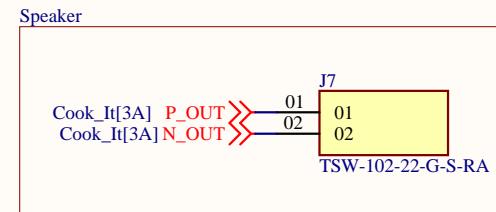
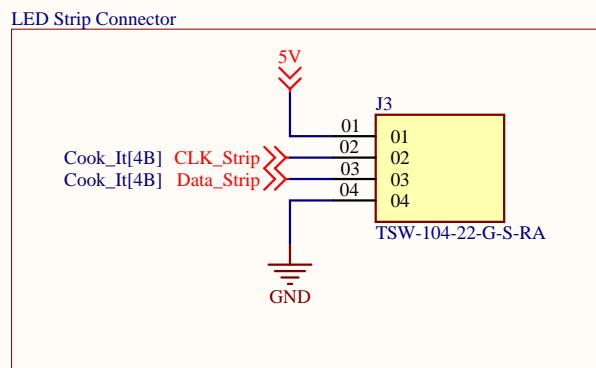
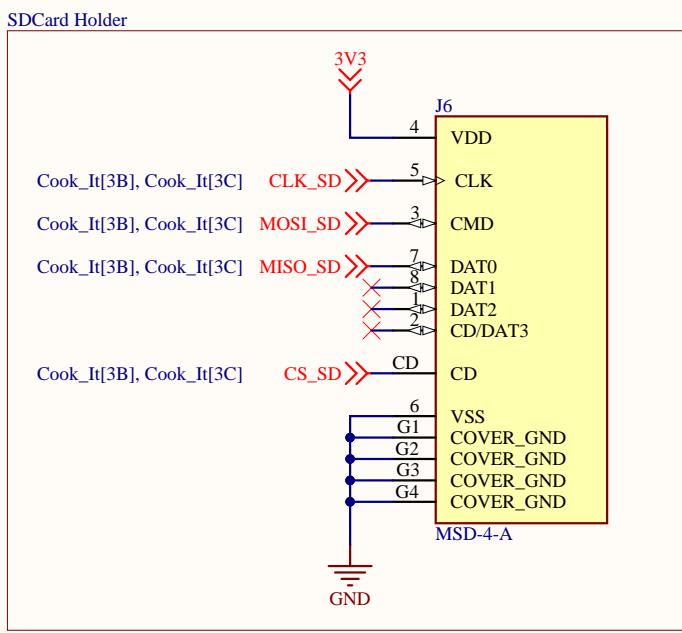
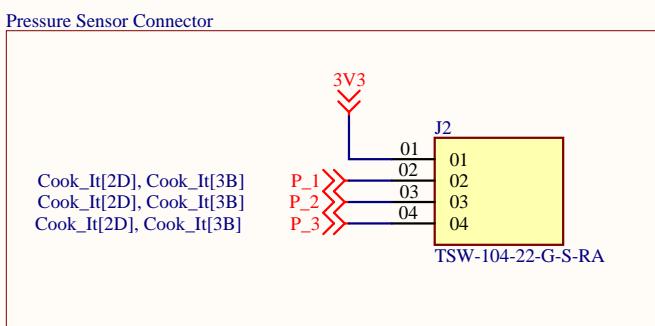
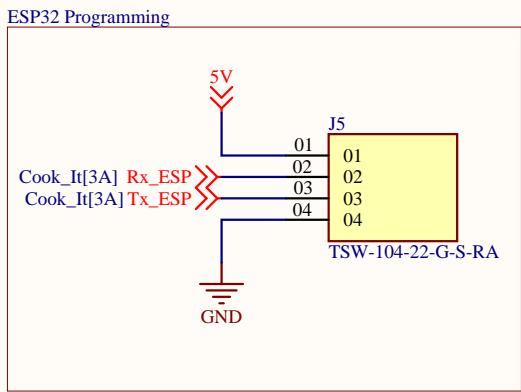
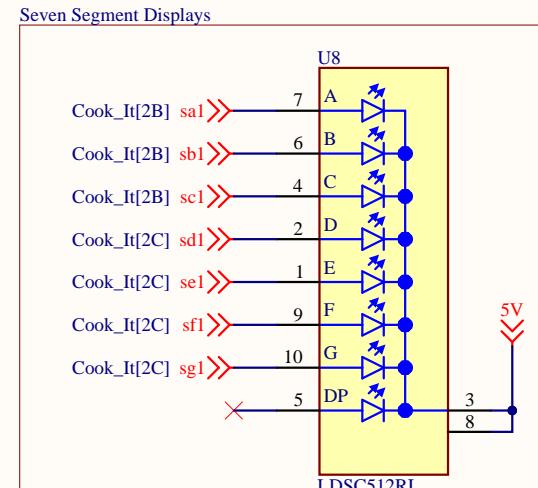
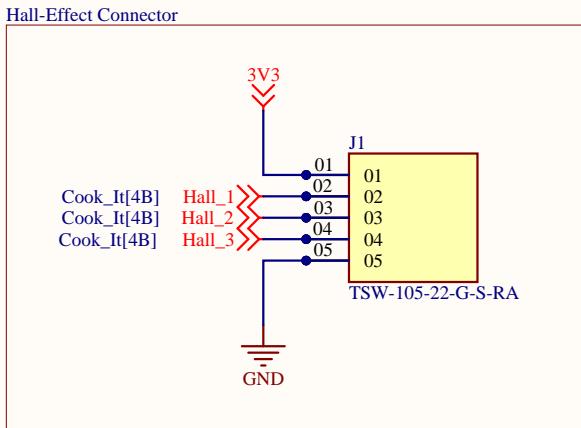
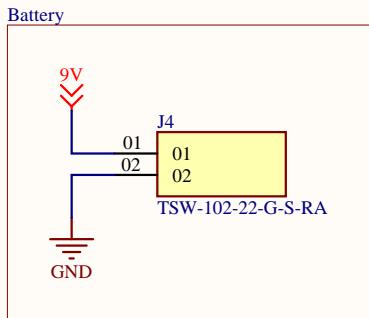


1

2

3

4



**Title**  
**Connectors**

Size	Number	ECE1895	Revision
A			0
Date:	10/30/2025	Sheet 2 of 3	
File:	C:\Users\.\Connectors.SchDoc	Drawn By:	Nicholas Starace

1

2

3

4

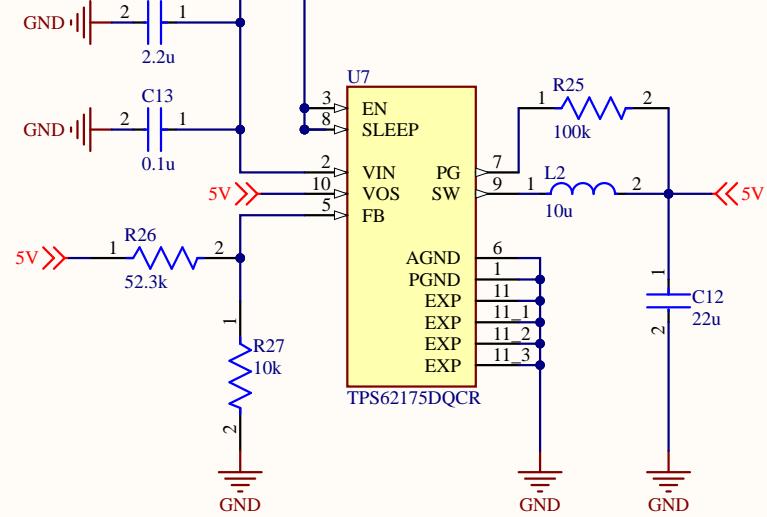
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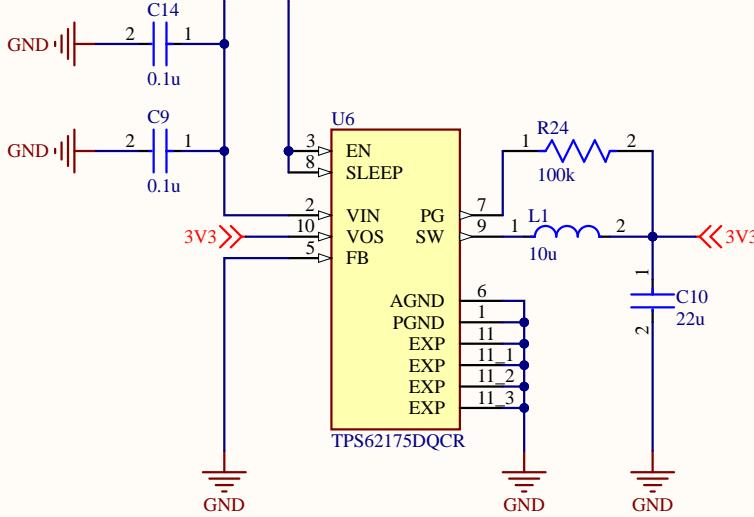
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9V to 5V



9V to 3.3V



A

B

A

B

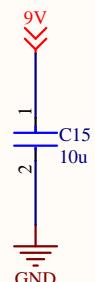
C

C

D

D

Battery Filter



Title

Power

Size	Number	Revision
A	ECE1895	0
Date:	10/30/2025	Sheet 3 of 3
File:	C:\Users\...\Power.SchDoc	Drawn By: Nicholas Starace

1

2

3

4

Comment	Description	Designator	Footprint	LibRef	Quantity
0.1u	CAP CER 2.2uF 100V X7T0805	C2, C6, C7, C9, C13, C14	FP-GRM21B-0_2-e0_2_0_7-IPC_B	CMP-06035-063309-1	6
1u	CAP CER 2.2uF 100V X7T0805	C3	FP-GRM21B-0_2-e0_2_0_7-IPC_B	CMP-06035-063309-1	1
12p	CAP CER 2.2uF 100V X7T0805	C4, C5	FP-GRM21B-0_2-e0_2_0_7-IPC_B	CMP-06035-063309-1	2
22u	CAP CER 2.2uF 100V X7T0805	C10, C12	FP-GRM21B-0_2-e0_2_0_7-IPC_B	CMP-06035-063309-1	2
2.2u	CAP CER 2.2uF 100V X7T0805	C11	FP-GRM21B-0_2-e0_2_0_7-IPC_B	CMP-06035-063309-1	1
10u	CAP CER 2.2uF 100V X7T0805	C15	FP-GRM21B-0_2-e0_2_0_7-IPC_B	CMP-06035-063309-1	1
	FERRITE BEAD 1 KOHM 0805 1LN	FB1, FB2	FP-BME2A1000LN2-IPC_C	CMP-03232-000001-1	2
Conn Unshrouded Header HDR5 POS Bulk	TSW-105-22-G-S-R-A 2.54mm Solder RA Side Entry Thru-Hole Bulk	J1	SAMTEC_TSW-105-22-G-S-R-A	TSW-105-22-G-S-R-A	1
TSW-104-22-G-S-R-A		J2, J3, J5	SAMTEC_TSW-104-22-G-S-R-A	TSW-104-22-G-S-R-A	3
TSW-102-22-G-S-R-A		J4, J7	SAMTEC_TSW-102-22-G-S-R-A	TSW-102-22-G-S-R-A	2
MSD-4-A	Micro SD Card Connector, 9 Positions, Connector and Ejector, Push In, Auto Eject Out, Surface Mount, 1.8 mm Height Above Board, Gold Flash	J6	CUI_MSD-4-A	MSD-4-A	1
10u	LQM21DN330M70L Multilayer Inductor, 33 uH, 2.99 ohm, 16 MHz, 200 mA 0805 [2012 Metric], LQM	L1, L2	FP-LQM21DN_70-MFG	CMP-00260-111578617-1	2
10k	RES Thin Film, 499kO, 0.1% 0.125W, 25ppm/^C, 0805	R1, R5, R6, R7, R8	FP-TFCR0805-IPC_B	CMP-250906-214896-1	5
100k	RES Thin Film, 499kO, 0.1% 0.125W, 25ppm/^C, 0805	R2	FP-TFCR0805-IPC_B	CMP-250906-214896-1	1
2.2k	RES Thin Film, 499kO, 0.1% 0.125W, 25ppm/^C, 0805	R3, R4	FP-TFCR0805-IPC_B	CMP-250906-214896-1	2
1M	RES Thin Film, 499kO, 0.1% 0.125W, 25ppm/^C, 0805	R9	FP-TFCR0805-IPC_B	CMP-250906-214896-1	1
200	RES Thin Film, 1.72kO, 1% 0.125W, 25ppm/^C, 0805	R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23	FP-TFCR0805-MFG	CMP-250906-142014-1	14
100k	RES Thin Film, 1.72kO, 1% 0.125W, 25ppm/^C, 0805	R24, R25	FP-TFCR0805-MFG	CMP-250906-142014-1	2
52.3k	RES Thin Film, 1.72kO, 1% 0.125W, 25ppm/^C, 0805	R26	FP-TFCR0805-MFG	CMP-250906-142014-1	1
10k	RES Thin Film, 1.72kO, 1% 0.125W, 25ppm/^C, 0805	R27	FP-TFCR0805-MFG	CMP-250906-142014-1	1
51k	RES Thin Film, 499kO, 0.1% 0.125W, 25ppm/^C, 0805	R28, R29, R30	FP-TFCR0805-IPC_B	CMP-250906-214896-1	3
ESP32-S3-WROOM-1-N8R8	Bluetooth, WiFi 802.11b/g/n, Bluetooth v5.0, Transceiver Module 2.4GHz PCB Trace Surface Mount	U1	XCSR_ESP32S3WROOM-1-M1N8R8	ESP32-S3-WROOM-1-N8R8	1
BMI270	Accelerometer, Gyroscope, 6 Axis Sensor I^2C, SPI Output	U2	XDCR_BMI270	BMI270	1
MAX98357AETE-T	Tiny, Low-Cost, PCM Class D Amplifier with Class AB Performance	U3	QFN50P300X300X80-17N	MAX98357AETE-T	1
SN74LS47N	Decoder/Driver Single 4-to-7 16-Pin PDIP Tube	U4, U5	SOIC127P600X175-16N	SN74LS47N	2
TPS62175DQCR	28V, 0.5A Step-Down Converter with SNOOZE Mode 10-WSON-40 to 85	U6, U7	SON50P300X200X80-11N240X84	TPS62175DQCR	2
LDSC512RI	.56IN. 7 SEGMENT SINGLE DISPLAY, 565NM GREEN, GRAY FACE, WHITE SEGMENTS, COMMON   Lumex LDS-C512R	U8, U9	LED_LDSC512RI	LDSC512RI	2
32.768k	32.768 kHz At20ppm Crystal 12.5pF 70 kOhms 2-SMD, No Lead	Y1	XTAL_ABS07-32.768kHz-T	ABS07-32.768kHz-T	1