

Title
Connectors

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

1

2

3

4

A

B

A

B

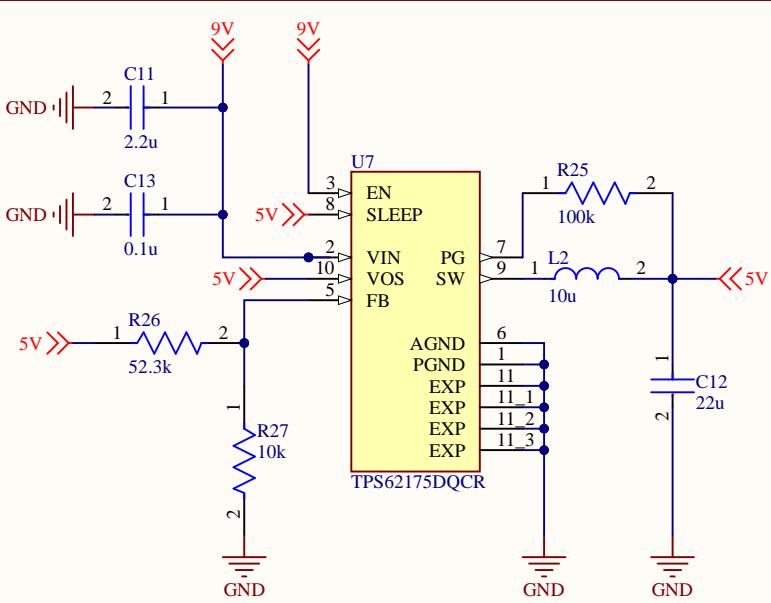
C

D

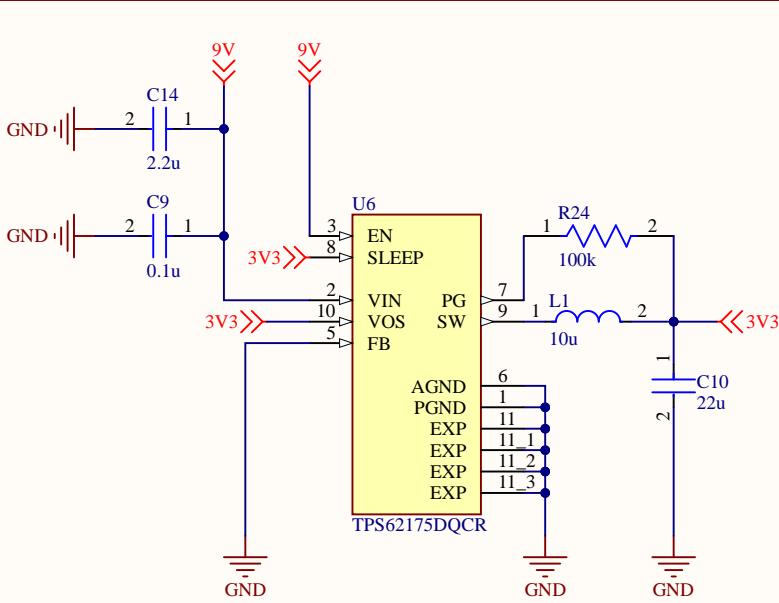
C

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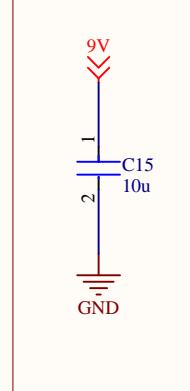
9V to 5V



9V to 3.3V



Battery Filter



Title

Power

Size

A

Number

ECE1895

Revision

0

Date:

11/02/2025

Sheet 3 of

3

File:

C:\Users\..\Power.SchDoc

Drawn By:

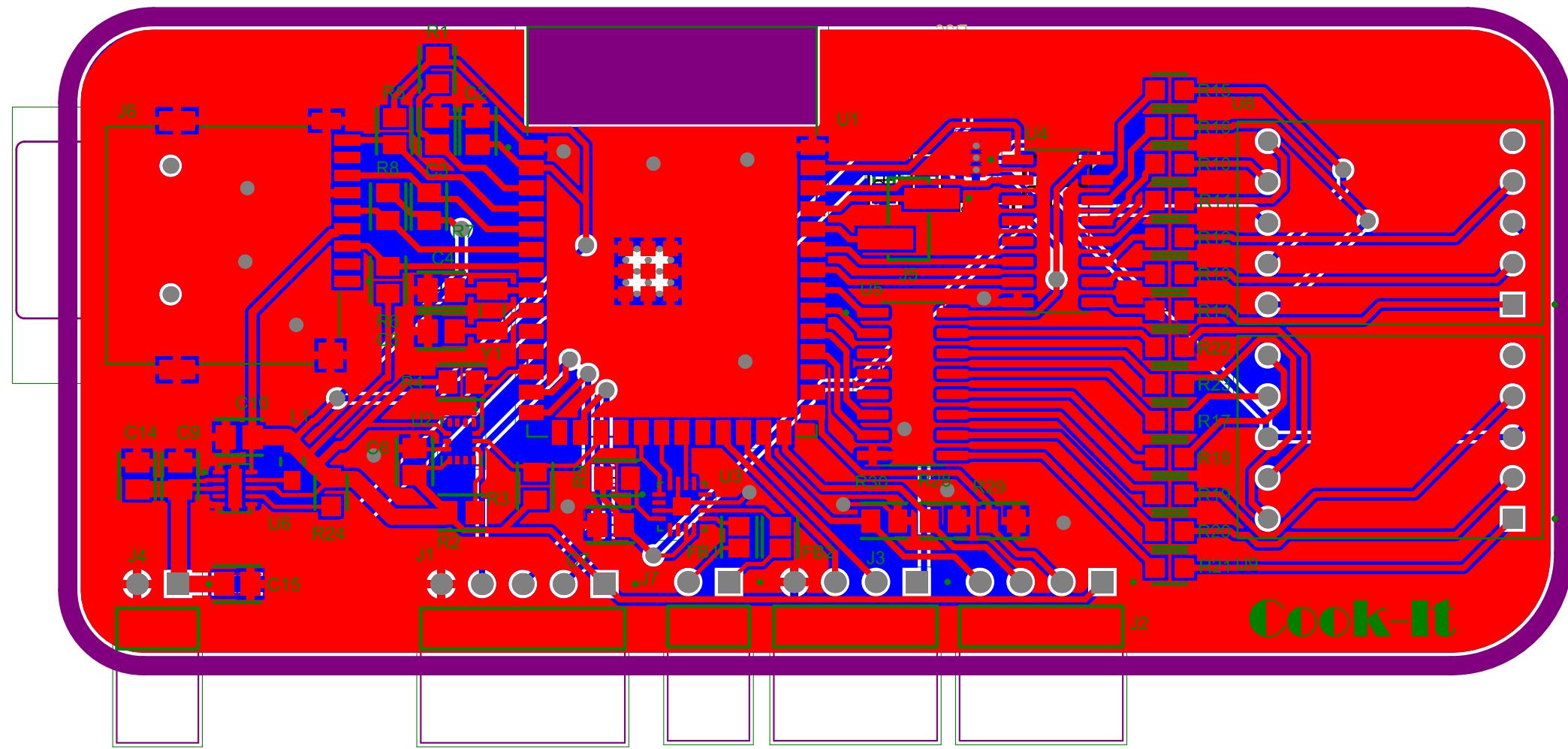
Nicholas Starace

1

2

3

4



Comment	Description	Designator	Footprint	LibRef	Quantity
0.1u	CAP CER 2.2uF 100V X7T0805	C2, C6, C7, C9, C13	FP-GRM21B0-2-e0_2_0.7IPC_B	CMP-06035-063309-1	5
1u	CAP CER 2.2uF 100V X7T0805	C3	FP-GRM21B0-2-e0_2_0.7IPC_B	CMP-06035-063309-1	1
12p	CAP CER 2.2uF 100V X7T0805	C4, C5	FP-GRM21B0-2-e0_2_0.7IPC_B	CMP-06035-063309-1	2
22u	CAP CER 2.2uF 100V X7T0805	C10, C12	FP-GRM21B0-2-e0_2_0.7IPC_B	CMP-06035-063309-1	2
2.2u	CAP CER 2.2uF 100V X7T0805	C11, C14	FP-GRM21B0-2-e0_2_0.7IPC_B	CMP-06035-063309-1	2
10u	CAP CER 2.2uF 100V X7T0805	C15	FP-GRM21B0-2-e0_2_0.7IPC_B	CMP-06035-063309-1	1
	FERRITE BEAD 1 KOHM 0805 1LN	FB1, FB2	FP-BMB2A1000LN2-IPC_C	CMP-03232-000001-1	2
	Conn Unshrouded Header HDR5 POS 2.54mm Solder RA Side Entry Thru-Hole Bulk	J1	SAMTEC_TSW-105-22-G-SRA	TSW-105-22-G-SRA	1
		J2, J3	SAMTEC_TSW-104-22-G-SRA	TSW-104-22-G-SRA	2
		J4, J7	SAMTEC_TSW-102-22-G-SRA	TSW-102-22-G-SRA	2
	TSM - Samtec 2.54mm Single Row Vertical Surface Mount Header 5.84mm Post Height (01) - Fast Stock	J5	SAMTEC_TSM-102-01-XSV	TSW-102-01-XSV	1
	MSD-4-A	J6	CUI_MSD-4-A	MSD-4-A	1
10u	LQMN21DN330M70L Multilayer Inductor, 33 μ H, 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, 499k Ω , 0.1%, 0.125W, 25ppm/ $^{\circ}$ C, 0805	R1, R5, R6, R7, R8	FP-TFCR0805-IPC_B	CMP-250906-214896-1	5
100k	RES Thin Film, 499k Ω , 0.1%, 0.125W, 25ppm/ $^{\circ}$ C, 0805	R2	FP-TFCR0805-IPC_B	CMP-250906-214896-1	1
2.2k	RES Thin Film, 499k Ω , 0.1%, 0.125W, 25ppm/ $^{\circ}$ C, 0805	R3, R4	FP-TFCR0805-IPC_B	CMP-250906-214896-1	2
1M	RES Thin Film, 499k Ω , 0.1%, 0.125W, 25ppm/ $^{\circ}$ C, 0805	R9	FP-TFCR0805-IPC_B	CMP-250906-214896-1	1
200	RES Thin Film, 1.72k Ω , 1%, 0.125W, 25ppm/ $^{\circ}$ 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, 1.72k Ω , 1%, 0.125W, 25ppm/ $^{\circ}$ C, 0805	R24, R25	FP-TFCR0805-MFG	CMP-250906-142014-1	2
52.3k	RES Thin Film, 1.72k Ω , 1%, 0.125W, 25ppm/ $^{\circ}$ C, 0805	R26	FP-TFCR0805-MFG	CMP-250906-142014-1	1
10k	RES Thin Film, 1.72k Ω , 1%, 0.125W, 25ppm/ $^{\circ}$ C, 0805	R27	FP-TFCR0805-MFG	CMP-250906-142014-1	1
51k	RES Thin Film, 499k Ω , 0.1%, 0.125W, 25ppm/ $^{\circ}$ C, 0805	R28, R29, R30	FP-TFCR0805-IPC_B	CMP-250906-214896-1	3
	Bluetooth, WiFi 802.11b/g/n, Bluetooth v5.0 Transceiver Module 2.4GHz PCB Trace Surface Mount	U1	XCVR_ESP32S3WROOM-1-M1N8R8	ESP32-S3-WROOM-1-N8R8	1
	Accelerometer, Gyroscope, 6 Axis Sensor I 2 C, SPI Output	U2	XDCR_BM1270	BMI1270	1
	Tiny Low-Cost, PCM Class D Amplifier with Glass AB Performance	U3	QFN50P300X300X80-17N	MAX98357AEIE+T	1
	Decoder/Driver Single 4-to-7 16-Pin PDP Tube	U4, U5	SOIC127P600X175-16N	SN74LS47N	2
	28V, 0.5A Step-Down Converter with SNO202E Mode 10-WSON-40 to 85	U6, U7	SON50P300X200X80-11N240X84	TPS62175DQCR	2
	.56IN. 7 SEGMENT SINGLE DISPLAY, 565NM GREEN, GRAY FACE, WHITE SEGMENTS, COMMON Lumex LDS-C512RI	U8, U9	LED_LDS512RI	LDS512RI	2
32.768k	32.768 kHz At20ppm Crystal 12.5pF 70 kOhms 2-MLD, No Lead	Y1	XTAL_ABS07-32.768kHz-T	ABS07-32.768kHz-T	1