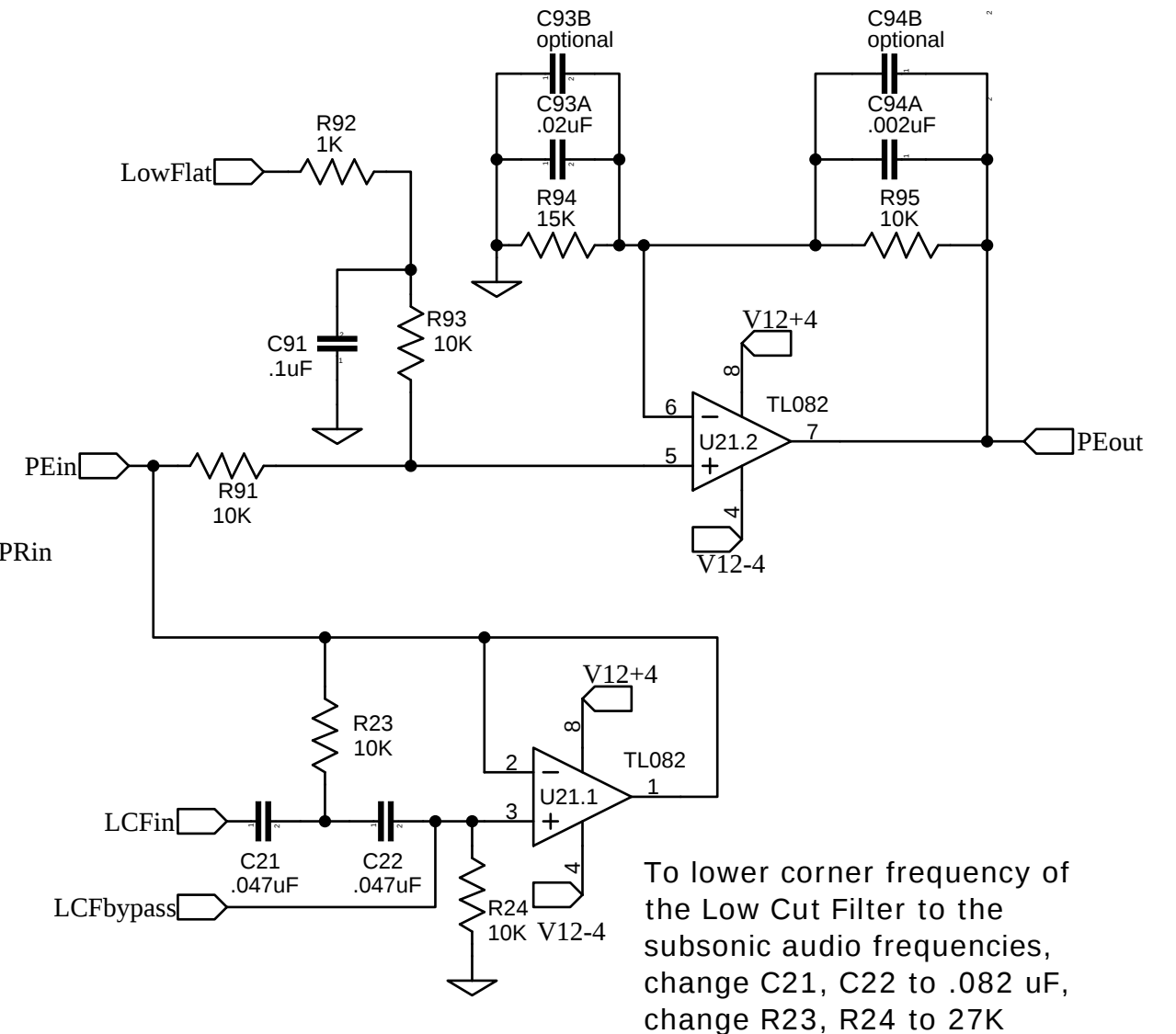
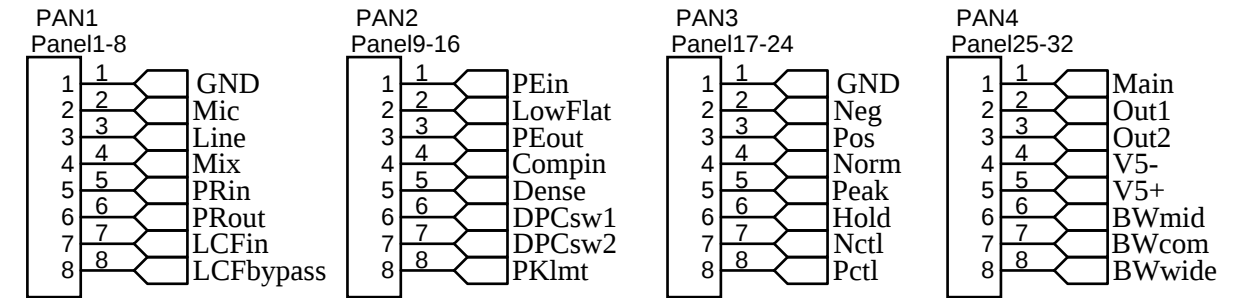
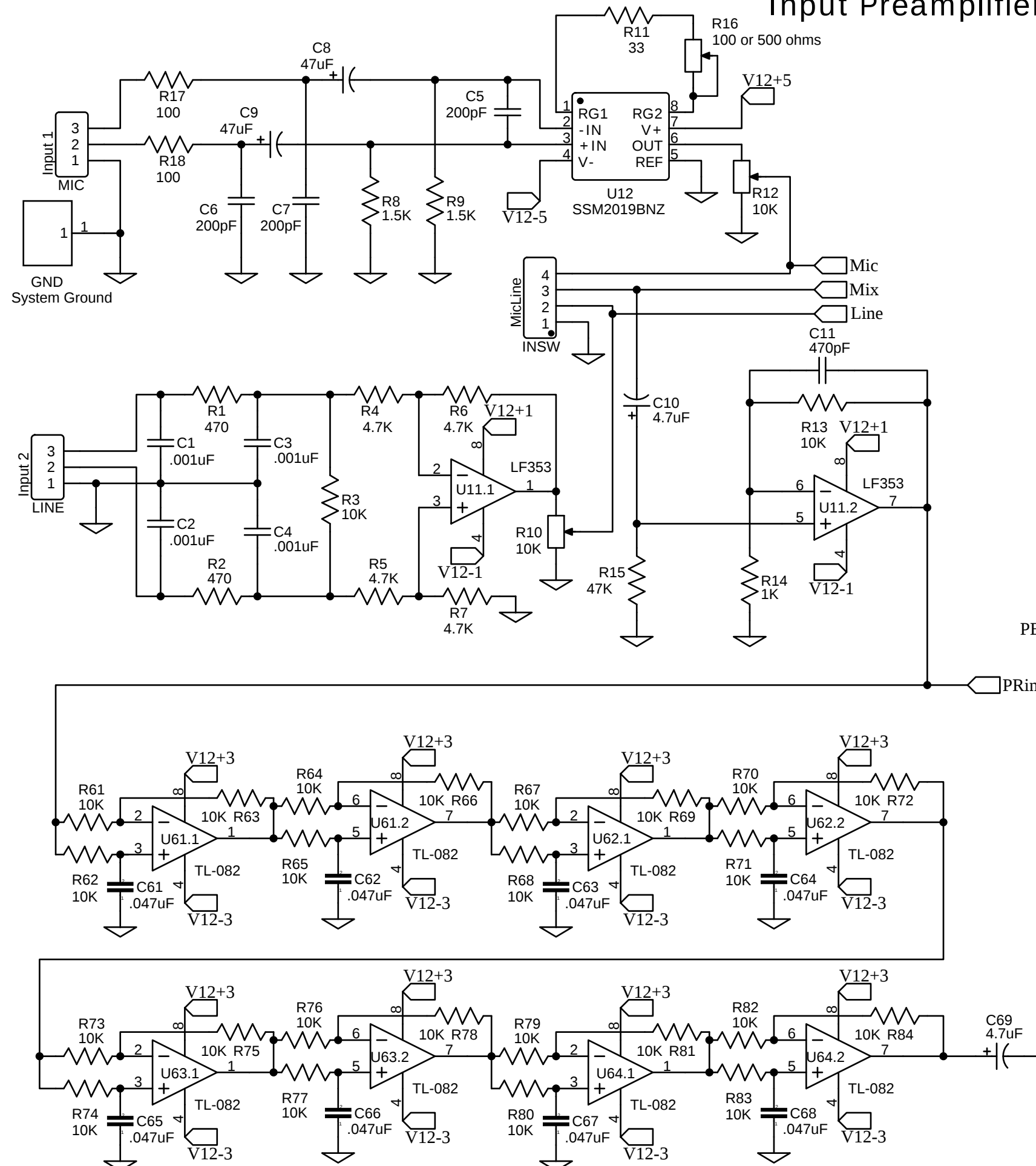


Input Preamplifier, Phase Rotator, Low Cut Filter, and PreEmphasis



To lower corner frequency of the Low Cut Filter to the subsonic audio frequencies, change C21, C22 to .082 uF, change R23, R24 to 27K

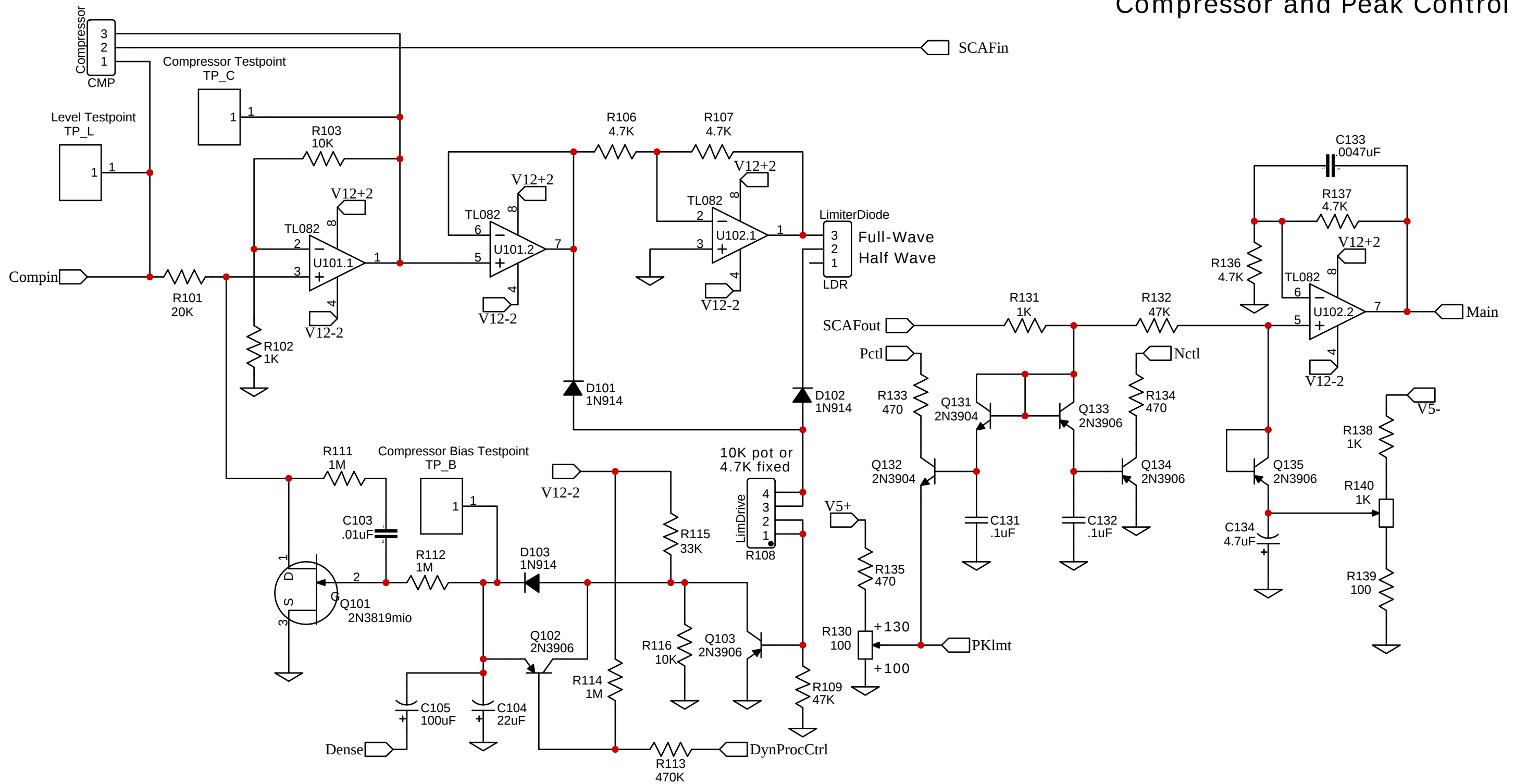
Master File AP20231002V520

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Updated component values for production 2024-01-28

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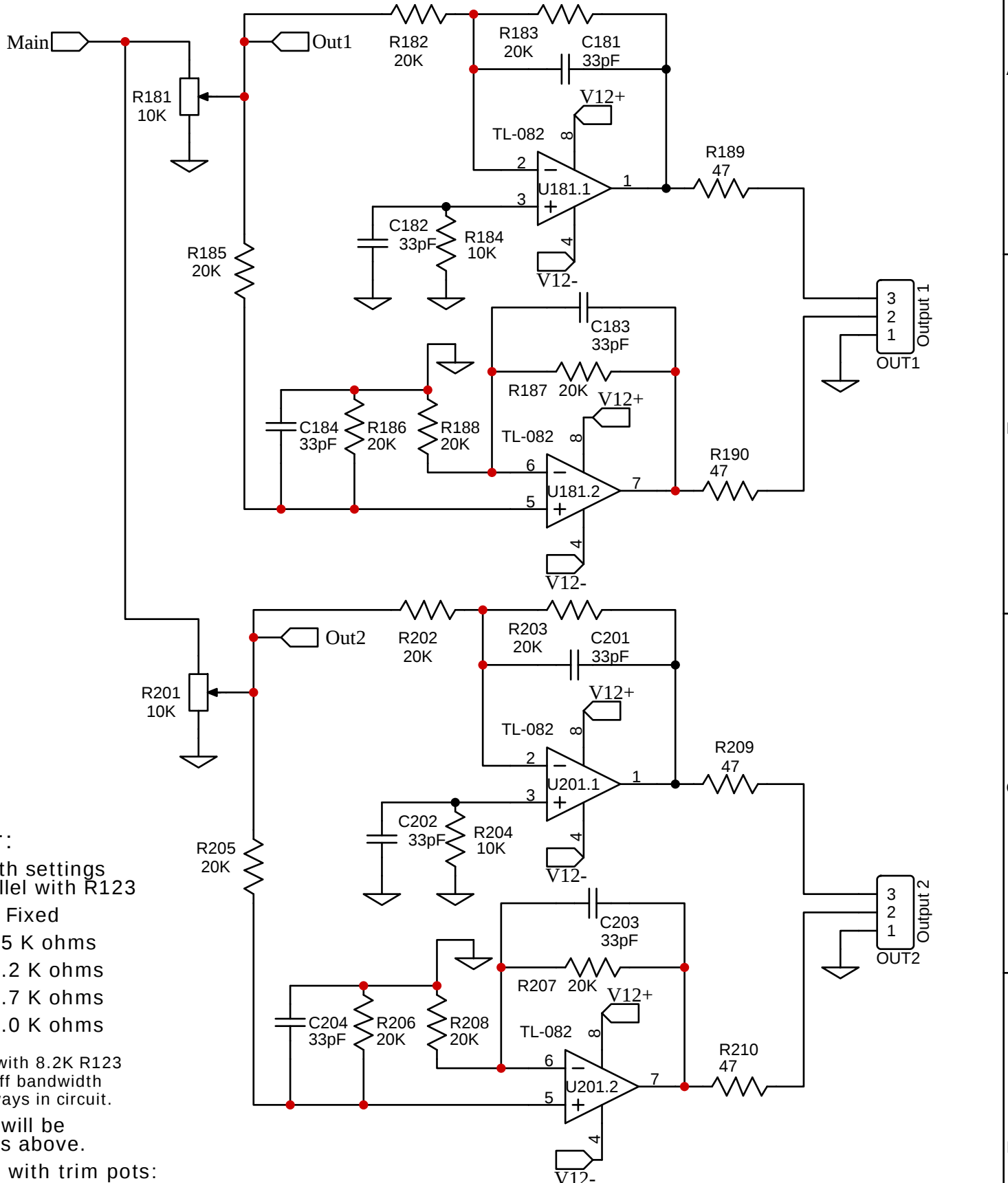
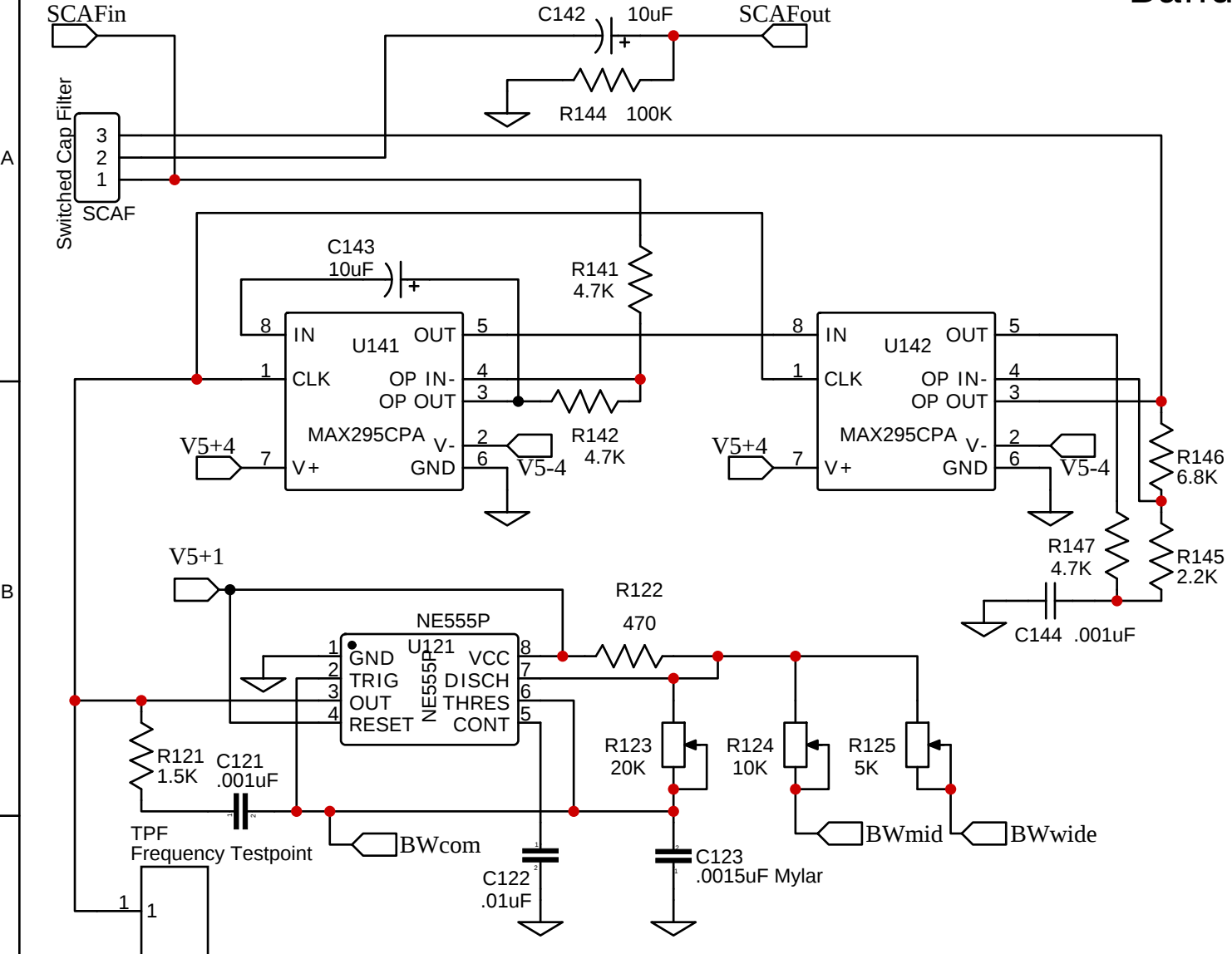
Compressor and Peak Control



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Bandwidth Clock, SCAF Filter, and Differential Output Amplifiers



SCAF Clock Specifications:

Values for R124 or R125 resistor:

Audio Response	AM Bandwidth	Clock Frequency	For only two bandwidths Clock Timing Resistance	For three bandwidth settings Resistance in Parallel with R123
3 KHz	6 KHz	129 KHz	R123 Resistor: 8.2K ohms	Variable (calibrate)
4 KHz	8 KHz	171 KHz	5.2K ohms	Fixed
5 KHz	10 KHz	215 KHz	3.5K ohms	14.36K ohms 15 K ohms
6 KHz	12 KHz	238 KHz	3.0K ohms	6.11 K ohms 6.2 K ohms
7 KHz	14 KHz	280 KHz	2.2K ohms	4.51 K ohms 4.7 K ohms
				2.95 K ohms 3.0 K ohms

Preferred, most accurate calibration method:
Clock frequency is adjusted such that SCAF
output signal level is reduced 12 dB from the
1 KHz reference level, when the signal frequency is
raised to the desired audio response frequency.
Some Ops may wish a 3 dB down corner frequency.

Approximate total resistance
Use for only two clock rates
with no center-off BW switch.

For "close-enough" clock frequency, you will be
in the ball park if you use the fixed values above.

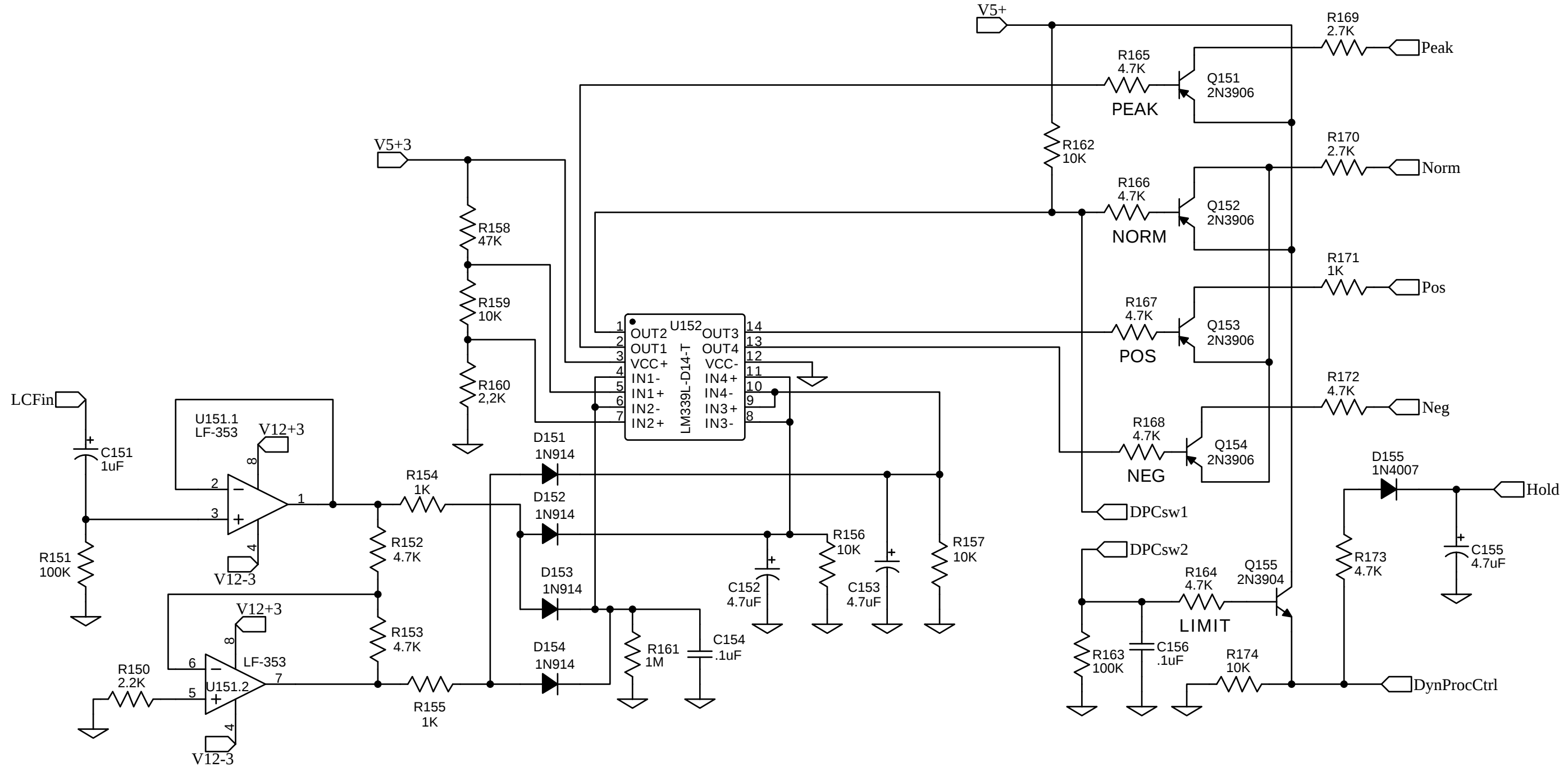
If you wish to calibrate with trim pots:

R123 = 10K (103)
R124 = 25K (253) or 10K (103)
R125 = 10K (103) or 5K (502)

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Level Indicator and Dynamic Processing Control Logic



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