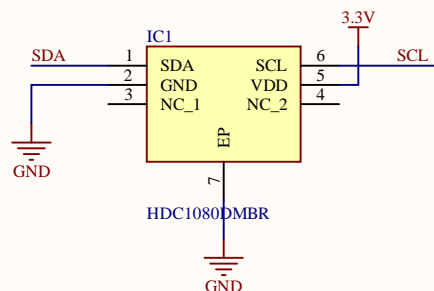
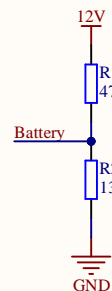


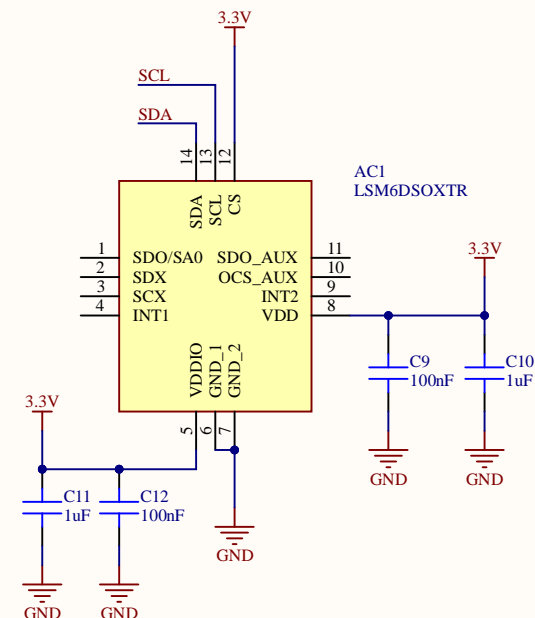
## Temperature sensor



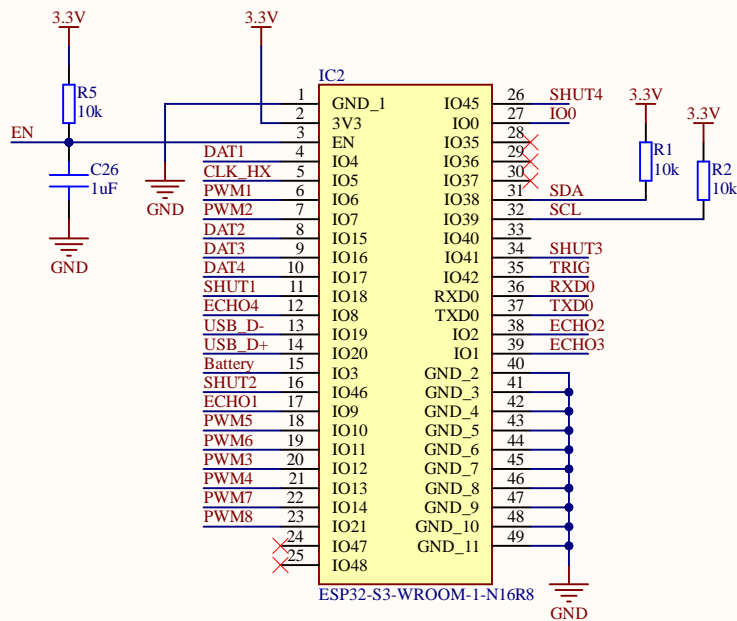
## Voltage measure



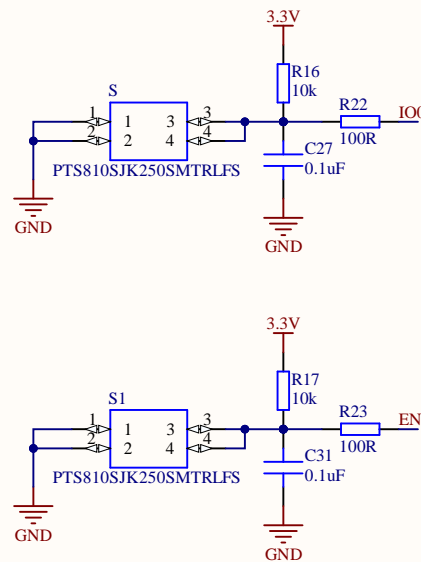
## Accelerometer with gyroscope



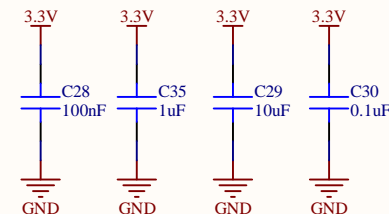
## MCU ESP-32-S3



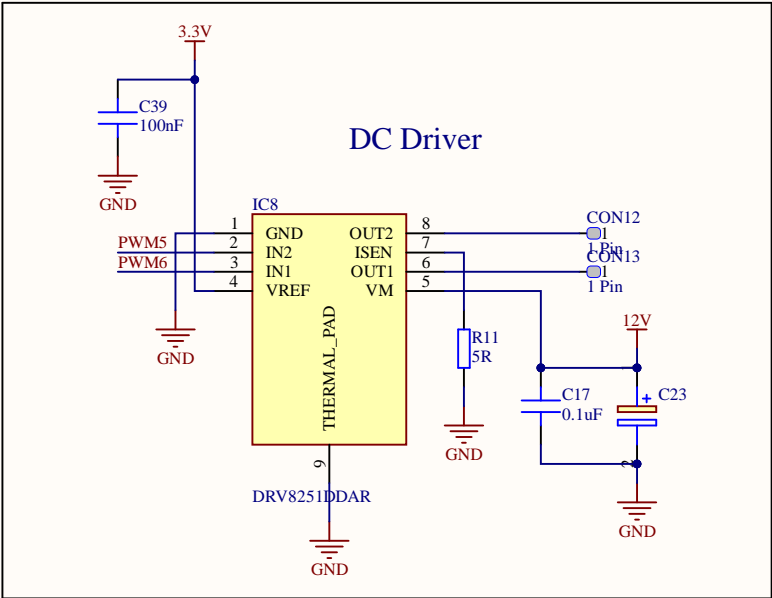
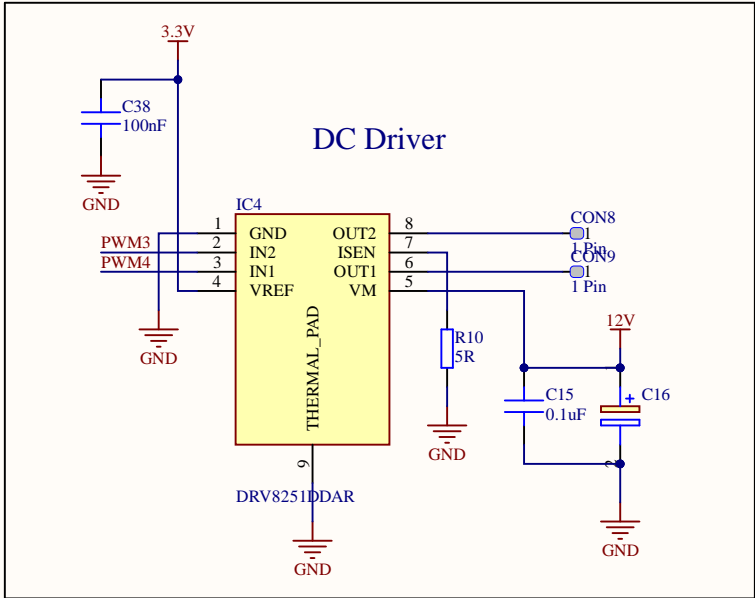
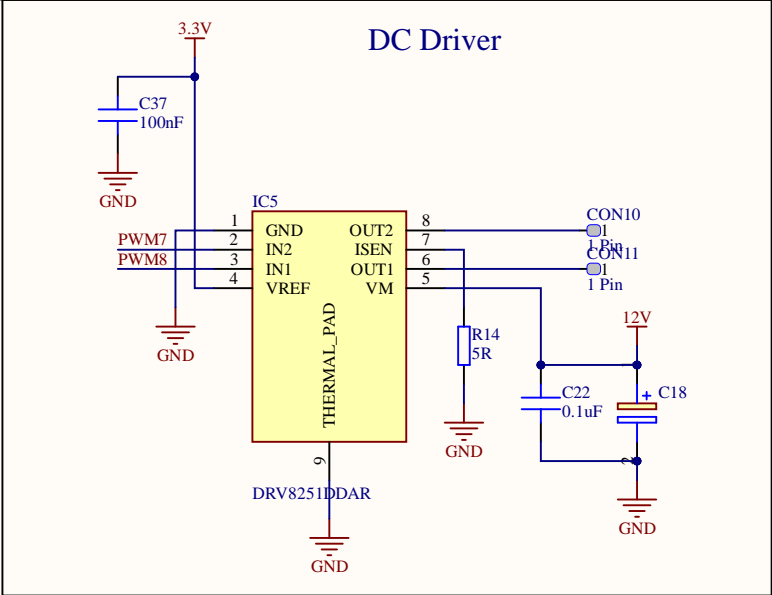
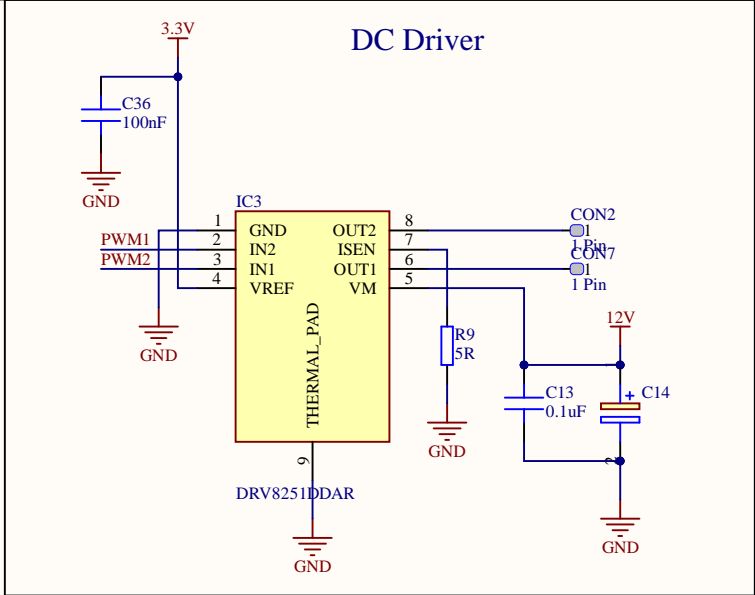
## Buttons



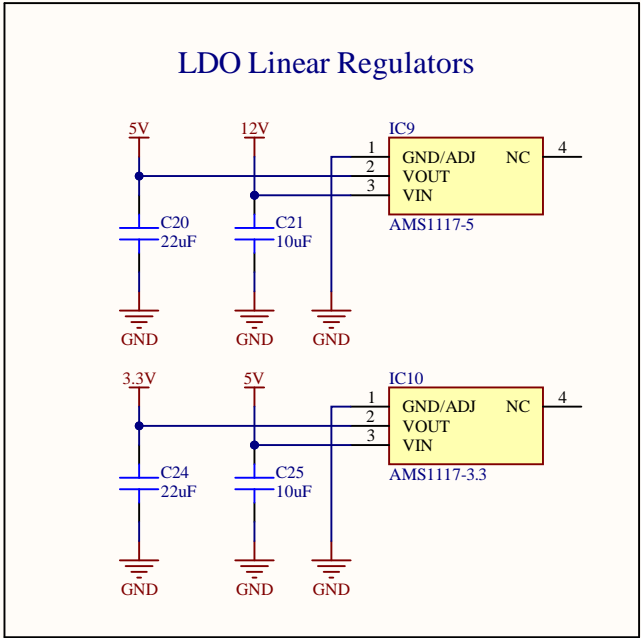
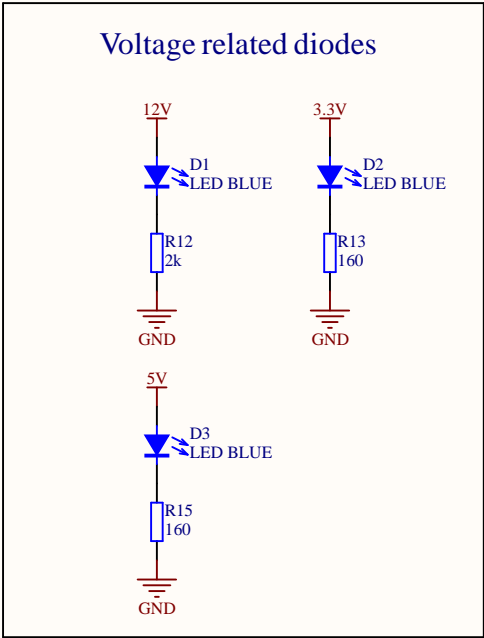
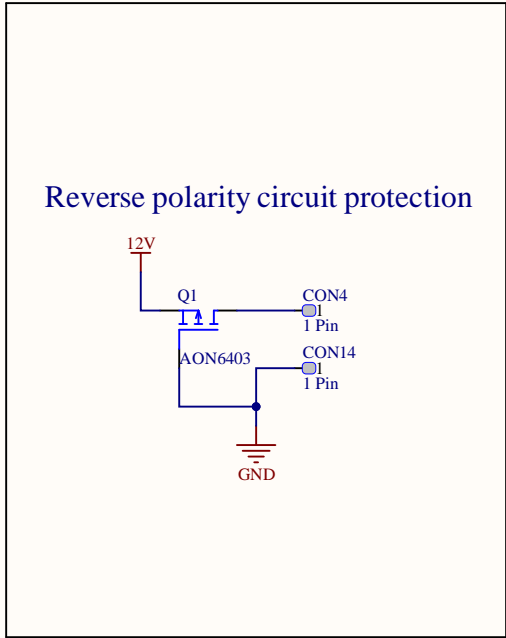
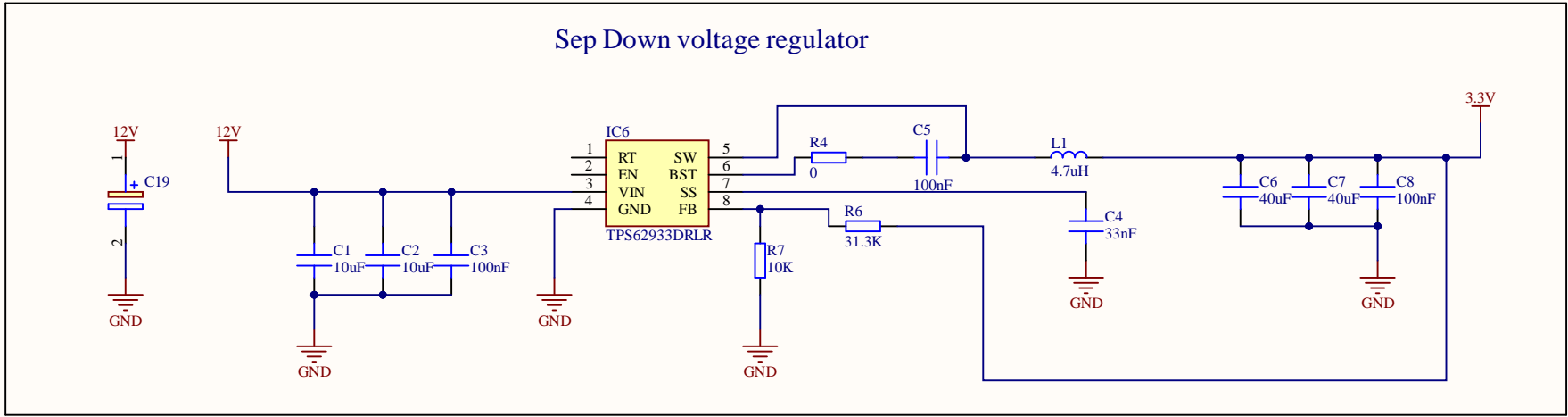
## MCU filtration



Title		
Size	Number	Revision
A4		
Date:	4.12.2025	Sheet of
File:	C:\ALTUM_PROJECTS\...\MCU.SchDoc Drawn By:	



Title		
Size	Number	Revision
A4		
Date:	4.12.2025	Sheet of
File:	C:\ALTIUM_PROJECTS\DC_DRIVER	Schema



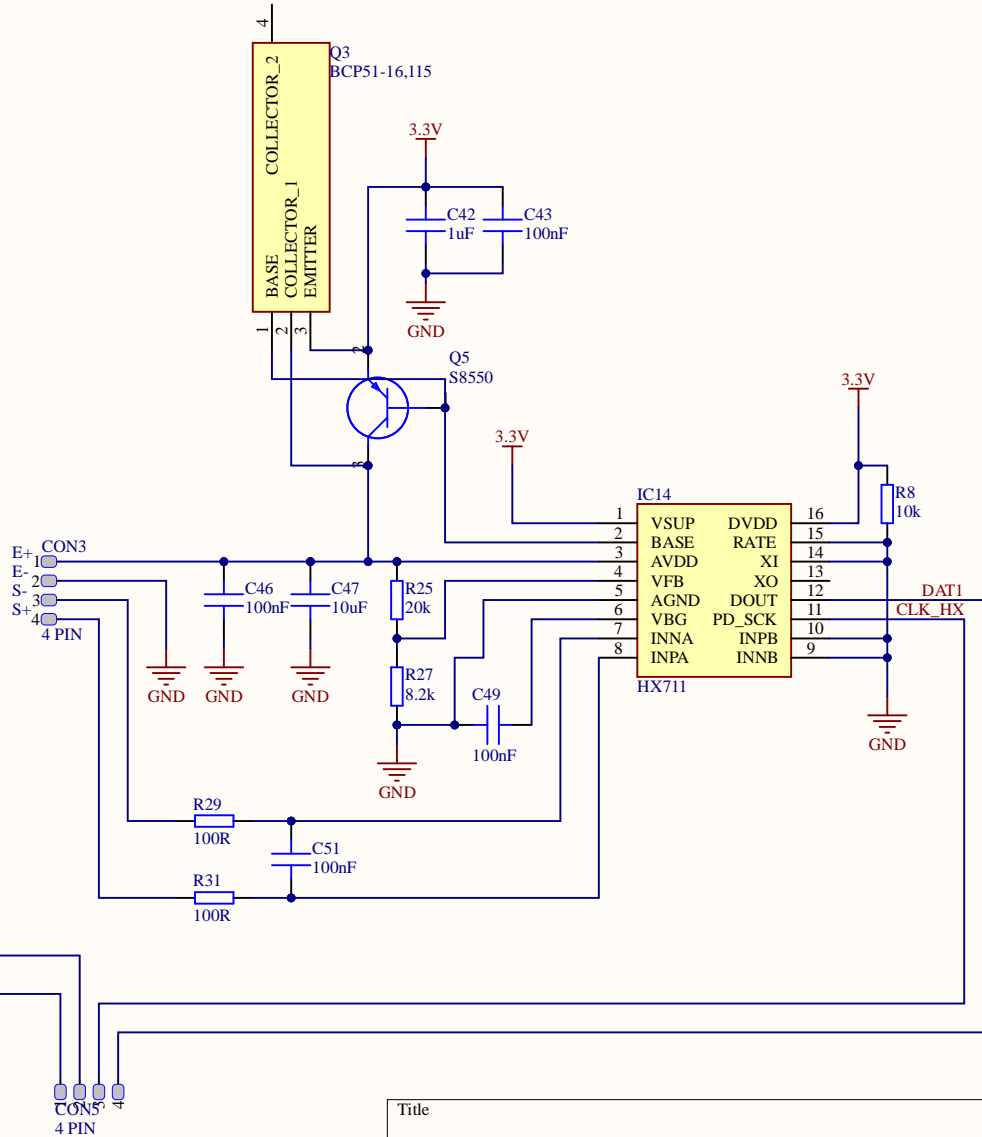
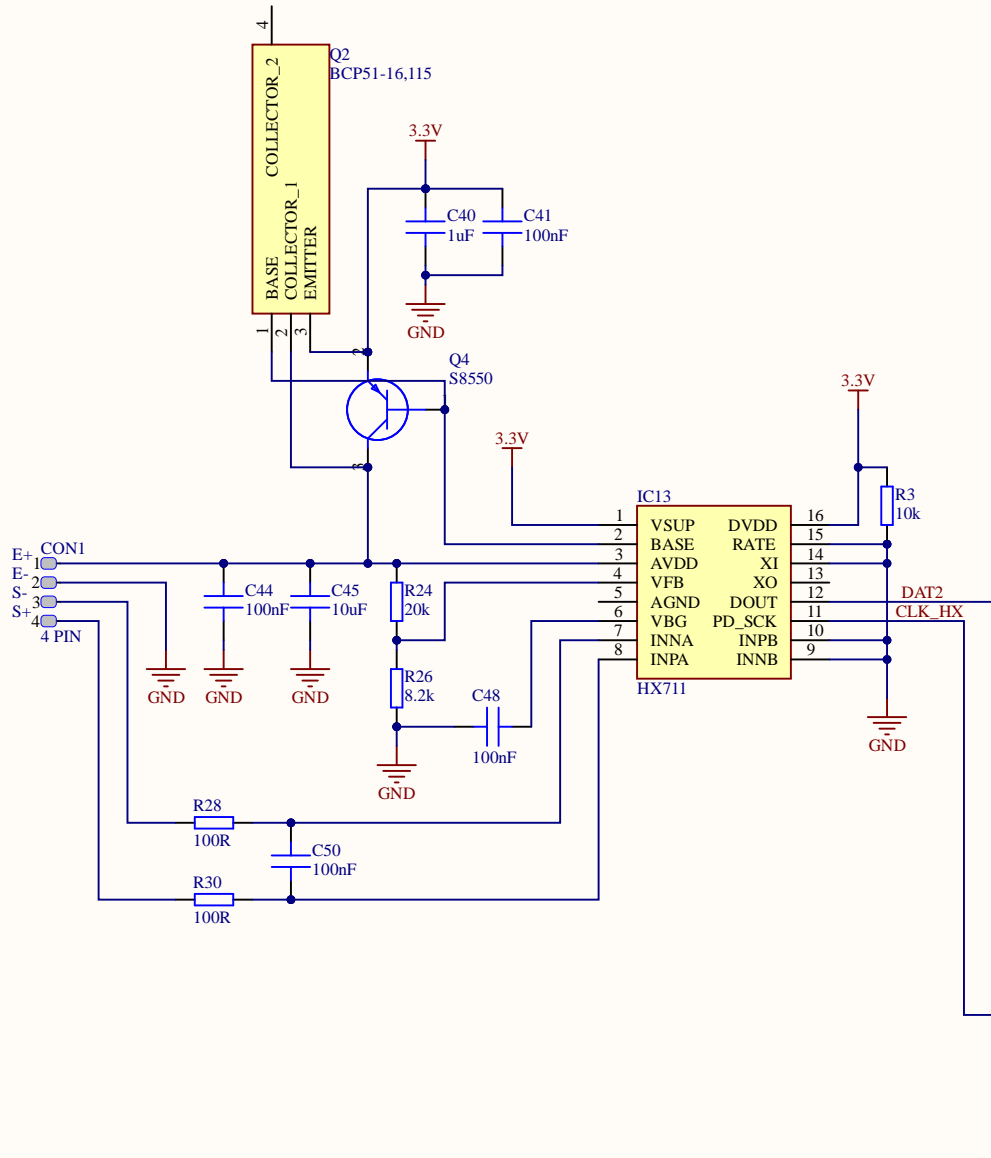
Title		
Size	Number	Revision
A4		
Date:	4.12.2025	Sheet of
File:	C:\ALTIUM_PROJECTS\...\DC-DC.SchDoc	Drawn By:

[illegible]

The diagram shows a 6-pin chip labeled '09185066324' with a yellow background. The pins are numbered 1 through 6. Pin 1 is labeled 'EN'. Pin 2 is connected to a 3.3V supply. Pin 3 is labeled 'TXD0'. Pin 4 is connected to a common ground line. Pin 5 is labeled 'RXD0'. Pin 6 is labeled 'IO0' and is also connected to the common ground line. The common ground line is connected to a GND symbol.

[illegible]

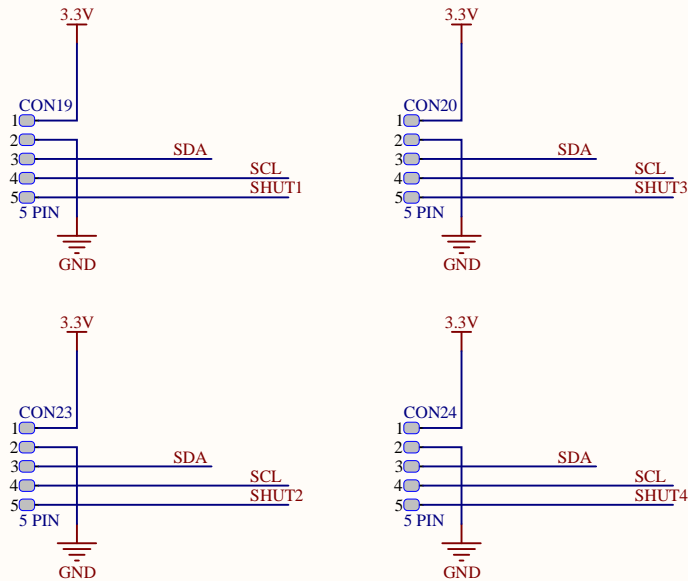
Title		
Size A4	Number	Revision
Date: 4.12.2025	Sheet of	
File: C:\ALTUM_PROJECTS\...\INTERFACE	SubDocBy:	



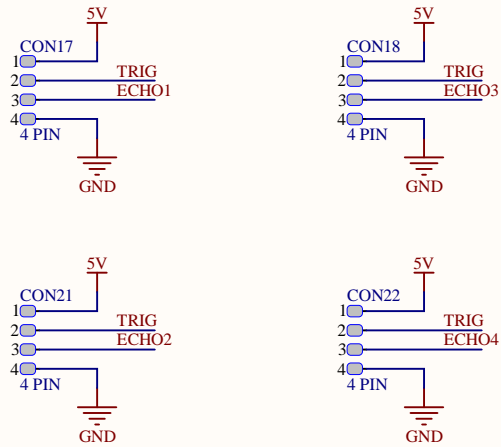
Title		
Size	Number	Revision
A4		
Date:	4.12.2025	Sheet of
File:	C:\ALTIUM_PROJECTS\...\Amplifiers1	Sub: Don By:



VL53L0X Laser distance sensors



HCSR04 Ultrasonic distance sensors



Title		
Size	Number	Revision
A4		
Date:	4.12.2025	Sheet of
File:	C:\ALTIUM_PROJECTS\...\Sensors.SchDoc	Drawn By:

Comment	Description	Designator	Footprint	LibRef	Quantity
LSM6DSOXTR	Accelerometer	AC1	LGA-14_1	LSM6DSOXTR	1
10uF	MLCC Capacitor	C1, C2	C 1206	Capacitor	2
100nF	MLCC Capacitor	C3, C8	C 0603	Capacitor	2
33nF	MLCC Capacitor	C4	C 0402	Capacitor	1
100nF	MLCC Capacitor	C5, C9, C12, C28, C36, C37, C38, C39, C41, C43, C44, C46, C48, C49, C50, C51, C53, C55, C56, C58, C60, C61, C62, C63	C 0402	Capacitor	24
40uF	MLCC Capacitor	C6, C7	C 1206	Capacitor	2
1uF	MLCC Capacitor	C10, C11, C26, C35, C40, C42, C52, C54	C 0402	Capacitor	8
0.1uF	MLCC Capacitor	C13, C17, C22, C27, C30, C31	C 0402	Capacitor	6
UVY1V101MED1TD	Capacitor Polarised	C14, C16, C18, C19, C23	CAPPRD250W50D655 H1250	UVY1V101MED1TD	5
0.1uF	MLCC Capacitor	C15	C 0603	Capacitor	1
22uF	MLCC Capacitor	C20, C24	C 0805	Capacitor	2
10uF	MLCC Capacitor	C21, C25	C 0805	Capacitor	2
10uF	MLCC Capacitor	C29, C32, C33, C34, C45, C47, C57, C59	C 0402	Capacitor	8
4 PIN		CON1, CON3, CON6, CON15	BM04B-SRSS-TB	4 PIN	4
1 Pin		CON2, CON4, CON7, CON8, CON9, CON10, CON11, CON12, CON13, CON14	SMD PAD	1 Pin	10
4 PIN		CON5, CON16, CON17, CON18, CON21, CON22	Goldpin 2.54 4P	4 PIN	6
5 PIN		CON19, CON20, CON23, CON24	Goldpin 2.54mm 5Pin	5 PIN	4
LED BLUE		D1, D2, D3	LED 0603 BLUE	LED BLUE	3
LES5D5.0CT1G	TVS Diode (Bi-directional)	D4, D5, D6, D7, D8, D9, D10	LES5D50CT1G	LES5D5.0CT1G	7
HDC1080DMBR	Integrated Circuit	IC1	SON100P300X300X80-7N-D	HDC1080DMBR	1
ESP32-S3-WROOM-1-N16R8	Integrated Circuit	IC2	ESP32S3WROOM1N16R8	ESP32-S3-WROOM-1-N16R8	1
DRV8251DDAR	Integrated Circuit	IC3, IC4, IC5, IC8	SOIC127P600X170-9N	DRV8251DDAR	4
TPS62933DRLR	Integrated Circuit	IC6	SOTFL50P160X60-8N	TPS62933DRLR	1
BAT760-7	Integrated Circuit	IC7, IC11, IC12	SOD2513X120N	BAT760-7	3
AMS1117-5	Integrated Circuit	IC9	SOT229P700X180-4N	AMS1117-3.3	1
AMS1117-3.3	Integrated Circuit	IC10	SOT229P700X180-4N	AMS1117-3.3	1
HX711	Integrated Circuit	IC13, IC14, IC15, IC16	SOIC127P600X160-16N	HX711	4
09185066324	Connector	J1	09185066324	09185066324	1
USB4500-03-0-A	Connector	J2	USB4500030A	USB4500-03-0-A	1
0473461001	Connector	J3	0473461001	0473461001	1
4.7uH	General pourpouse inductor	L1	HP10630	Inductor	1
AON6403	P-Mosfet 30V 67A Rds(on) 3.1mR	Q1	DFN 5x6	AON6403	1
BCP51-16,115	Transistor RET PNP	Q2, Q3, Q6, Q7	SOT230P700X180-4N	BCP51-16,115	4
S8550	Transistor BUT PNP	Q4, Q5, Q8, Q9	SOT95P240X110-3N	S8550	4
10k	General pourpouse resistor	R1, R2, R3, R5, R7, R8, R16, R17, R18, R21, R32, R33	R 0402	Resistor	12
0	General pourpouse resistor	R4	R 0402	Resistor	1
31.3K	General pourpouse resistor	R6	R 0402	Resistor	1
5R	General pourpouse resistor	R9, R10, R11, R14	R 1206	Resistor	4
2k	General pourpouse resistor	R12	R 0402	Resistor	1
160	General pourpouse resistor	R13, R15	R 0402	Resistor	2
47k	General pourpouse resistor	R19	R 0402	Resistor	1
13k	General pourpouse resistor	R20	R 0402	Resistor	1
100R	General pourpouse resistor	R22, R23, R28, R29, R30, R31, R38, R39, R40, R41	R 0402	Resistor	10
20k	General pourpouse resistor	R24, R25, R34, R35	R 0402	Resistor	4
8.2k	General pourpouse resistor	R26, R27, R36, R37	R 0402	Resistor	4
PTS810SJK250SMTRLFS	Tactile Switch SPST-NO Top Actuated Surface Mount	S, S1	PTS810SJK250SMTRLFS	PTS810SJK250SMTRLFS	2