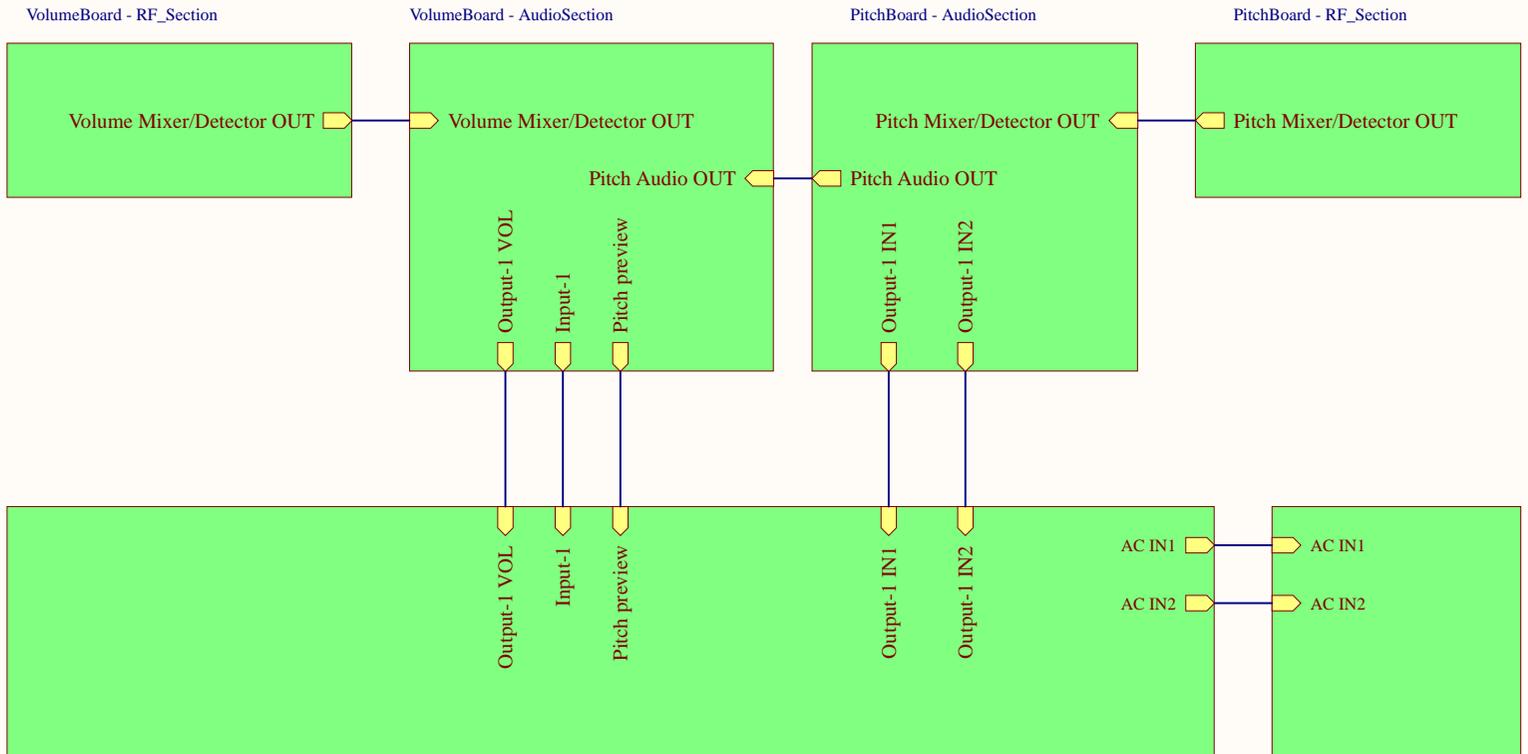


Volume board

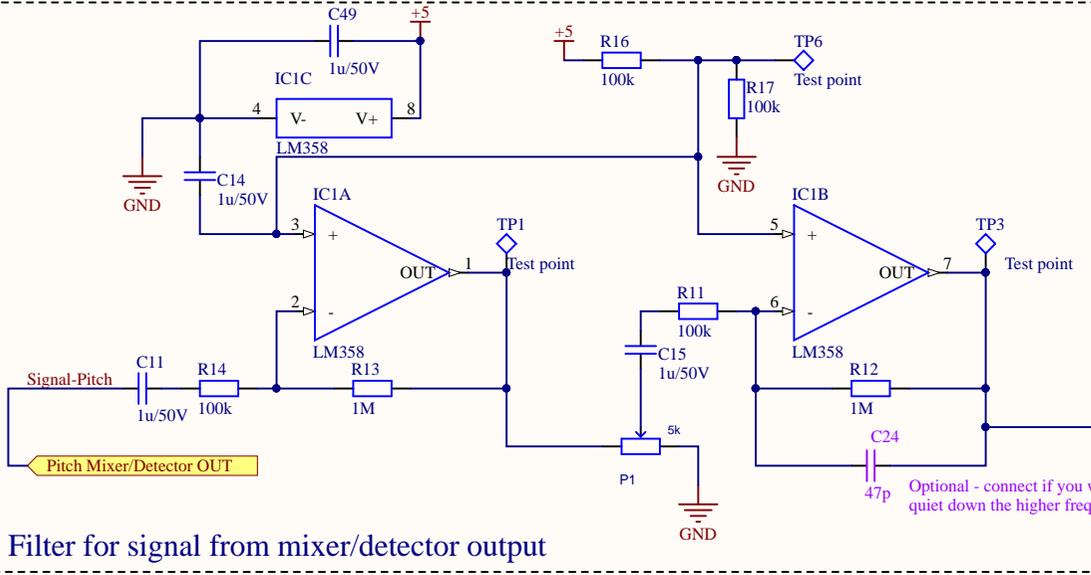
Pitch board



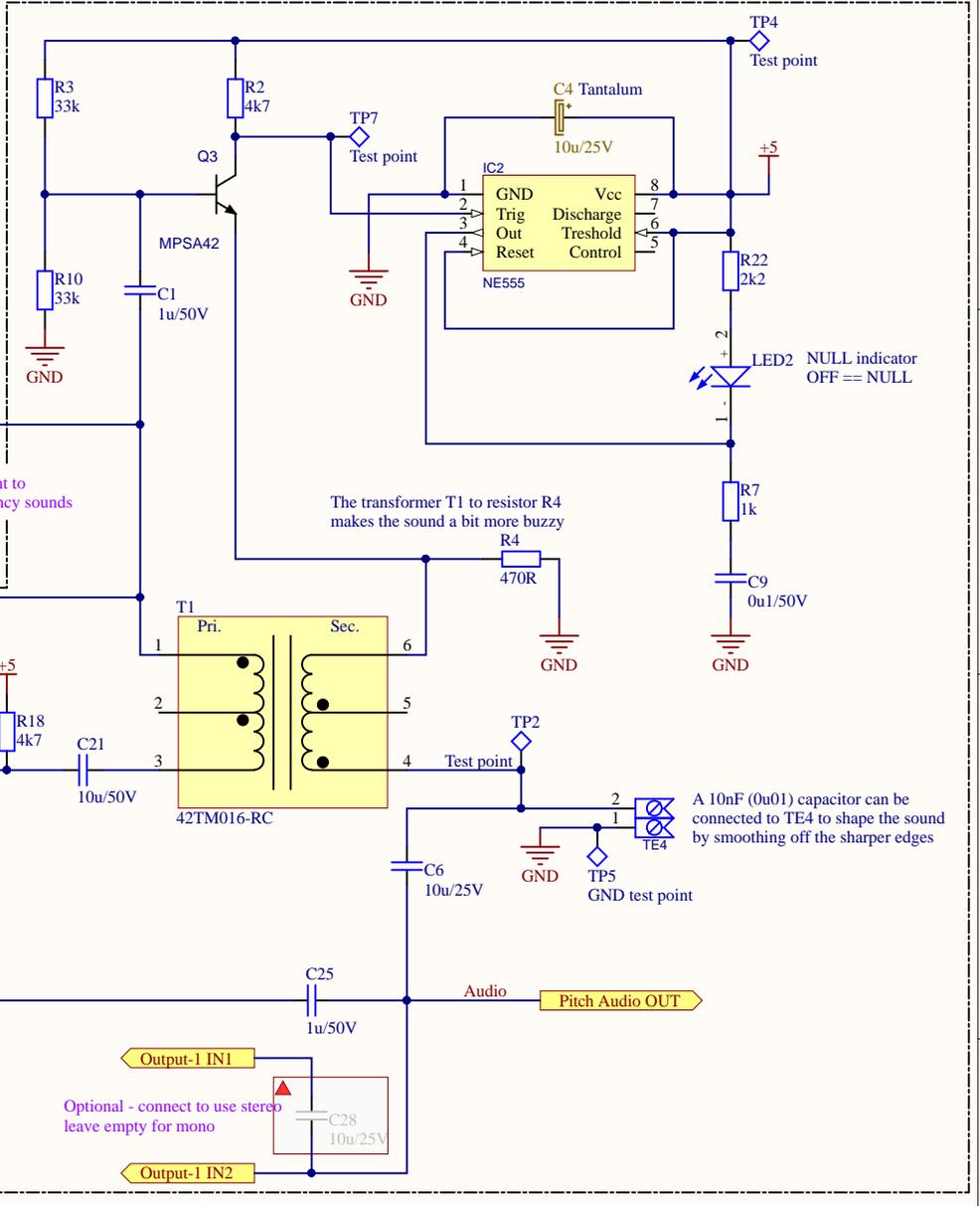
Front panel connections

Power supply

Phoenix Electrodeum		
Engineered by:	Christopher Becker	
Drawn by:	Peter Nimac	
Date:	23.01.2019	
File:	Phoenix.SchDoc	Revision: 1.07.19
Size:	A4	Sheet 1 of 7
WEB: http://www.oldtemecula.com/theremin2020/		



Filter for signal from mixer/detector output



This part of the circuit is used to shape the signal into the classic theremin waveform

TE3 is a power connector from the board for a future accessory (i.e. a reverb board)

Optional - connect to use stereo leave empty for mono

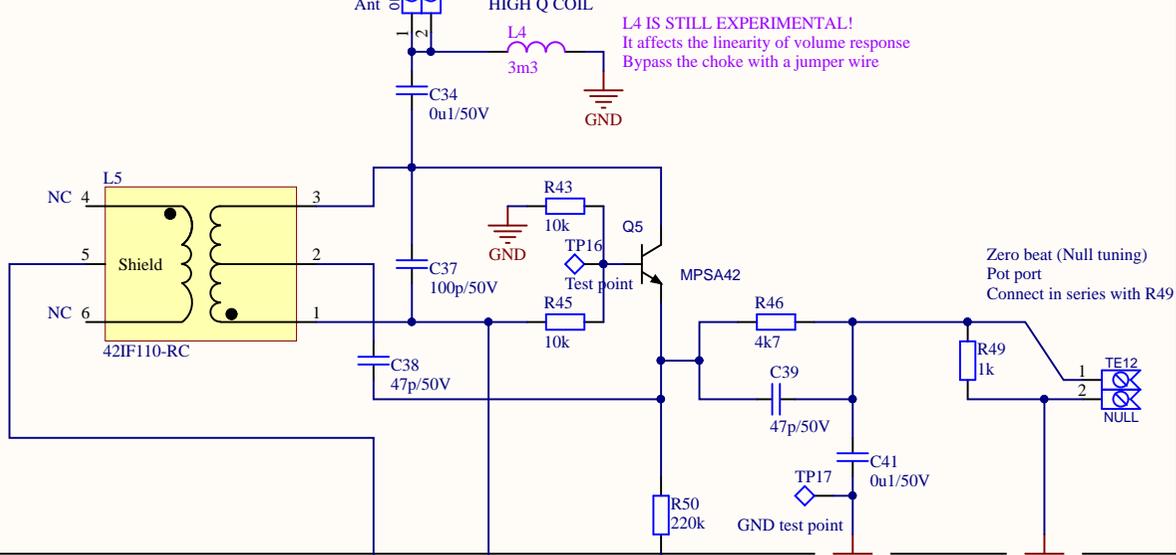
A 10nF (0u01) capacitor can be connected to TE4 to shape the sound by smoothing off the sharper edges

PITCH BOARD

Phoenix Electrodeum		Pitch - Audio section
Engineered by: Christopher Becker	Drawn by: Peter Nimac	Revision: 1.07.19
Date: 23.01.2019	Size: A4	Sheet3 of 7
File: PitchBoard - AudioSection.SchDoc		
WEB: http://www.oldtemecula.com/theremin2020/		

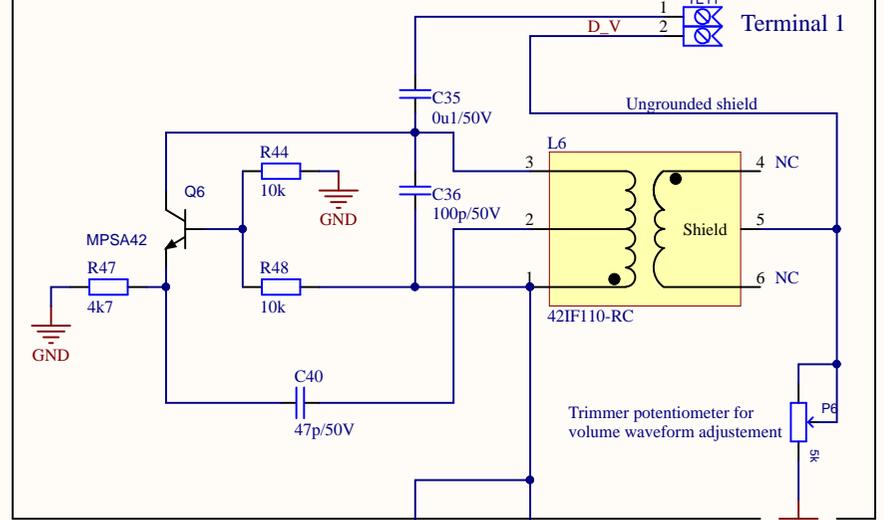


Variable pitch, L1 oscillator

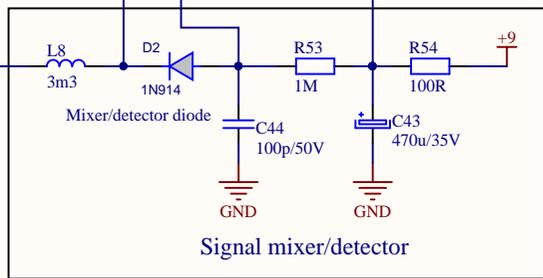


Fixed pitch, L2 oscillator

$f = \sim 750\text{KHz}$



Terminal 1



Volume Mixer/Detector OUT

P7 and P8 are used to balance thermal drift they are not mandatory however and may be left out, as they will be bypassed by R1 and R27.

Phoenix Electrodeum

Engineered by: Christopher Becker
 Drawn by: Peter Nimac
 Date: 23.01.2019 | Size: A4
 File: VolumeBoard - RF Section.SchDoc
 WEB: <http://www.oldtemecula.com/theremin2020/>

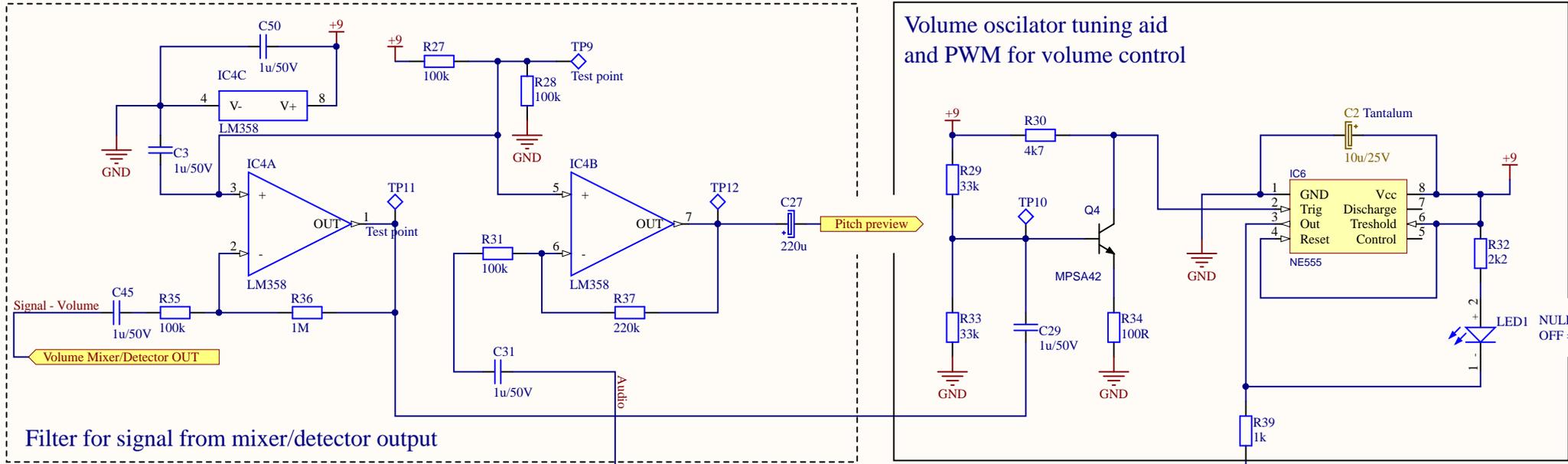
Volume - RF section

Revision: 1.07.19

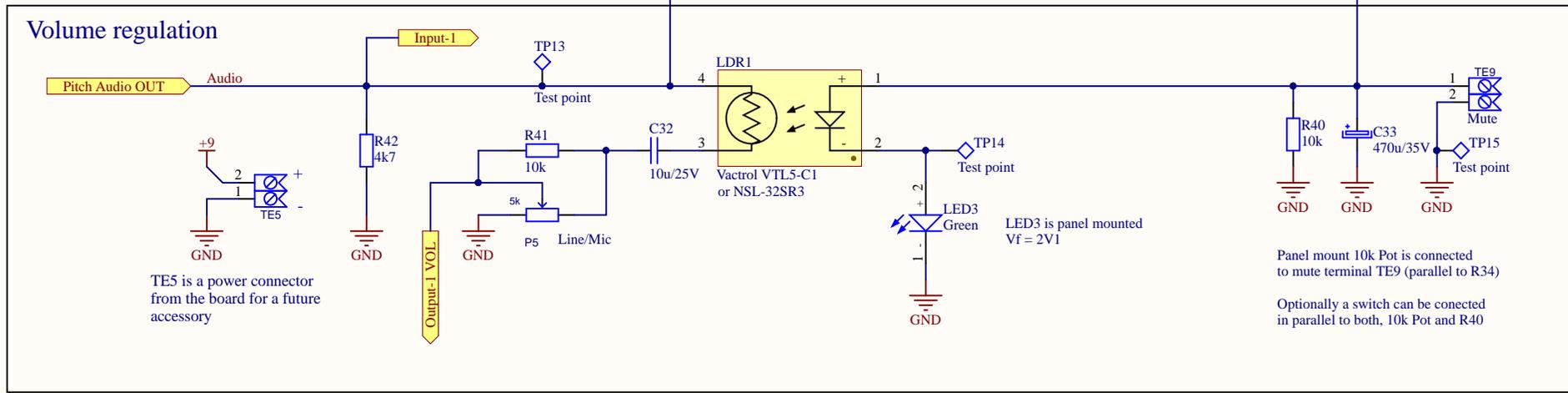
Sheet4 of 7



VOLUME BOARD



Volume regulation

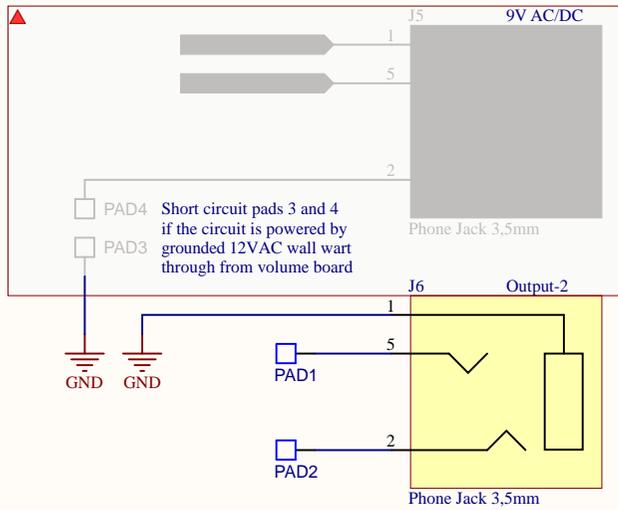


VOLUME BOARD

Phoenix Electrodeum		Volume - Audio section
Engineered by:	Christopher Becker	Revision: 1.07.19
Drawn by:	Peter Nimac	Sheet 5 of 7
Date:	23.01.2019	Size: A4
File:	VolumeBoard - AudioSection.SchDoc	
WEB:	http://www.oldtemecula.com/theremin2020/	



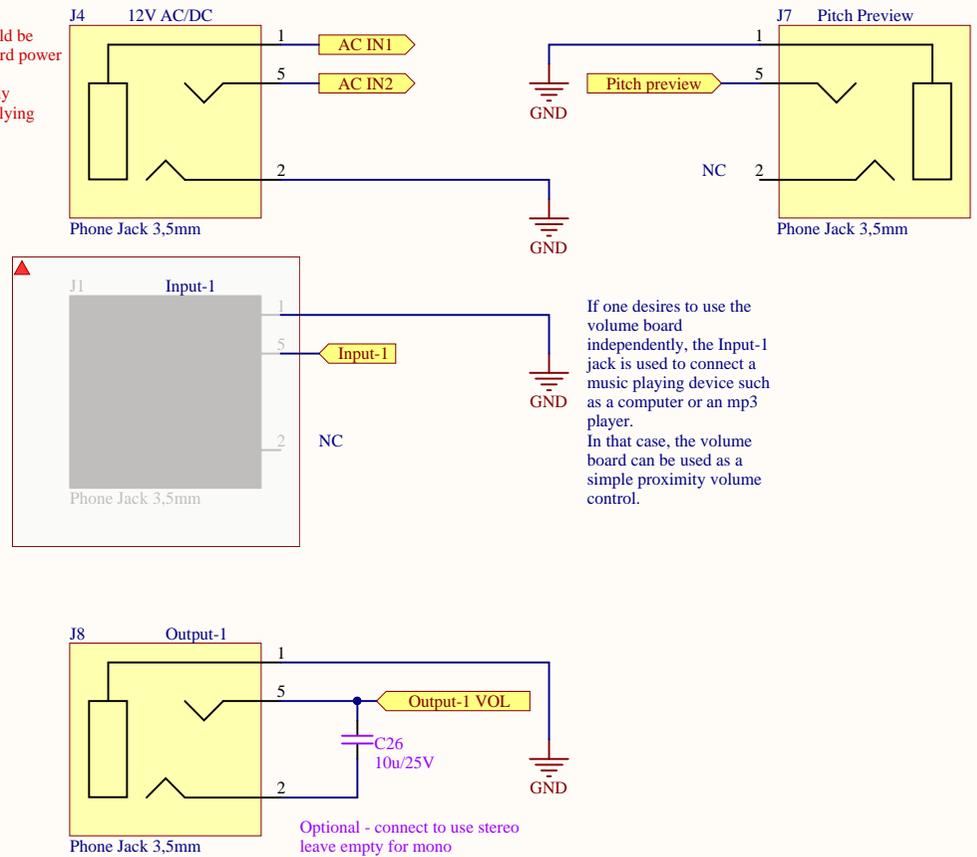
PITCH BOARD



Connection for an accessory Output from NE555 or unmodified sound before transformer can be fed here

VOLUME BOARD

This connector should be replaced by a standard power connector. TRS jack is not really appropriate for supplying power



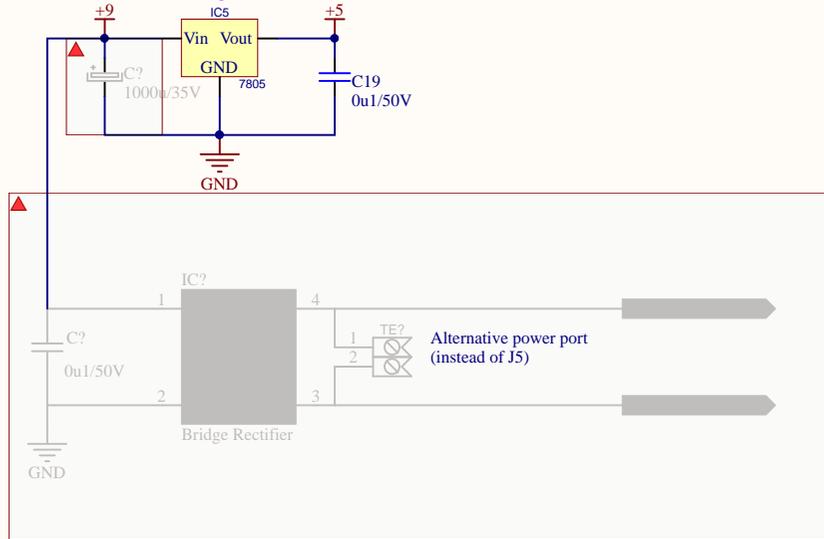
Optional - connect to use stereo leave empty for mono

If one desires to use the volume board independently, the Input-1 jack is used to connect a music playing device such as a computer or an mp3 player. In that case, the volume board can be used as a simple proximity volume control.

Phoenix Electrodeum		Front panel	
Engineered by:	Christopher Becker	Revision: 1.07.19	
Drawn by:	Peter Nimac	Sheet 6 of 7	
Date:	23.01.2019	Size: A4	
File:	FrontPanel.SchDoc		
WEB: http://www.oldtemecula.com/theremin2020/			

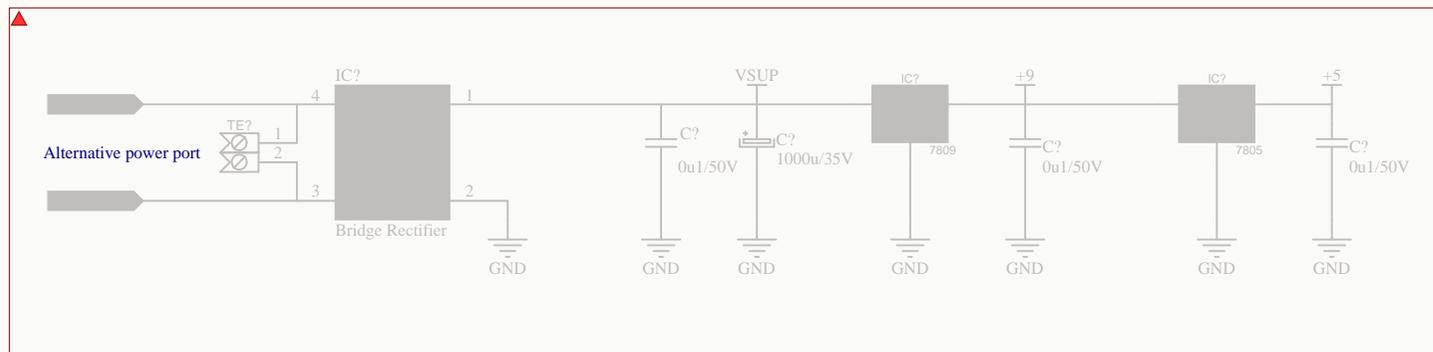
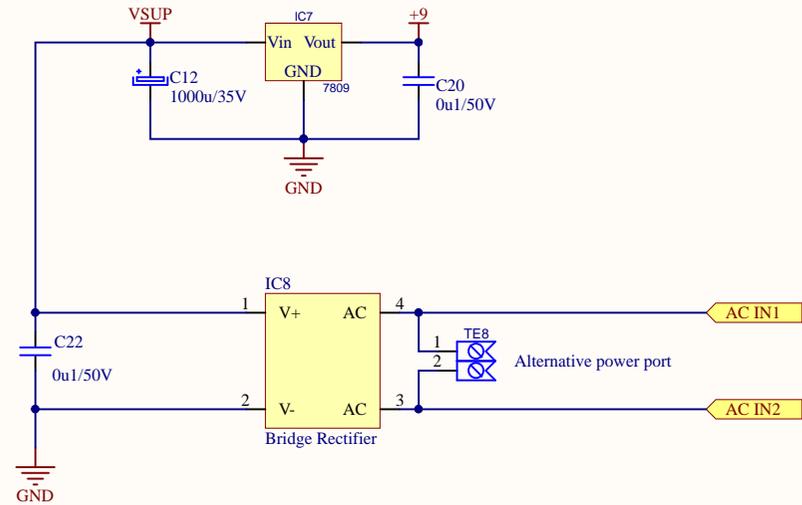
This part of the circuit is placed on the pitch board

C10 is not used if Volume board is connected
In that case leave as an open circuit



I will remove the greyed out areas.
I will however, make a separate schematic for the 2
board variant and leave the appropriate parts of the
circuit on the schematic.

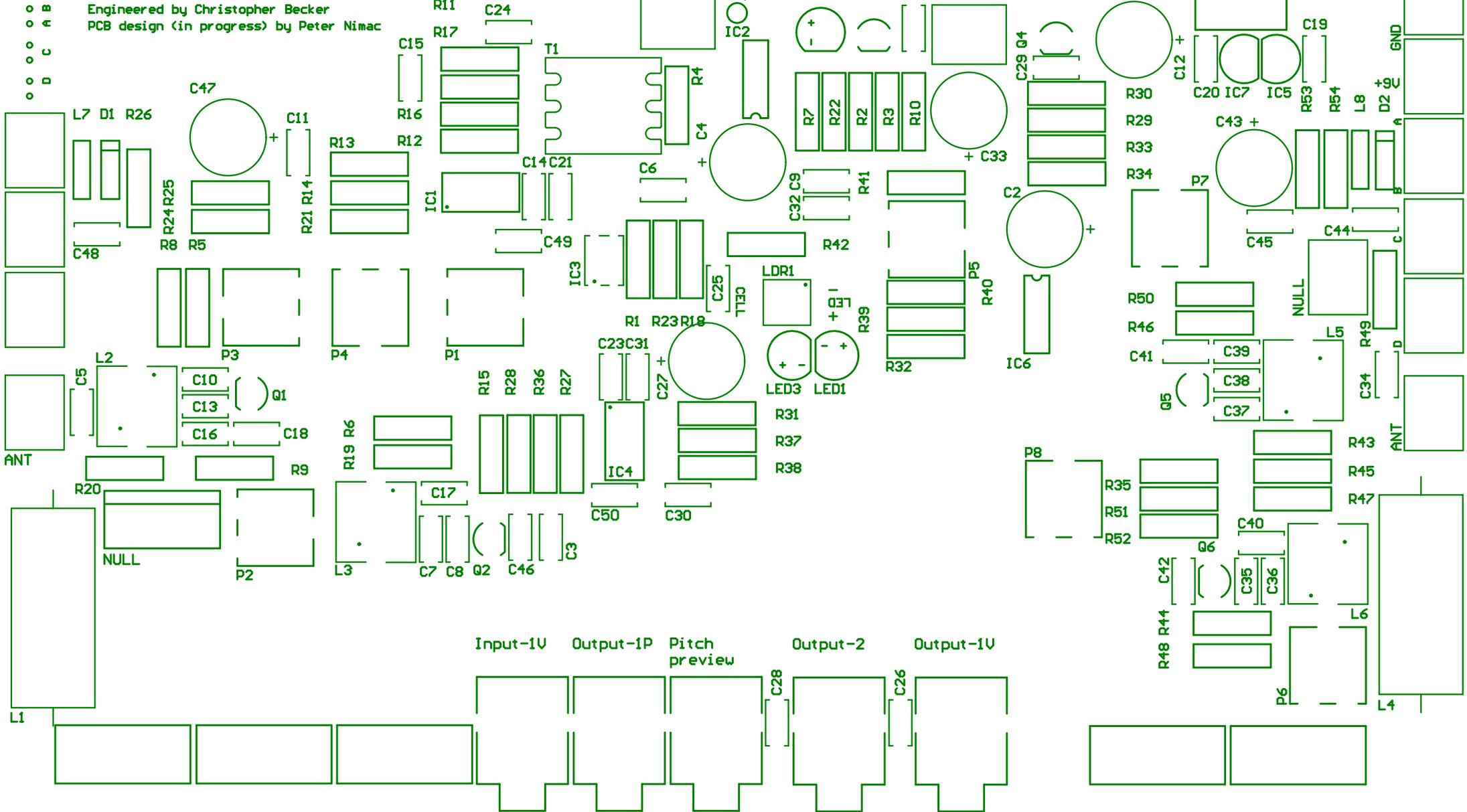
This part of the circuit is placed on the volume board



Phoenix Electrodeum		Power Supply	
Engineered by:	Christopher Becker	Revision: 1.07.19	
Drawn by:	Peter Nimac	Sheet 7 of 7	
Date:	23.01.2019	Size: A4	
File:	PowerSupply.SchDoc		
WEB: http://www.oldtemecula.com/theremin2020/			

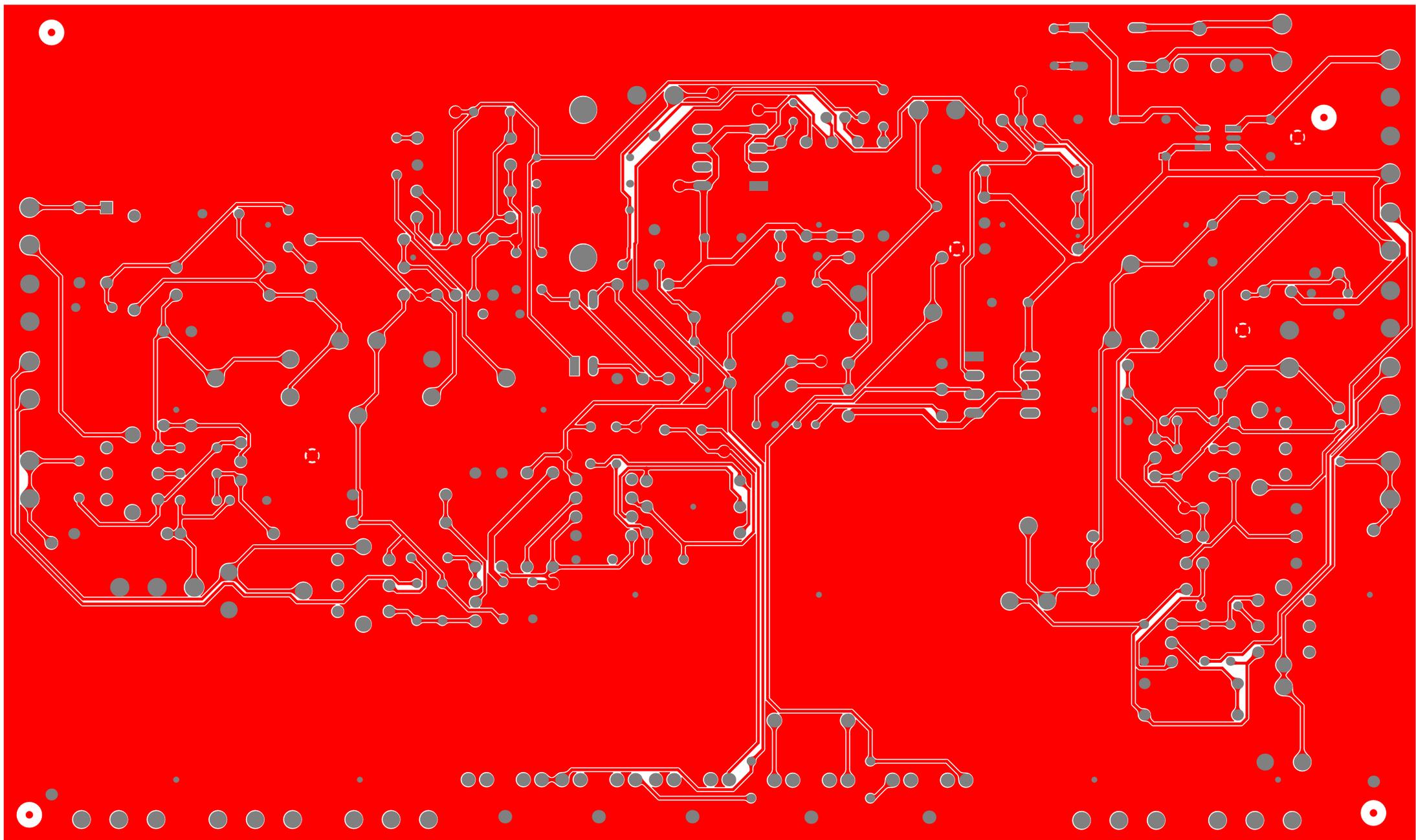
Phoenix Electrodeum
 Prototype for a single board revision
 (revision B1)

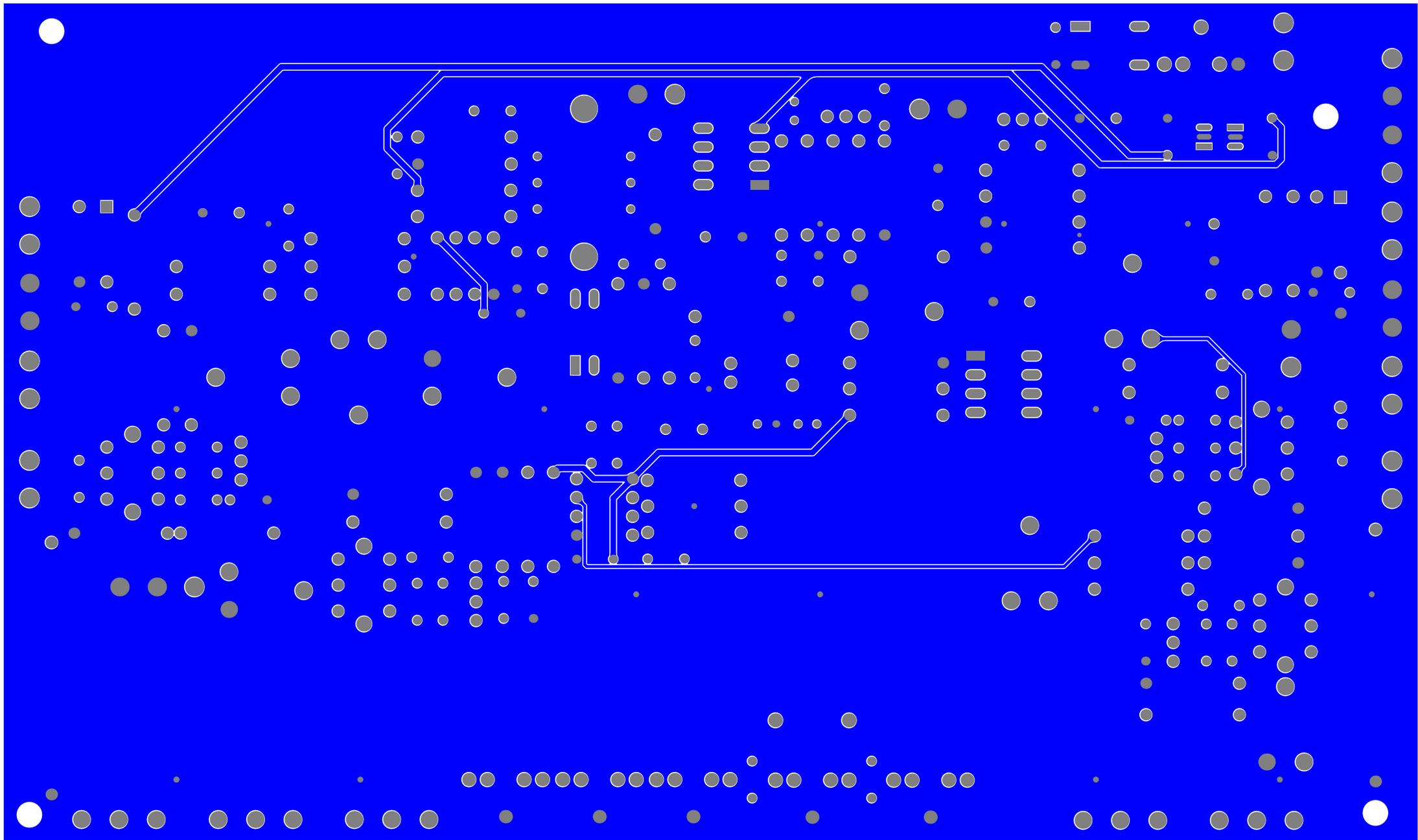
Engineered by Christopher Becker
 PCB design (in progress) by Peter Nimac



Phone Vol Volume Pitch

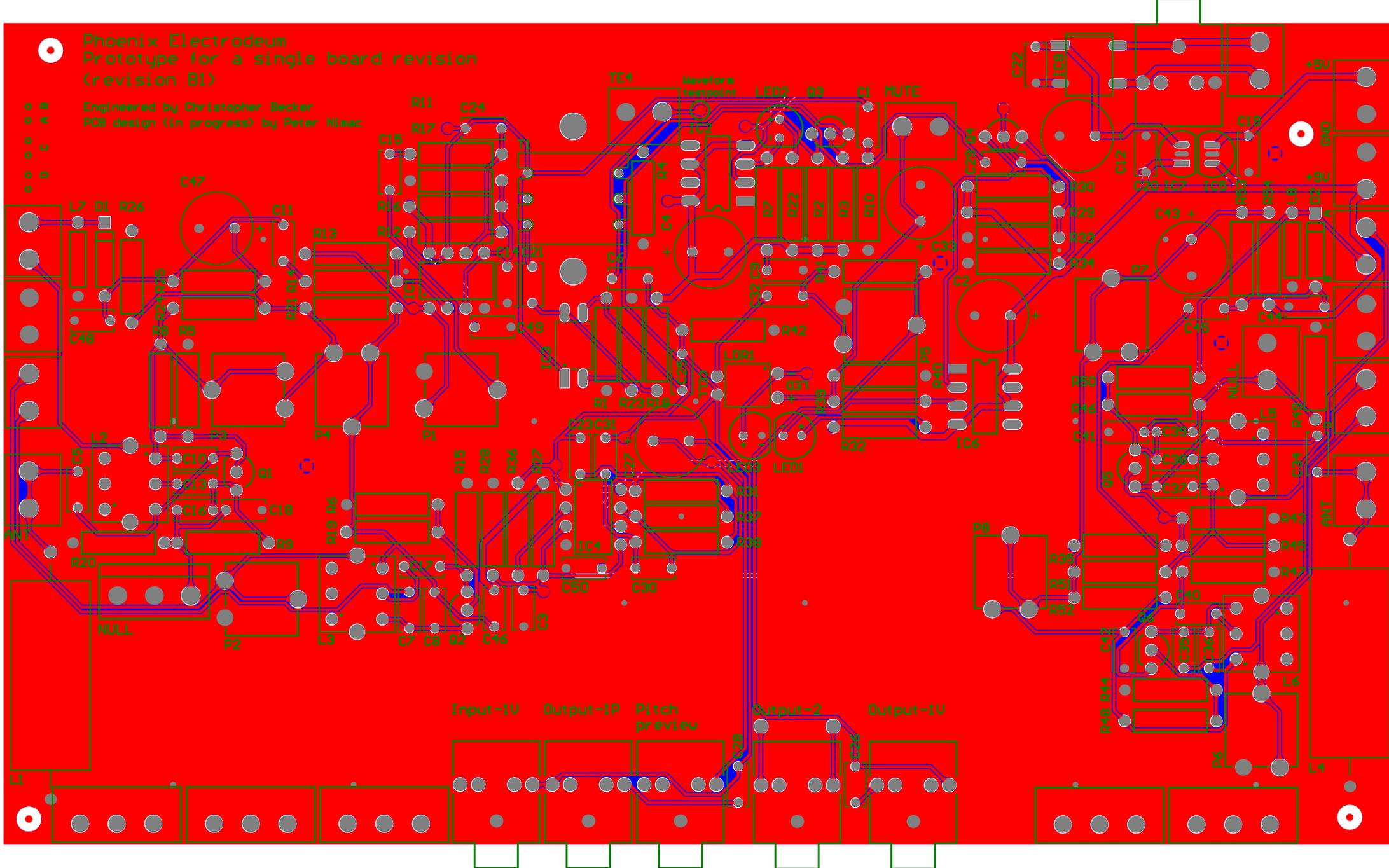
Waveform Brightness





Phoenix Electrodeum
Prototype for a single board revision
(revision B1)

Engineered by Christopher Becker
PCB design (in progress) by Peter Nimac



Phone Vol

Volume

Pitch

Waveform

Brightness