Perk V1.0 karltron.com/Perk A Percussion Aid - 2024-08

Step	Ref	Qnty	Value	Footprint	Description
1	U1, U2, U4, U5	4	TL074	Package_SO:SOIC-1	Generic
2	U3	1	SSI2164	Package_SO:SOIC-1	Fancy
3	C3	1	2n2	Capacitor_SMD:C_	trigger
4	C4, C6, C7, C10, C11, C15, C18, C19, C20, C25, C26	11	100n	Capacitor_SMD:C_	decoupling
5	C8	1	10n	Capacitor_SMD:C_	noise
6	C9	1	2u2	Capacitor_SMD:C_	noise support
7	C13, C14, C21, C24	4	1000p	Capacitor_SMD:C_	dampener
8	C16, C17, C22, C23, C27, C28	6	220p	Capacitor_SMD:C_	relaxer
9	D2, D3	2	1N4148	FDLL4148	trigger cond
10	Q1, Q2, Q3	3	2N3904	Package_TO_SOT_S	MMBT3904
11	R1, R5, R39	3	4K7	Resistor_SMD:R_08	amplification
	R39 is for the LED, may change to your preference. 4K7 is for taming a superbright				
12	R2, R10, R12, R18, R19, R28, R30	7	10K	Resistor_SMD:R_0805	
13	R3, R4, R11, R15, R20, R22, R23, R27, R41, R42, R43, R44, R45, R49	14	100K	Resistor_SMD:R_0805	
14	R6, R7, R55	3	1M	Resistor_SMD:R_0805	
15	R8, R14, R48, R54, R56, R57, R58, R60, R61, R62	10	1K	Resistor_SMD:R_0805	
16	R9, R13, R17	3	2M2	Resistor_SMD:R_08	noise support
17	R16, R24, R26, R31, R32, R33, R34, R36, R37, R50, R52, R53	12	30K	Resistor_SMD:R_08	standard
18	R21	1	470K	Resistor_SMD:R_08	subtle
19	R25, R29, R35, R38	4	220R	Resistor_SMD:R_08	relaxation
20	R40	1	47K	Resistor_SMD:R_0805	
21	R46, R47, R51, R59	4	68K	Resistor_SMD:R_08	adjustment
22	J13	1	_02x05_Odd_	Connector_PinHea	shrouded header
23	C1	1	1uF	Capacitor_THT:CP_	envelope
24	C2, C5, C12,C29	4	10u	Capacitor_THT:CP_	power and audio
25					
26	D4, D5	2	1N5819	Diode_THT:D_DO-4	power prot
27	Post, screws	1,2	11mm/3mm	3.2mm	structural
28					
29	J9, J10	2	nn_01x10_Ma	Connector_PinHea	board
30	J11, J12	2	n_01x10_Fen	Connector_PinHea	to board
31		be sure to align all faceplate elements before soldering any of them			
32	J1, J2, J3, J4, J5, J6, J7, J8	8	JACK_2P	Europi:Thonkiconn	minijacks
33	RV1, RV2, RV3	3	B100K	Potentiometer_THT	KNOBS
34	RV4	1	B10K	Potentiometer_Alpha_RD901F-40-00D	
35	D1	1	LED	LED_THT:LED_D5.0	indicator
36	Knobs				
37	Power Cable				
38	Screws & Washers				