Lumenide SouthWorks Kaal 3080 Filter (WAI format) BOM rev3.1 27/4/2019

Resistors					
QTY	Value	Datasheet	Mouser	Other	Note
5	10R		271-10R-RC		
7	100k	R1, R5, R11, R16, R18, R20, R22	271-100K-RC		
1	1M	R15, R21, R23, R28, R30, R31, R32	271-1M-RC		Value may be 2.4 Mohm depending on gain.
5	10k	R14, R17, R24, R27, R29	271-10K-RC		
5	1.0k	R3,	271-1.0K-RC		
8	1k	R12, R13, R27	271-1K-RC		
5	220	R6, R8, R19, R25, R26, R33, R34	271-220-RC		
5	330k	R2,	271-330K-RC		
1	33k	R4		Synth Cyclon	
1	3k Trimpot	R10		Activated in Trimpot	Thermally connect to U2
1	1k	R26	271-1K-RC		
2	470k	R22, R31	271-470K-RC		
1	680	R32	271-680-RC		
3	47k	R9, R12, R20, R27 R33	271-47K-RC		
1	150k	R7	271-150K-RC		Adjust R33 for 2.4V Pedestal part.
3	4.2k	R13	271-4.2K-RC		
1	330k	R2	271-330K-RC		Adjust for input gain, or swap it out for a 100kR potentiometer. Academically, R2 may need to be adjusted as well if resonance becomes too much, or eliminated.
1	100 Trimmer	R14	72-7W-1K		

Capacitors					
QTY	Value	Datasheet	Mouser	Other	Note
17	100n	C11, C13, C16, C17, C19, C14, C15, C21, C12, C20, C25,			
1	220n	C24	598-C1608X5R1E224K080AE		2.2 uses lead sequence
5	330n	C8	667-EMK316B7334KH-T		Main lead spacing
8	100p	C1, C2, C3, C5, C6, C7		Smallbear For styrene cap Use P 98 code 4.00%	or 330 - P7P2032J2003B0GD (5mm spacing), but the Styrene caps are available for C7 + C8. Styrene caps are used. Use pin 1 of 98 code 4.00%. Lead spacing of 5.08 (2.5mm spacing)
2	10u Electrolytic	C10, C23	647-UBD1E100MPM		2.5mm lead spacing. 5mm

Semiconductors					
QTY	Value	Datasheet	Mouser	Other	Note
2	CA3080 Matched				
2	1N4148	D1	621-1N4370HWF-7		Already included
4	TBD 57	D2, D3, D4, D5	512-SI8285-IS-F		Already included

ICs					
QTY	Value	Datasheet	Mouser	Other	Note
1					Without user package and also 2K, always talk with pin 8 (square) because otherwise
1	CA3080	IC1, IC2, IC3, IC4		Synth Cyclon	
1	LM 4558	IC5	926-LM1458N/NOPB		
1	TL072	IC6, IC7	595-TL072P		

Switches					
QTY	Value	Datasheet	Mouser	Other	Note
2	3 pos On-On-On	SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8	108-GB3MP12050		
1	3 pos Header	Header	571-6303146		Remove Pin 2 to use next to dictionary event switch
1	2 pos Header	SW9(T), SW10(T), SW11(T), SW12(T), SW13(T), SW14(T), SW15(T), SW16(T), SW17(T), SW18(T), SW19(T), SW20(T), SW21(T), SW22(T), SW23(T), SW24(T), SW25(T), SW26(T), SW27(T), SW28(T), SW29(T), SW30(T), SW31(T), SW32(T), SW33(T), SW34(T), SW35(T), SW36(T), SW37(T), SW38(T), SW39(T), SW40(T), SW41(T), SW42(T), SW43(T), SW44(T), SW45(T), SW46(T), SW47(T), SW48(T), SW49(T), SW50(T), SW51(T), SW52(T), SW53(T), SW54(T), SW55(T), SW56(T), SW57(T), SW58(T), SW59(T), SW60(T), SW61(T), SW62(T), SW63(T), SW64(T), SW65(T), SW66(T), SW67(T), SW68(T), SW69(T), SW70(T), SW71(T), SW72(T), SW73(T), SW74(T), SW75(T), SW76(T), SW77(T), SW78(T), SW79(T), SW80(T), SW81(T), SW82(T), SW83(T), SW84(T), SW85(T), SW86(T), SW87(T), SW88(T), SW89(T), SW90(T), SW91(T), SW92(T), SW93(T), SW94(T), SW95(T), SW96(T), SW97(T), SW98(T), SW99(T), SW100(T), SW101(T), SW102(T), SW103(T), SW104(T), SW105(T), SW106(T), SW107(T), SW108(T), SW109(T), SW110(T), SW111(T), SW112(T), SW113(T), SW114(T), SW115(T), 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1	3 pos Header		571-6303146		
1	2 pos Header		571-6303143		
1	3 pos Connector		571-3-640641-3		
1	2 pos Connector		571-3-640641-2		
1	3 pos Connector		571-3-640643-3		
8	DPS Screws M3 10 mm	Panel to PCB Mount	90480A107	M3Master: 91916A107	Look in packs of 100. Alternately, for a better finished look on the panel use a 91716A111 set
8	Nuts M3	Panel to PCB Mount	94480A200	M3Master: 94716A000	Try to keep the hex corner cross flats possible 6.5 mm is perfect. If it won't fit between the 2 it is "wide."
1	100kB	Curve T: Resistance Potentiometer		Smallbear: LOG16 T2	
3	Guard nuts	Panel		Smallbear: GN009	
3	Guard washers	Panel		Smallbear: GW009	
3	Guard nuts	Panel		Smallbear: GN009	
1	1/4" Jack	Panel Mount		Mentor Model: PJ301M3	Also Model 1 in its 1/4" jacks as well, but a one-size-magnum-size
2	Pre-Set Bands	PT-32	8123-272R103J127		

Non-matched Resistors and capacitors (Optional)

10	Black Wood Screw		90159A212	M3Master: 90159A212 A
10	Black Nuts in Kitchen		94480A241 982953A300	M3Master: Sold in packs of 100. Nuts in ch.

R1, R2, R15 & R16 tolerances values have changed. They are as follows:

R1 = 1.1% R2 = 1% R15 = 1.1% R16 = 1.1%

DONOT USE 0.1% 0.5% 1% 2% 5% 10% 20%