Mallet-organ synthesizer

4 octave tone/ASR PCB

(Twelve 12-bit frequency divider networks in total, one for each tone in the 12-tone chromatic scale)

NOTE: Every RC filter network has layout for these paralleled components, though not drawn with R and C values as needed for each filter’s unique cut-off frequency using targeted (0R) resistance values. A program written in C computes all of these resistance values as well as parameters for all sixteen frequency divider networks.

(Twelve filter/mixer networks in total, one for each tone in the 12-tone chromatic scale)

NOTE: Top copper planes are all +5 VDC, bottom copper planes all Ground.