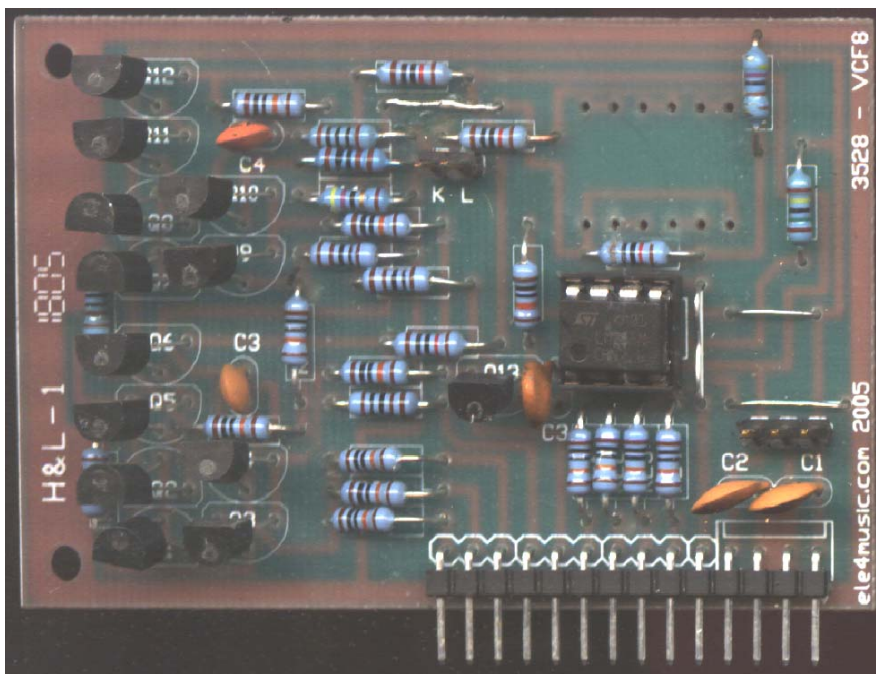
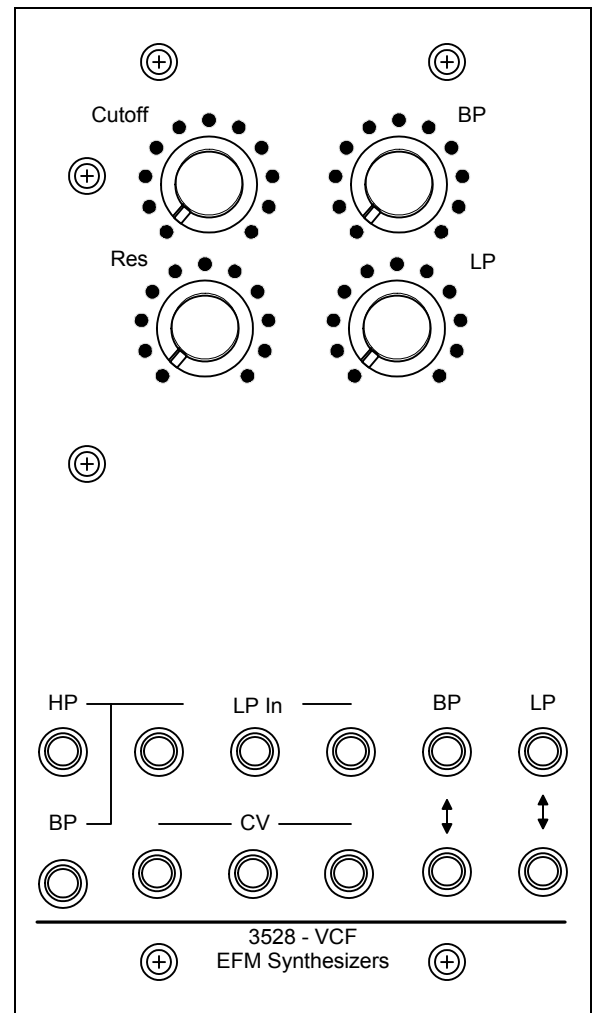
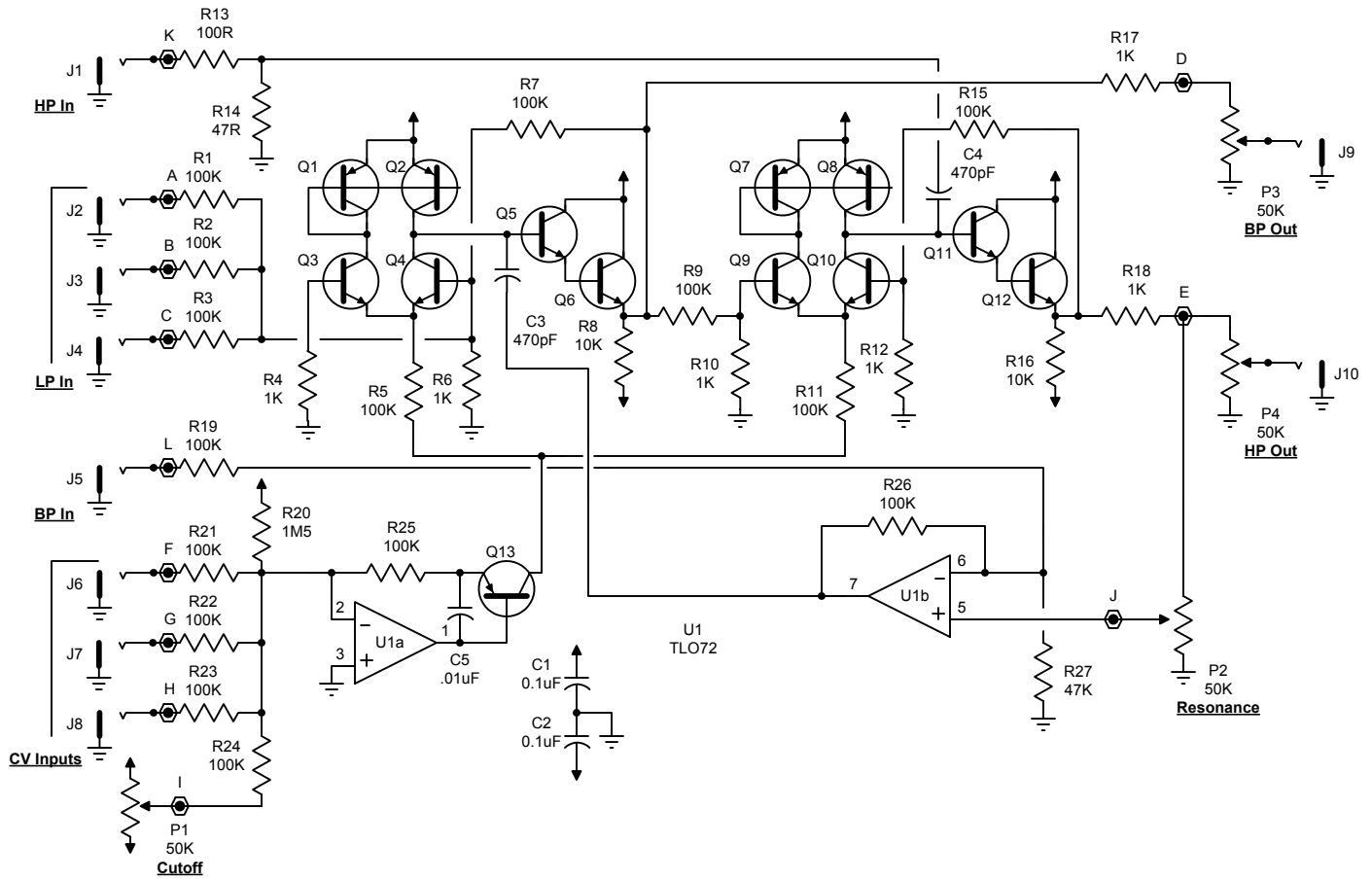


3528 VCF voltage controlled filter

The 3528 is based in the korg MS20 filters.

Cell1 and Cell2 (See VCF1-3521) are identical integrators connected in series. The gain of these amplifiers determine the center frequency of the filter. The gain is set by bias current supplied by constant current source Q1 and Q2. The ratio of currents through these two transistors is a rough exponential function of the voltage difference between the bases. Current supplied from Q2 is reasonably constant and repeatable. High, and low-pass outputs are all available at the same time.





Small Kit

- PCB
- C1,2
- C3,4
- C5
- R1,2,3,5,7,9,11,15,19,21
- 22,23,24,25,26
- R4,6,10,12,17,18
- R8,16
- R13
- R14
- R27
- R20
- Q1,2,7,8,13
- Q3,4,5,6,9,10,11,12
- U1

- PC Board 1
- 0.1uF Ceramic 2
- 470pF Ceramic 2
- .01uF Ceramic 1
- 100K 14
- 1K 6
- 10K 2
- 100 1
- 47 1
- 47K 1
- 1M5 1
- 2N3906 5
- 2N3906 8
- LF353/TLO72 1

Full Kit

- P1,2,3,4 50K Pot 4
- Knob 4
- Jack 1/8" 12
- L Bracket w/hardware 2
- Header 1
- Panel 1
- Overlay 1

Errors

There's not enough gain to use the limiting diodes D1-6. I think this can be fixed by lowering the value of R5,11 but I haven't had time to try it.

The good part is that it works well for now by simply omitting the diodes. May not want to fix it? Don't know yet..

