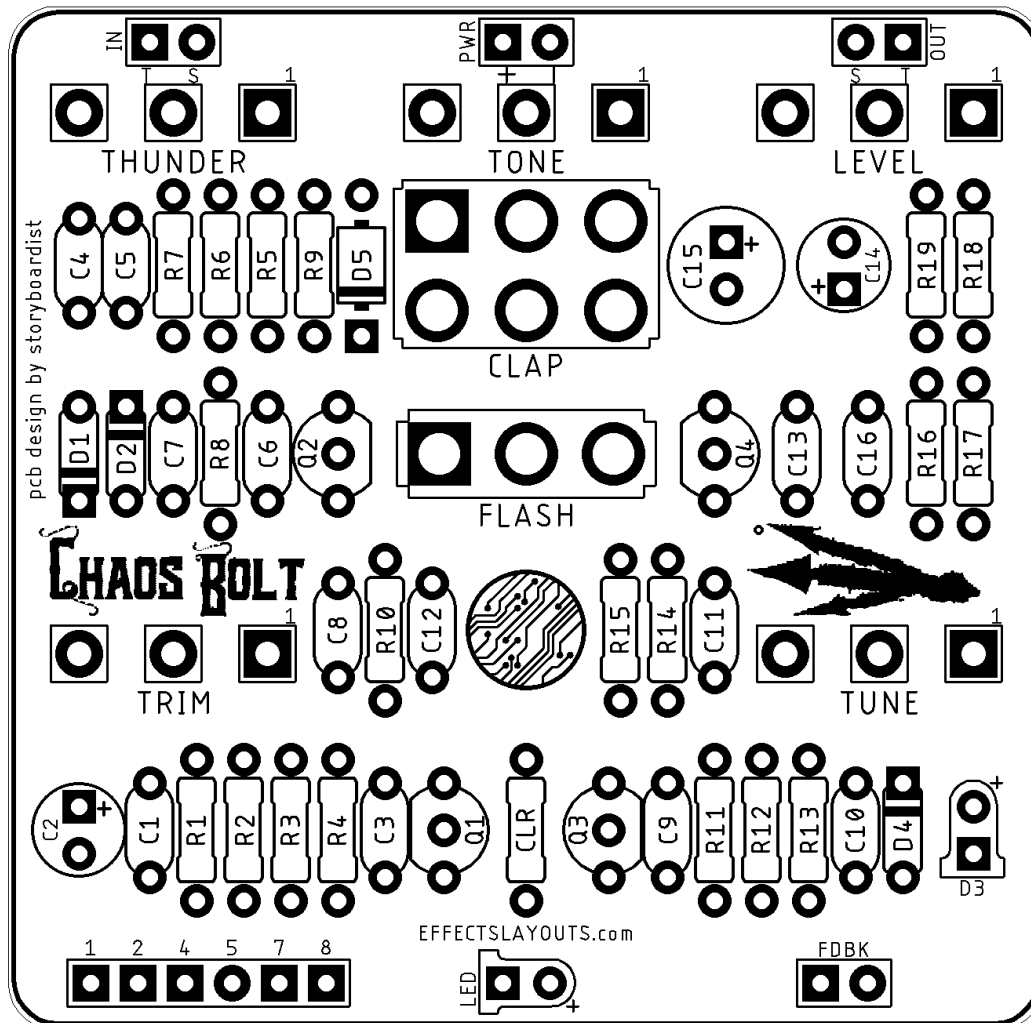


# CHAOS BOLT

## DESCRIPTION

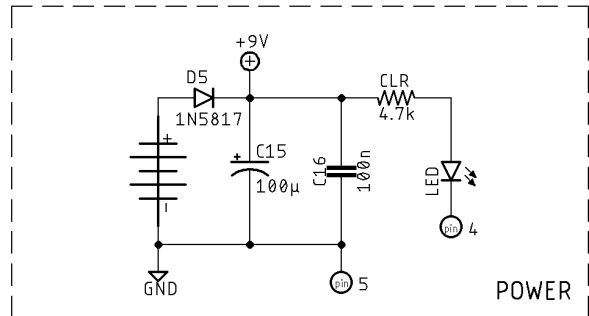
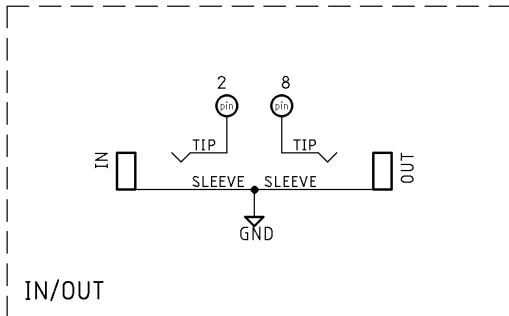
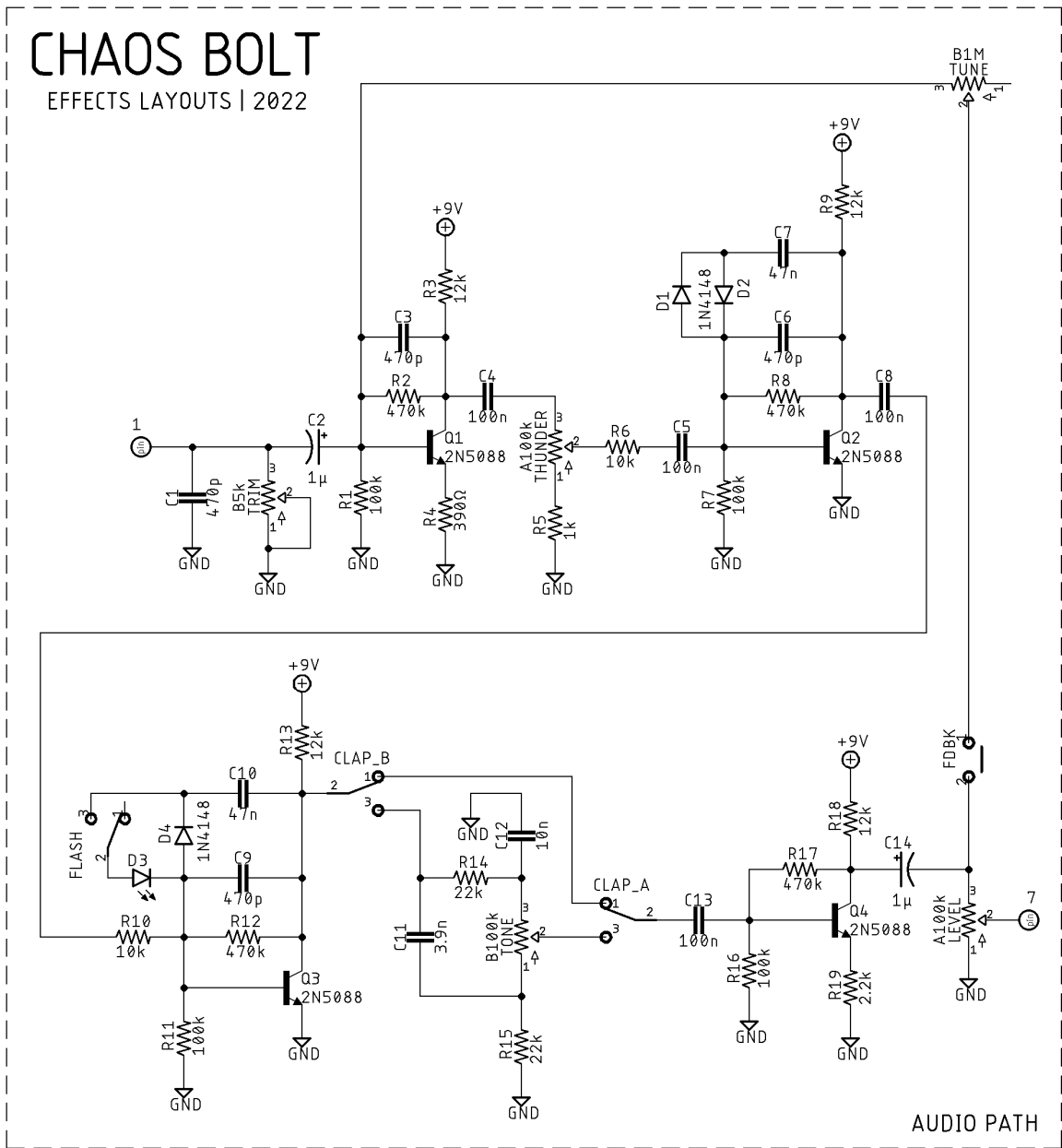
The CHAOS BOLT is a tweakable, Big Muff variant based on the Eau Claire Thunder from Dwarfcraft Devices. It features a tune-able feedback loop, triggered by a momentary footswitch, along with a tone stack bypass toggle (the Clap switch) and a diode toggle (the Flash switch) adding an LED to the second gain stage. All of this fits neatly in a 125B, which might make this closer to the Dwarfcraft Baby Thunder, but with more of the functionality of the larger Eau Claire version.

## LAYOUT



Note pinout of Q1, 4 is EBC from top to bottom, and Q2-3 is CBE from top to bottom.

# SCHEMATIC



## BOM

### Resistors

R1	100k
R2	470k
R3	12k
R4	390Ω
R5	1k
R6	10k
R7	100k
R8	470k
R9	12k
R10	10k
R11	100k
R12	470k
R13	12k
R14	22k
R15	22k
R16	100k
R17	470k
R18	12k
R19	2.2k
CLR	4.7k

### Capacitors

C1	470p
C2	1μ
C3	470p
C4	100n
C5	100n
C6	470p
C7	47n
C8	100n

C9	470p
C10	47n
C11	3.9n
C12	10n
C13	100n
C14	1μ
C15	100μ
C16	100n

### Semiconductors

D1	1N4148
D2	1N4148
D3	Green 3mm LED
D4	1N4148
D5	1N5817
LED	3 or 5mm
Q1	2N5088
Q2	2N5088
Q3	2N5088
Q4	2N5088

### Electromechanical

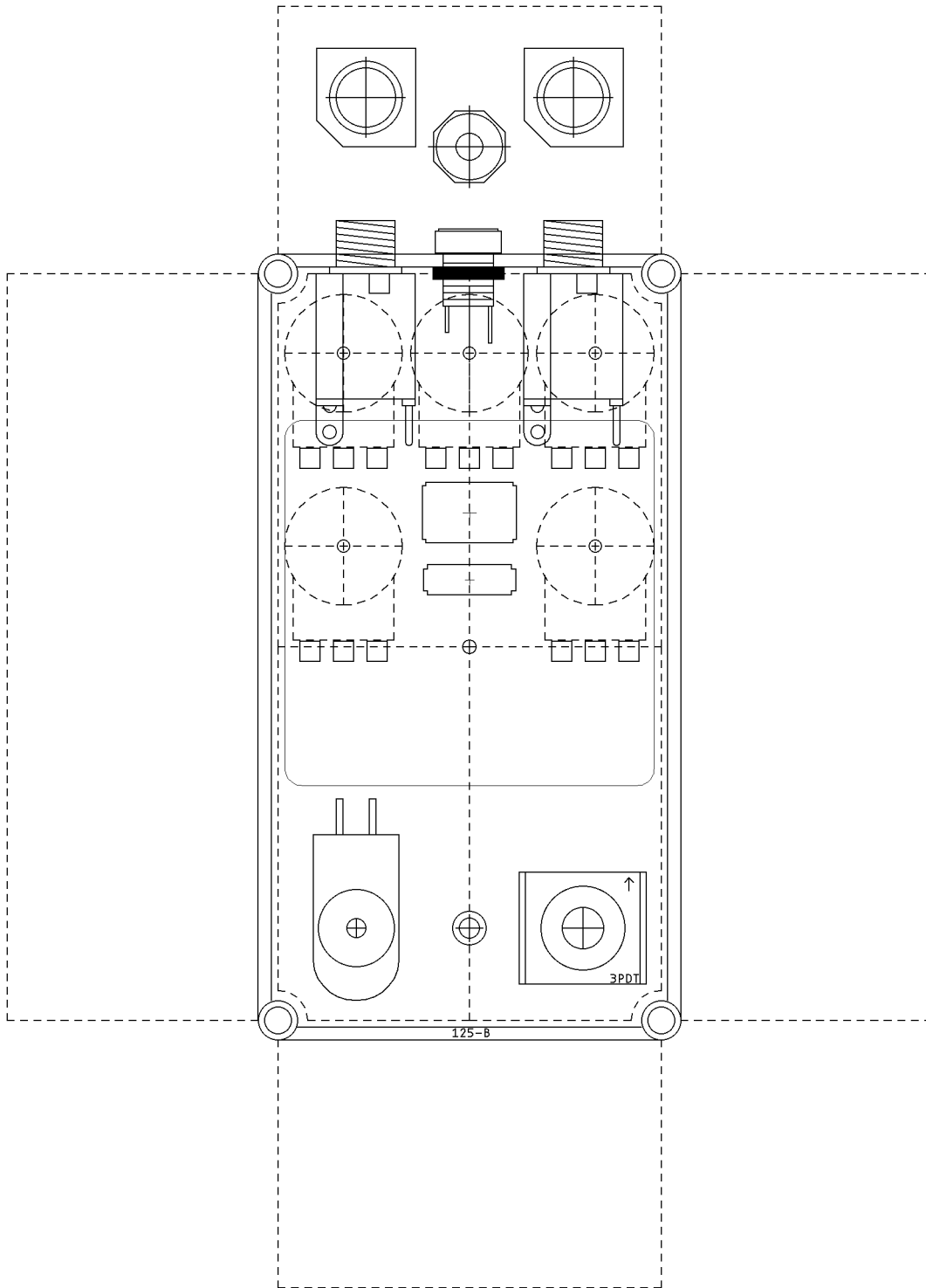
CLAP	DPDT on/on
FDBK	Momentary footswitch
FLASH	SPDT on/on
LEVEL	A100k
THUNDER	A100k
TONE	B100k
TRIM	B5k
TUNE	B1M

## SHOPPING LIST

Value	Type (Suggested)	Quantity
390Ω	¼ watt metal or carbon film	1
1k	¼ watt metal or carbon film	1
2.2k	¼ watt metal or carbon film	1
4.7k	¼ watt metal or carbon film	1
10k	¼ watt metal or carbon film	2
12k	¼ watt metal or carbon film	4
22k	¼ watt metal or carbon film	2
100k	¼ watt metal or carbon film	4

470k	¼ watt metal or carbon film	4
470p	Ceramic	4
3.9n	Film	1
10n	Film	1
47n	Film	2
100n	Film	4
100n (C16)	Ceramic	1
1μ	Electrolytic (25v+)	2
100μ	Electrolytic (25v+)	1
1N4148	Silicon switching diode	3
1N5817	Rectifier diode	1
2N5088	BJT	4
LED (D3)	Green diffused 3mm	1
LED	3 or 5mm	1
A100k	16mm right angle PC mount	2
B5k	16mm right angle PC mount	1
B100k	16mm right angle PC mount	1
B1M	16mm right angle PC mount	1
DPDT	On/on toggle	1
SPDT	On/on toggle	1
Momentary	N.O. footswitch	1

**DRILL TEMPLATE (125B)**



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