## **Bill Of Materials for Pretzel**

**Design Title** Pretzel

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**Document Number** 

Revision 1.1

**Design Created** Monday, November 13, 2023 **Design Last Modified** Monday, November 13, 2023

**Total Parts In Design** 88

0 Modules				
Quantity	References	<u>Value</u>	PCB Package	<u>Notes</u>
Sub-totals:				
0 Capacitors				
•	References	<u>Value</u>	<u>PCB</u> <u>Package</u>	<u>Notes</u>
Sub-totals:				
28 Resistors				
_	References	<u>Value</u>	PCB Package	<u>Notes</u>
14	R1-R14	4.99K	RES40	1% 1/4W 50-100PPM Metal Film Resistor
10	R15-R24	3.3K	RES40	1% 1/4W 50-100PPM Metal Film Resistor
4	R25-R28	100R	RES40	1% 1/4W 50-100PPM Metal Film Resistor
Sub-totals:				
8 Integrated Circuits				
Quantity	References	<u>Value</u>	PCB Package	<u>Notes</u>
3	U1-U3	4093	DIL14	CMOS 4000 Series DIP Package
1	U4	40106	DIL14	CMOS 4000 Series DIP Package
3	U5-U7	4041	DIL14	CMOS 4000 Series DIP Package
1	U8	LF347	DIL14	Quad Op Amp (most are fine, TL074 for example)
Sub-totals:				
7 Transistors				
Quantity	References	<u>Value</u>	PCB Package	<u>Notes</u>
7	Q1-Q7	2N3904	TO92	NPN Transistors (2n3904 works well) EBC Pinout on PCB
Sub-totals:				
7 Diodes				
Quantity	References	<u>Value</u>	PCB Package	<u>Notes</u>
7	D1-D7	DIODE	DIODE30	Small Signal Switching Diodes (1n4148 or equivalnet)
Sub-totals:				
38 Miscellaneous				
Quantity	References	<u>Value</u>	PCB Package	<u>Notes</u>
14	+12,-12,0V,AA,AB,AO,NI,NO,OA,OB, OO,XA,XB,XO	CONN- SIL1	CONN- SIL1	SIL Pad on PCB. No part needed.
9	BP1-BP9	100nF	0805	0805 SMT C0G/NP0 Bypass/Decoupling Capacitors
2	FB1-FB2	0R	RES40	Axial Ferrite Beads
1	J1	SIL-156-04	SIL-156-04	MTA-156 Friction Lock Power Header
10	LED1-LED10	LED-BIRG	CONN- SIL2	Two Lead Bi-Color LEDs

2 PF1-PF2 10uF ELEC- Electrolytic Power Filtering Capacitors RAD10

Sub-totals:

Totals:

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