## **Bill Of Materials for TRANSFORM**

Design TitleTRANSFORMAuthorDustin Stroh (J3RK)

**Document Number** 

**Revision** Rev 2.2

Design CreatedWednesday, June 28, 2023Design Last ModifiedWednesday, June 28, 2023

**Total Parts In Design** 113

0 Modu	ıles						
Quantity	References	<u>Value</u>	PCB Pookege	<u>Notes</u>			
Sub-totals:							
15 Cap							
	References	<u>Value</u>	PCB Package	<u>Notes</u>			
6	C1,C4-C5,C7,C14-C15	100pF	CAP10	COG/NP0 MLCC/ Ceramic / Film			
4	C2-C3,C6,C8	1200pF	CAP10	C0G/NP0 MLCC/ Ceramic / Film			
1	C9	10nF	CAP10	C0G/NP0 MLCC/ Ceramic / Film			
2	C10-C11	22pF	CAP10	C0G/NP0 MLCC/ Ceramic / Film			
2	C12-C13	33pF	CAP10	C0G/NP0 MLCC/ Ceramic / Film			
Sub-totals:							
43 Resistors							
Quantity	References	<u>Value</u>	PCB Package	<u>Notes</u>			
11	R1,R3,R11-R12,R14-R15,R21-R24,R33	100K	RES40	1% Resistor (Temp Coefficient NOTimportant for this design.)			
4	R2,R5,R9-R10	220R	RES40	1% Resistor (Temp Coefficient NOTimportant for this design.)			
4	R4,R6-R8	20K	RES40	1% Resistor (Temp Coefficient NOTimportant for this design.)			
15	R13,R17-R18,R27-R31,R34-R40	10K	RES40	1% Resistor (Temp Coefficient NOTimportant for this design.)			
3	R16,R41-R42	470R	RES40	1% Resistor (Temp Coefficient NOTimportant for this design.)			
3	R19-R20,R32	100R	RES40	1% Resistor (Temp Coefficient NOTimportant for this design.)			
2	R25-R26	100k	RES40	1% Resistor (Temp Coefficient NOTimportant for this design.)			
1	R13-OPT-MODE	680k	RES40	1% Resistor (Temp Coefficient NOTimportant for this design.)			
Sub-totals:							
8 Integrated Circuits							
Quantity	<u>References</u>	<u>Value</u>	PCB Package	<u>Notes</u>			
1	U1	J2164	SO16	SSI2164 (SSI version only. No SSM or V series.)			
5	U2-U3,U6-U8	OPA2134UA	SO8	Use High Quality Dual Op Amps. OPA2134 / OPA2132 / AD8034 / LF412 / TLE2072			
1	U4	LM4040-5	TO92	5V Precision Voltage Reference TO-92 package. (A, B precision preferred.)			
1	U5	TLE2062	SO8	TLE2062 HIGHLY RECOMMENDED (for voltage swing at 12V supply, and output current spec)			
Sub-totals:							
0 Transistors							
Quantity	References	<u>Value</u>	<u>PCB</u> <u>Package</u>	<u>Notes</u>			

Sub-totals:							
0 Diodes							
<u>Quantity</u>	<u>References</u>	<u>Value</u>	<u>PCB</u> <u>Package</u>	<u>Notes</u>			
Sub-totals:							
47 Miscellaneous							
Quantity	References	<u>Value</u>	<u>PCB</u> <u>Package</u>	<u>Notes</u>			
16	+5,+12,-5,-12,0V,CV1-CV2,FD,FIA1-FIA2,MX1-MX12,MXOUT,PANIN,VO1-VO2	CONN-SIL1	CONN- SIL1	SIL Pad on PCB / No component required.			
16	BP1-BP16	100nF	0805	SMT Decoupling / Bypass 0805 Capacitors C0G/NP0			
1	FADE1	10K	CONN- SIL3	Panel Pots (Linear)			
2	FB1-FB2	0R	RES40	Ferrite Beads			
2	FIB1-FIB2	CONN-SIL1	CONN- SIL1	Ferrite Beads			
1	J1	SIL-156-04	SIL-156-04	MTA-156 Friction Lock Power Header			
1	LED1	LED-BIRG	CONN- SIL2	SIL Pad on PCB / No component required.			
2	MXD1-MXD2	SW-SPST	CONN- SIL2	SPST/SPDT Toggle Switch (Recommend NKK or TE/Alco)			
2	OFFSET1-OFFSET2	100K	CONN- SIL3	Panel Pots (Linear)			
2	PF1-PF2	10uF	ELEC- RAD13	Electrolytic Power Filtering Capacitors			
1	SW1	SW-DPDT	CONN- SIL6	DPDT Toggle Switch (Recommend NKK or TE/Alco)			
1	VCADETATCH1	SW-DPST	CONN- SIL4	DPST/DPDT or Two SPST/SPDT Toggle Switch (Recommend NKK or TE/Alco)			
Sub-totals:							

Totals:

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