IMU X ^
← IMU Y



PUT SPEAKER HERE

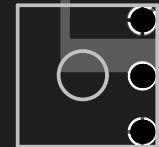


R17R16



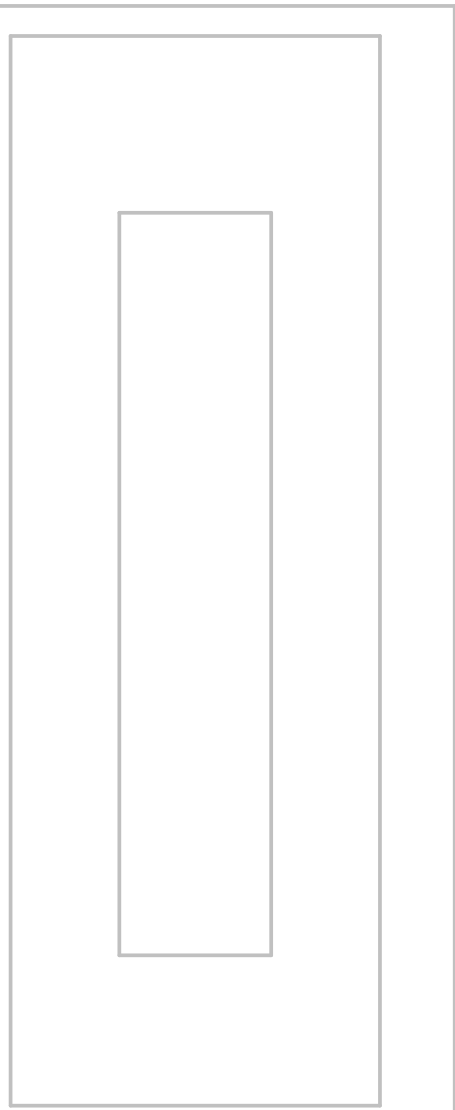
PLACE ON TOP OF LAUNCHPAD

R18



Wheelson Mk3 - InvestiGator
Control Sensor Board
Des. By. Marquez Jones 2021

R20



Line #	Name	Description	Designator	Quantity	Manufacturer 1	Manufacturer Part Number 1	Manufacturer Lifecycle 1	Supplier 1	Supplier Part Number 1	Supplier Unit Price 1	Supplier Subtotal 1
	Cap		C1, C3	2	Samsung	CL10B104KB8NNNC	Volume Production	Digi-Key	1276-1000-1-ND		
	Cap		C2, C4	2	Samsung	CL10B104KB8NNNC	Volume Production	Digi-Key	1276-1000-1-ND		
	Cap		C5, C7, C13, C14	4	Samsung	CL10B104KB8NNNC	Volume Production	Digi-Key	1276-1000-1-ND		
	Cap		C6, C11	2	Samsung	CL10B104KB8NNNC	Volume Production	Digi-Key	1276-1000-1-ND		
	Cap		C8, C9, C15, C16	4	Samsung	CL10B104KB8NNNC	Volume Production	Digi-Key	1276-1000-1-ND		
	Cap		C10	1	Samsung	CL10B104KB8NNNC	Volume Production	Digi-Key	1276-1000-1-ND		
	Cap		C12	1	Samsung	CL10B104KB8NNNC	Volume Production	Digi-Key	1276-1000-1-ND		
	1N4148	DIODE FAST SIGNAL 500MA/100V	D	2							
	LCD 44780		DS1	1							
	BMI055	Accelerometer, Gyroscope, 6 Axis Sensor	IC	1							
	LM2904AVDR	Integrated Circuit	IC1	1							
	MSP430FR4133IG56R	Integrated Circuit	IC2	1							
	Speaker	Loudspeaker	LS1	1							
	MHDR1X2	Header, 2-Pin	P1	1							
	ArduCam	Header, 8-Pin	P2	1							
	ULTRASONIC HC-SR04	Header, 4-Pin	P3, P4, P5	3							
	SSQ-110-03-T-D	Receptacle, 2.54mm, 10x2, Tin, TH	P6	1	Samtec	SSQ-110-03-T-D	Volume Production	Digi-Key	SAM1204-10-ND	2.13	2.13
	SSQ-110-03-T-D	Receptacle, 2.54mm, 10x2, Tin, TH	P7	1	Samtec	SSQ-110-03-T-D	Volume Production	Digi-Key	SAM1204-10-ND	2.13	2.13
	Header 4	Header, 4-Pin	P8, P9	2							
	MHDR2X2	Header, 2-Pin, Dual row	P10	1							
	Header 3X2	Header, 3-Pin, Dual row	P11	1							
	2N2907*	Bipolar_BJT_Transistor PNP 40V 600m	Q	1							
	2N2222A	Transistor BJT NPN	Q1, Q2	2							
	IRF3205	N-C channel 55V 110A (Tc) 200W (Tc) Thr	Q3	1							
	Res		R1, R2, R5, R15, R19	5	Stackpole Electronics	RMCF0603JT10K0	Volume Production	Digi-Key	RMCF0603JT10K0CT-ND		
	Res		R3, R6	2	Stackpole Electronics	RMCF0603JT10K0	Volume Production	Digi-Key	RMCF0603JT10K0CT-ND		
	Res		R4, R7, R12, R20	4	Stackpole Electronics	RMCF0603JT10K0	Volume Production	Digi-Key	RMCF0603JT10K0CT-ND		
	Res		R8, R11, R13	3	Stackpole Electronics	RMCF0603JT10K0	Volume Production	Digi-Key	RMCF0603JT10K0CT-ND		
	Res		R9	1	Stackpole Electronics	RMCF0603JT10K0	Volume Production	Digi-Key	RMCF0603JT10K0CT-ND		
	Res		R10	1	Stackpole Electronics	RMCF0603JT10K0	Volume Production	Digi-Key	RMCF0603JT10K0CT-ND		
	Res		R14	1	Stackpole Electronics	RMCF0603JT10K0	Volume Production	Digi-Key	RMCF0603JT10K0CT-ND		
	Res		R16, R17	2	Stackpole Electronics	RMCF0603JT10K0	Volume Production	Digi-Key	RMCF0603JT10K0CT-ND		
	RPot_1	Potentiometer	R18	1							
	LSM303DLH	Accelerometer, Magnetometer, 6 Axis Se	U1	1							