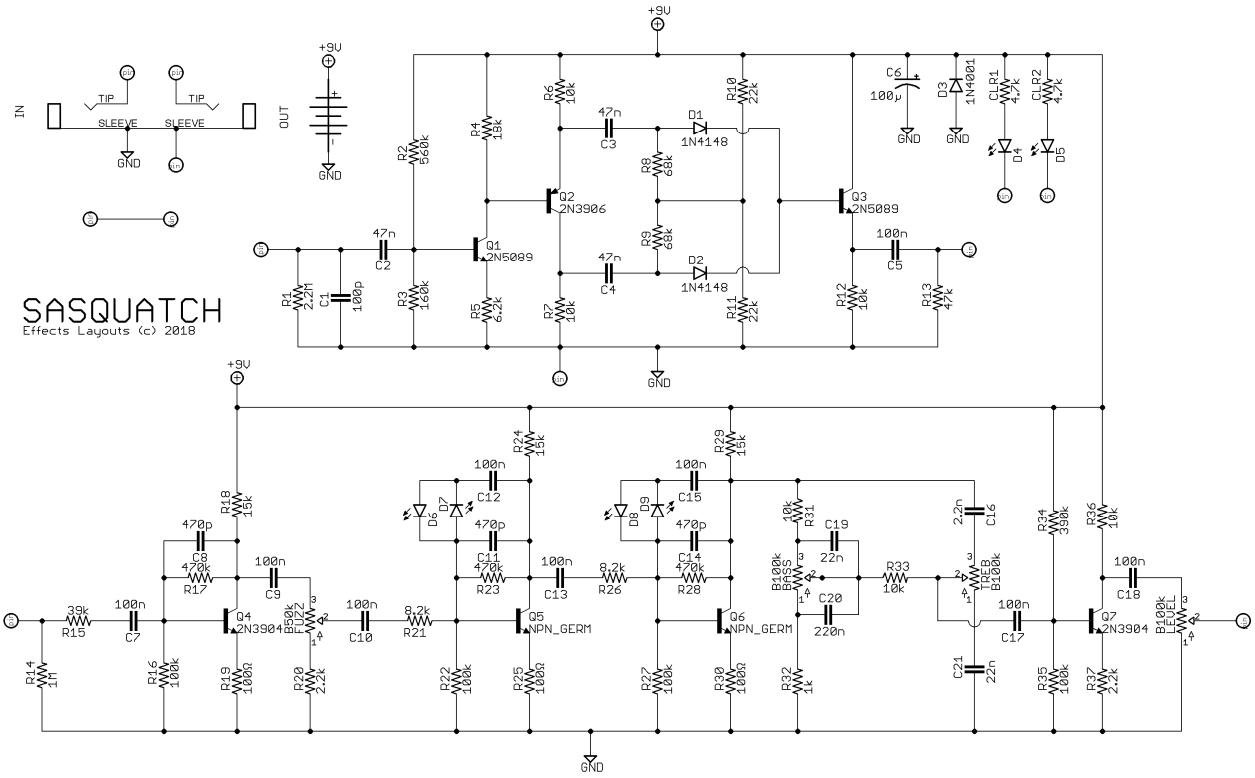
DESCRIPTION

The SASQUATCH is an octa-fuzz combining two classic effects: the Dan Armstrong® Green Ringer and Electro-Harmonix® Big Muff™. The Muff circuit has been modified with a James-Baxandall tone stack for individual treble and bass controls, and LEDs in the clipping stages. There is also the option to use germanium transistors in the two clipping stages. Despite the 2 footswitches, it's specifically designed to be built into a 125B enclosure with top mounted jacks. Pads for the input, output and DC jacks are all at the top of the board, and the numbered pads at the bottom of the board corresponding to a 3PDT footswitch lug numbers.

SCHEMATIC



BILL OF MATERIALS

Resistors

R1	2.2M
R2	560k
R3	160k
R4	18k
R5	6.2k
R6	10k
R7	10k
R8	68k
R9	68k
R10	22k
R11	22k
R12	10k
R13	47k
R14	2.2M
R15	39k
R16	100k
R17	470k
R18	15k
R19	100Ω
R20	2.2k
R21	8.2k
R22	100k
R23	470k
R24	15k
R25	100Ω
R26	8.2k
R27	100k
R28	470k
R29	15k
R30	100Ω
R31	10k
R32	1k
R33	10k
R34	390k
R35	100k
R36	10k
R37	2.2k
CLR1	4.7k
CLR2	4.7k

Capacitors

C1	100p
C2	47n
C3	47n
C4	47n
C5	100n
C6	100µ
C7	100n
C8	470p
C9	100n
C10	100n
C11	470p
C12	100n
C13	100n
C14	470p
C15	100n
C16	2.2n
C17	100n
C18	100n
C19	22n
C20	220n
C21	22n

Semiconductors

D1-2	1N4148
D3	1N4001
D4-5	LED
D6-9	3mm red LED
Q1, 3	2N5089
Q2	2N3906
Q4, 7	2N3904
Q5-6	NPN Germanium

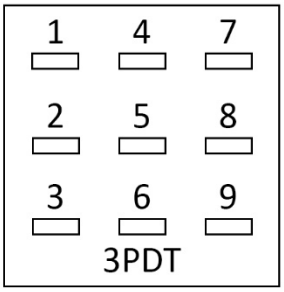
Electromechanical

Fuzz	B50k
Bass	B100k
Treble	B100k
Level	B100k

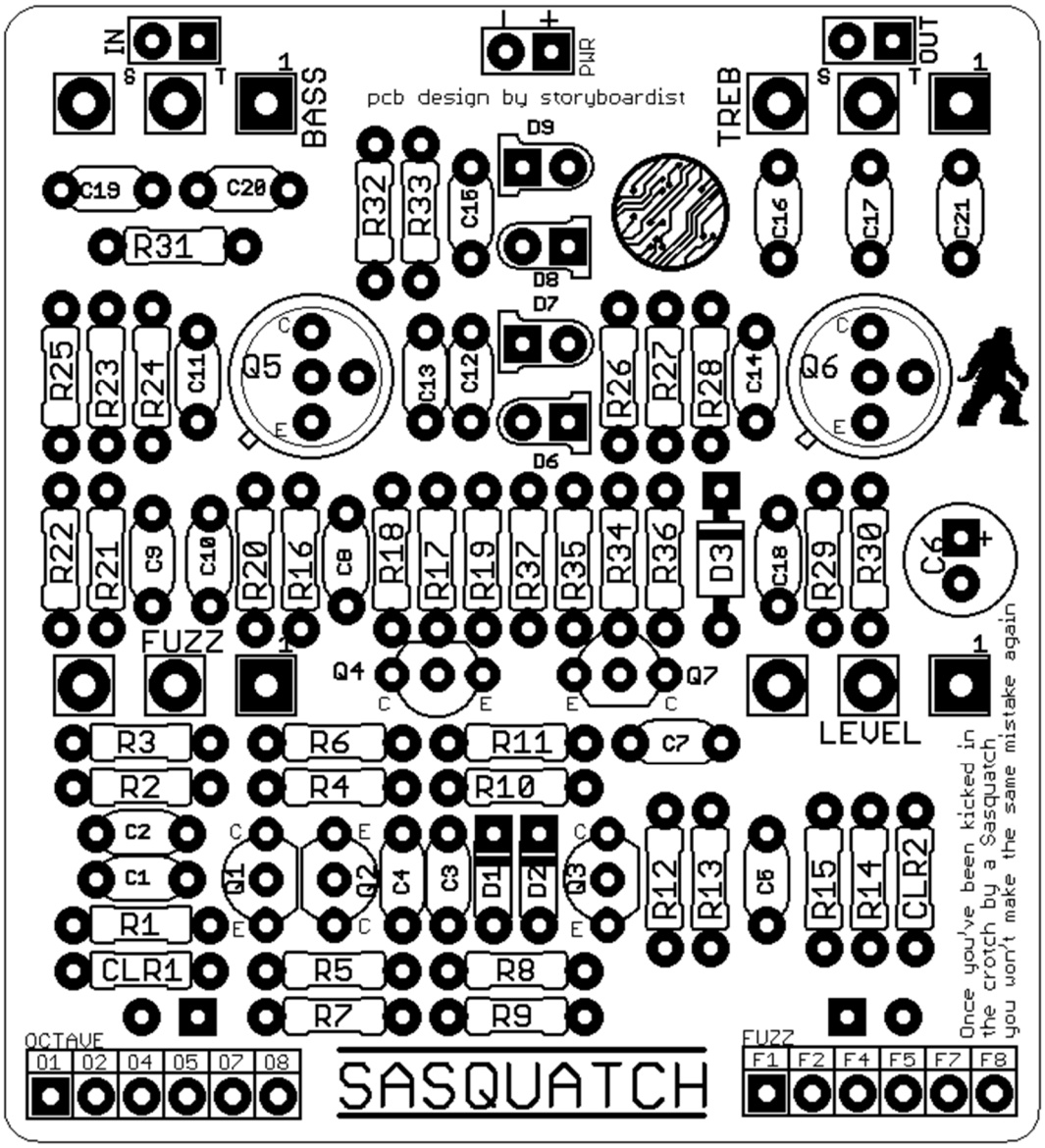
Notes

NPN Germaniums should be fairly high in hFE (250+ preferably). If you want to build the Sasquatch with all silicon transistors, use 2N5089 or similar high gain transistors for Q4-7. D4-5 are on/off indicator LEDs and should be populated on the back side of the board. You will need to jumper lugs 3 and 6 of the 3PDTs, and it's not a bad idea of running a jumper from lug 1 to lug 9.

Footswitch lug numbering:



LAYOUT



DRILL TEMPLATE (125B)