Bill Of Materials for Sreddal-Filter

Design Title	Sreddal-Filter
Author	
Document Number	
Revision	<NO
Design Created	Thursday, June 8, 2023
Design Last Modified	Friday, June 9, 2023
Total Parts In Design	96

0 Modules

Quantity	References	Value	PCB Package	Notes

Sub-totals:

10 Capacitors

Quantity	References	Value	PCB Package	Notes
1	C1	18pF	CAP10	C0G/NP0 MLCC / Ceramic / Film
1	C2	560pF	CAP20	Polypropylene Film (Filter Cap)
3	C3-C5	6.8nF	CAP20	Polypropylene Film (Filter Cap)
1	C6	10nF	CAP10	C0G/NP0 MLCC / Ceramic / Film
2	C7-C8	330pF	CAP10	C0G/NP0 MLCC / Ceramic / Film
1	C9	1uF	CAP20	AC Coupling Cap (1uF to 22uF)
1	C10	33pF	CAP10	C0G/NP0 MLCC / Ceramic / Film

Sub-totals:

36 Resistors

Quantity	References	Value	PCB Package	Notes
2	R1,R31	11.5K	RES40	1% 50PPM or 100PPM 1/4W Resistor
1	R2	68K	RES40	1% 50PPM or 100PPM 1/4W Resistor
3	R3-R5	33K	RES40	1% 50PPM or 100PPM 1/4W Resistor
1	R6	20K	RES40	1% 50PPM or 100PPM 1/4W Resistor
2	R7-R8	200R	RES40	1% 50PPM or 100PPM 1/4W Resistor
1	R9	13K	RES40	1% 50PPM or 100PPM 1/4W Resistor
6	R10,R13-R15,R17,R32	100K	RES40	1% 50PPM or 100PPM 1/4W Resistor
1	R11	1K	RES40	1% 50PPM or 100PPM 1/4W Resistor
1	R12	160K	RES40	1% 50PPM or 100PPM 1/4W Resistor
2	R16,R36	100R	RES40	1% 50PPM or 100PPM 1/4W Resistor
1	R18	499K	RES40	1% 50PPM or 100PPM 1/4W Resistor
1	R19	820K	RES40	1% 50PPM or 100PPM 1/4W Resistor
6	R20,R22-R23,R25,R28,R30	10K	RES40	1% 50PPM or 100PPM 1/4W Resistor
1	R21	470R	RES40	1% 50PPM or 100PPM 1/4W Resistor
2	R24,R27	4.99K	RES40	1% 50PPM or 100PPM 1/4W Resistor
2	R26,R29	47K	RES40	1% 50PPM or 100PPM 1/4W Resistor
2	R33-R34	680R	RES40	1% 50PPM or 100PPM 1/4W Resistor
1	R35	18K	RES40	1% 50PPM or 100PPM 1/4W Resistor

Sub-totals:

7 Integrated Circuits

Quantity	References	Value	PCB Package	Notes
1	U1	J2144	SSOP16	SSI2144 Filter IC (do not use vintage SSM2044)
1	U2	LM13700	SO16	SMT LM13700 Dual OTA
2	U3,U6	OPA2134UA	SO8	Any Good SMT Dual Op Amp
1	U4	LM4040-10	TO92	LM4040 5V (A, B, or C version fine.)

1	U5	TLE2062	SO8	This Buffers the Voltage References, and needs to supply decent current. TLE2062 (or similar high output with wide swing op amp REQUIRED)
1	U7	OPA134UA	SO8	Any Good SMT Single Op Amp

Sub-totals:

4 Transistors

Quantity	References	Value	PCB Package	Notes
2	Q1-Q2	2N3904	TO92	Any typical NPN (EBC pinout on PCB)
2	Q3-Q4	2N3906	TO92	Any typical PNP (EBC pinout on PCB)

Sub-totals:

3 Diodes

Quantity	References	Value	PCB Package	Notes
3	D1-D3	1N4148	DO35	Standard Small Signal Switching Diode

Sub-totals:

36 Miscellaneous

Quantity	References	Value	PCB Package	Notes
11	+10,+12,-10,-12,0V, KBIN,OUT,RCV, VCAOUT,VCFIN,VCV	CONN-SIL1	CONN-SIL1	
12	BP1-BP12	100nF	0805	SMT 0805 C0G/NP0 Bypass / Decoupling
2	FB1-FB2	0R	RES40	Ferrite Beads
6	FM1-FM2,IN1,RES, TUNE1,VOFFSET	100K	CONN-SIL3	Panel Potentiometers
1	INIT	100K	PRE-SQ4	
1	J1	SIL-156-04	SIL-156-04	MTA-156 Friction Lock Power Header
2	PF1-PF2	10uF	ELEC-RAD13	Power Filtering Electrolytic Capacitors
1	V/OCT	50K	PRE-SQ4	

Sub-totals:

Totals:

Friday, June 9, 2023 12:57:53 PM