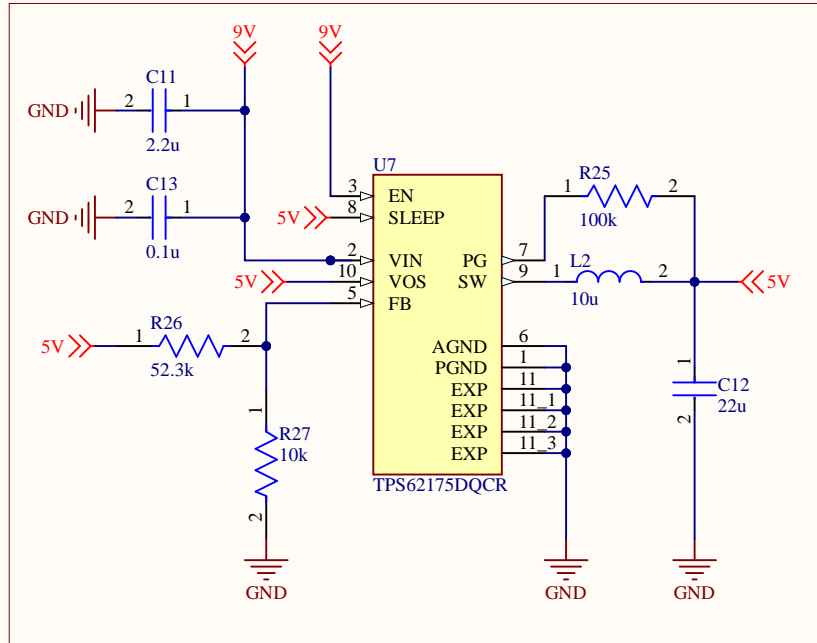
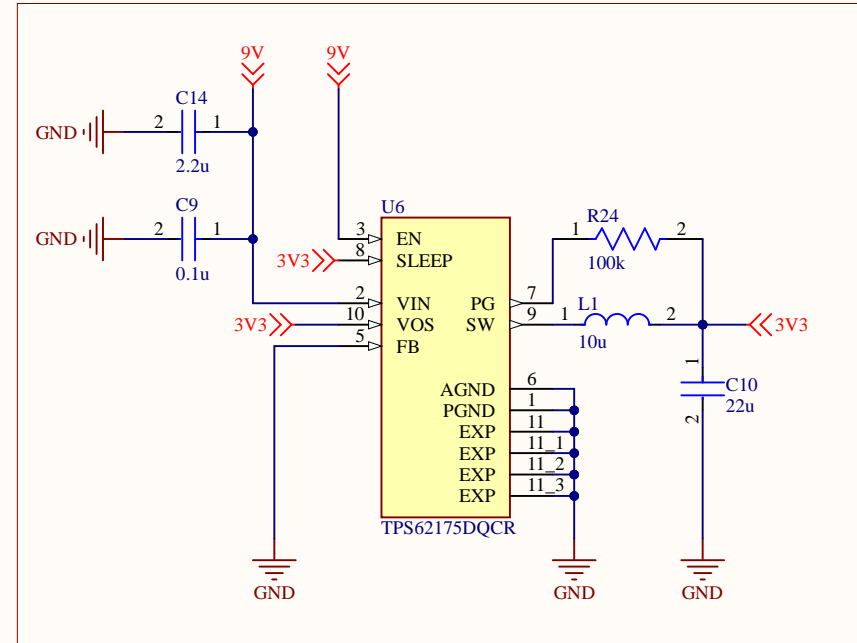


Title			
Connectors			
Size	Number	Revision	
A	ECE1895	0	
Date:	11/02/2025	Sheet 2 of	3
File:	C:\Users\...\Connectors.SchDoc	Drawn By:	Nicholas Starace

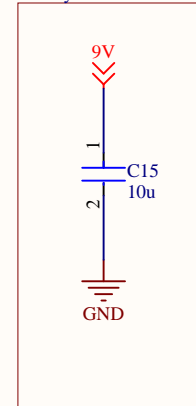
9V to 5V



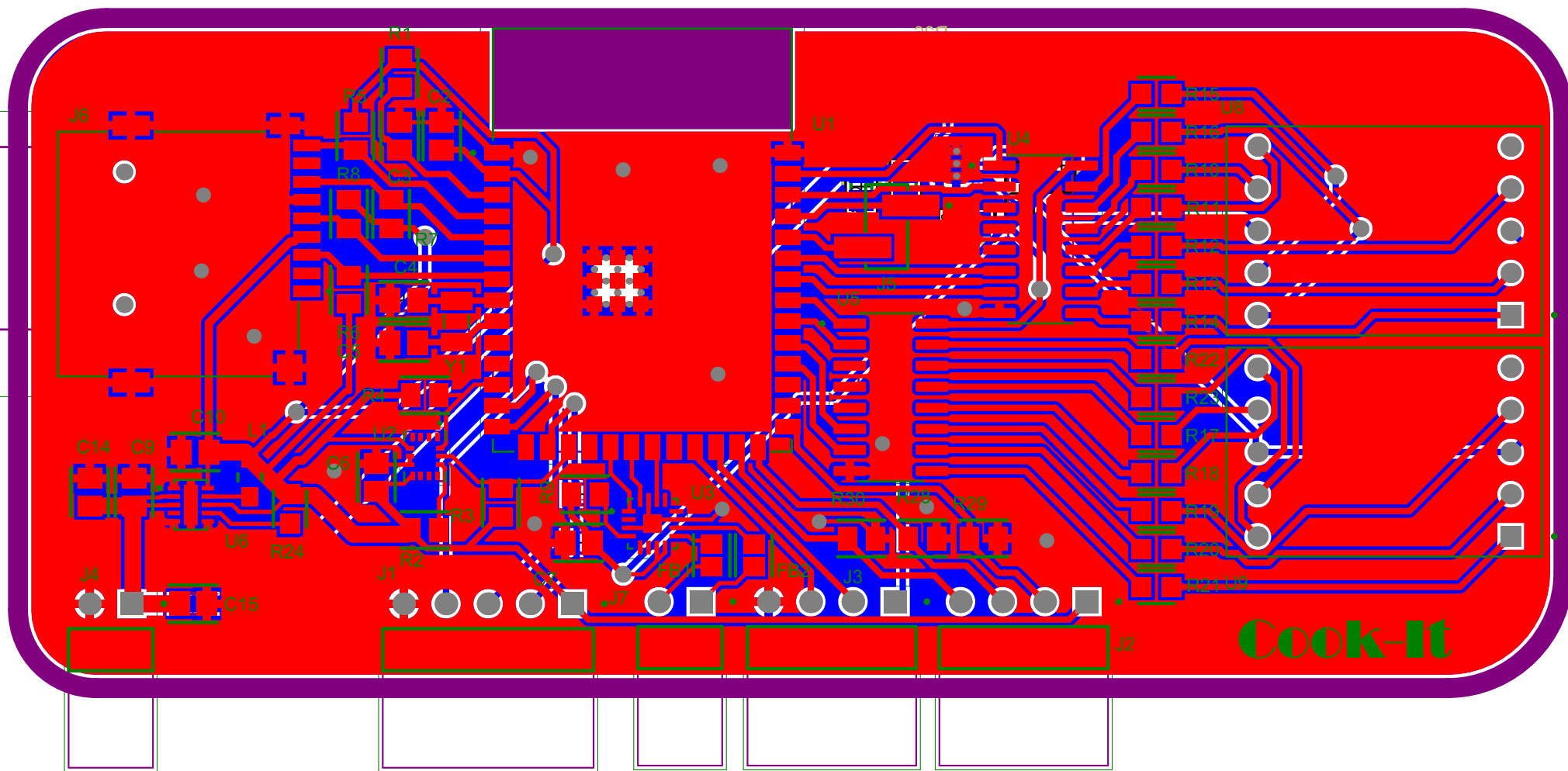
9V to 3.3V



Battery Filter



Title		
Power		
Size	Number	Revision
A	ECE1895	0
Date:	11/02/2025	Sheet 3 of 3
File:	C:\Users\...\Power.SchDoc	Drawn By: Nicholas Starace



Comment	Description	Designator	Footprint	LibRef	Quantity
0.1u	CAP CER 2.2UF 100V X7T0805	C2, C6, C7, C9, C13	FP-GRM21B-0.2- e0.2 0.7-IPC_B	OMP-06035-063309-1	5
1u	CAP CER 2.2UF 100V X7T0805	C3	FP-GRM21B-0.2- e0.2 0.7-IPC_B	OMP-06035-063309-1	1
12p	CAP CER 2.2UF 100V X7T0805	C4, C5	FP-GRM21B-0.2- e0.2 0.7-IPC_B	OMP-06035-063309-1	2
22u	CAP CER 2.2UF 100V X7T0805	C10, C12	FP-GRM21B-0.2- e0.2 0.7-IPC_B	OMP-06035-063309-1	2
2.2u	CAP CER 2.2UF 100V X7T0805	C11, C14	FP-GRM21B-0.2- e0.2 0.7-IPC_B	OMP-06035-063309-1	2
10u	CAP CER 2.2UF 100V X7T0805	C15	FP-GRM21B-0.2- e0.2 0.7-IPC_B	OMP-06035-063309-1	1
	FERRITE BEAD 1 KOH-M0805 1LN	FB1, FB2	FP-BMBE2A1000LN2- IPC_C	OMP-03232-000001-1	2
TSW-105-22-G-S-RA	Conn Unshrouded Header HDR5 POS 2.54mm Solder RA Side Entry Thru-Hole Bulk	J1	SAMTEC_TSW-105-22- G-S-RA	TSW-105-22-G-S-RA	1
TSW-104-22-G-S-RA		J2, J3	SAMTEC_TSW-104-22- G-S-RA	TSW-104-22-G-S-RA	2
TSW-102-22-G-S-RA		J4, J7	SAMTEC_TSW-102-22- G-S-RA	TSW-102-22-G-S-RA	2
TSW-102-01-X-SV	TSM - Samtec 2.54mm Single Row Vertical Surface Mount Header 5.84mm Post Height (01) - Fast Stock	J5	SAMTEC_TSM-102-01- X-SV	TSW-102-01-X-SV	1
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 µH, 2.99 ohm, 16 MHz, 200 mA, 0805 (2012 Metric), LQM	L1, L2	FP-LQM21DN_70-MFG	OMP-00260- 111578617-1	2
10k	RES Thin Film, 499kΩ, 0.1%, 0.125W, 25ppm/°C, 0805	R1, R5, R6, R7, R8	FP-TFCR0805-IPC_B	OMP-250906-214896- 1	5
100k	RES Thin Film, 499kΩ, 0.1%, 0.125W, 25ppm/°C, 0805	R2	FP-TFCR0805-IPC_B	OMP-250906-214896- 1	1
2.2k	RES Thin Film, 499kΩ, 0.1%, 0.125W, 25ppm/°C, 0805	R3, R4	FP-TFCR0805-IPC_B	OMP-250906-214896- 1	2
1M	RES Thin Film, 499kΩ, 0.1%, 0.125W, 25ppm/°C, 0805	R9	FP-TFCR0805-IPC_B	OMP-250906-214896- 1	1
200	RES Thin Film, 1.72kΩ, 1%, 0.125W, 25ppm/°C, 0805	R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23	FP-TFCR0805-MFG	OMP-250906-142014- 1	14
100k	RES Thin Film, 1.72kΩ, 1%, 0.125W, 25ppm/°C, 0805	R24, R25	FP-TFCR0805-MFG	OMP-250906-142014- 1	2
52.3k	RES Thin Film, 1.72kΩ, 1%, 0.125W, 25ppm/°C, 0805	R26	FP-TFCR0805-MFG	OMP-250906-142014- 1	1
10k	RES Thin Film, 1.72kΩ, 1%, 0.125W, 25ppm/°C, 0805	R27	FP-TFCR0805-MFG	OMP-250906-142014- 1	1
51k	RES Thin Film, 499kΩ, 0.1%, 0.125W, 25ppm/°C, 0805	R28, R29, R30	FP-TFCR0805-IPC_B	OMP-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	XCVR_ESP32S3WROO- M1N8R8	ESP32-S3-WROOM-1- N8R8	1
BM1270	Accelerometer, Gyroscope, 6 Axis Sensor I2C, SPI Output	U2	XDCR_BM1270	BM1270	1
MAV98357AETE+T	Tiny, Low-Cost, PCM Class D Amplifier with Class AB Performance	U3	QFN50P300X300X80- 17N	MAV98357AETE+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
LDSC512R	.56IN. 7 SEGMENT SINGLE DISPLAY, 565NM GREEN, GRAY FACE, WHITE SEGMENTS, COMMON   Lumex LDS-C512R	U8, U9	LED_LDSC512R	LDSC512R	2
32.768k	32.768 kHz At 20ppm Crystal 12.5pF 70 kOhms 2-SMD, No Lead	Y1	XTAL_ABS07- 32.768KHZ-T	ABS07-32.768KHZ-T	1