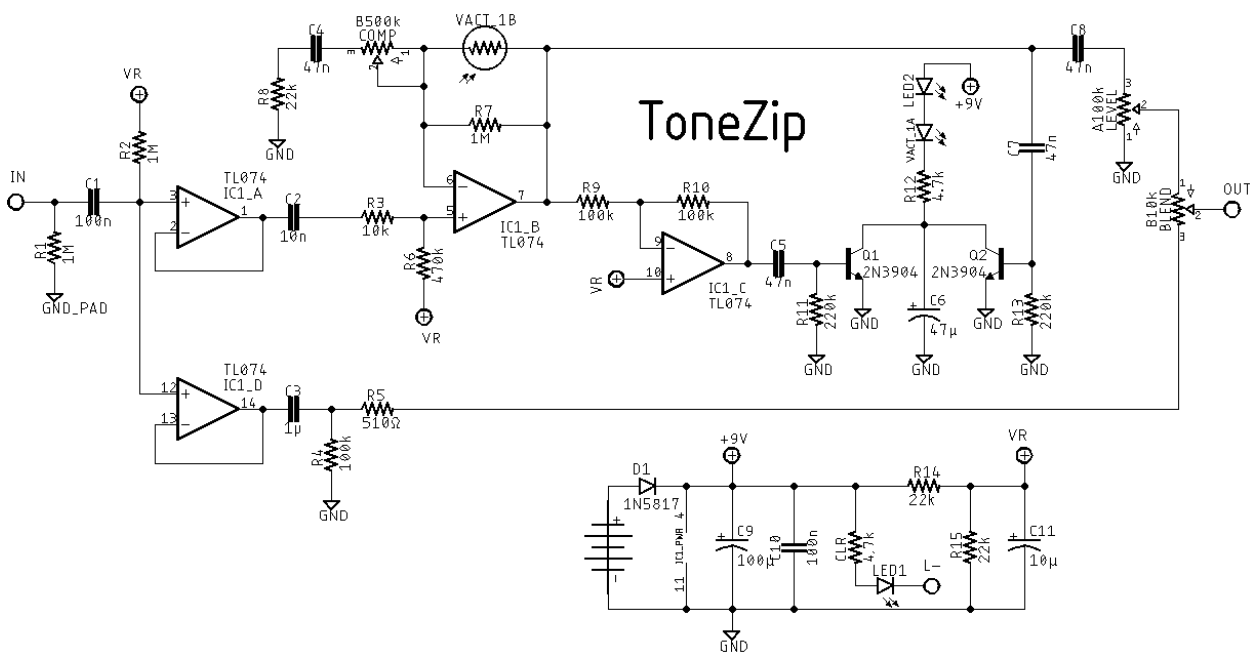


# ToneZip

## DESCRIPTION

The TONEZIP is an optical compressor based on the DOD 280. The main modification to the circuit is the added clean blend and input buffer, as well as an extra external LED showing the amount of compression happening in the circuit. It's a very transparent compressor with some clean boost on tap as well. Fits easily in either a 1590B or 125B enclosure.

## SCHEMATIC



## BOM

### Resistors

R1	1M
R2	1M
R3	10k
R4	100k
R5	510Ω
R6	470k
R7	1M
R8	22k
R9	100k
R10	100k
R11	220k
R12	4.7k
R13	220k
R14	22k
R15	22k
CLR	4.7k

### Capacitors

C1	100n
C2	10n
C3	1μ
C4	47n
C5	47n
C6	47μ

C7	47n
C8	47n
C9	100μ
C10	100n
C11	10μ

### Semiconductors

D1	1N5817
IC1	TL074
LED1	Red 5mm LED
LED2	3-5mm LED
Q1	2N3904
Q2	2N3904
Vact_1*	VTL5C2

### Electromechanical

Blend	B10k
Comp	B500k
Level	A100k

### Notes

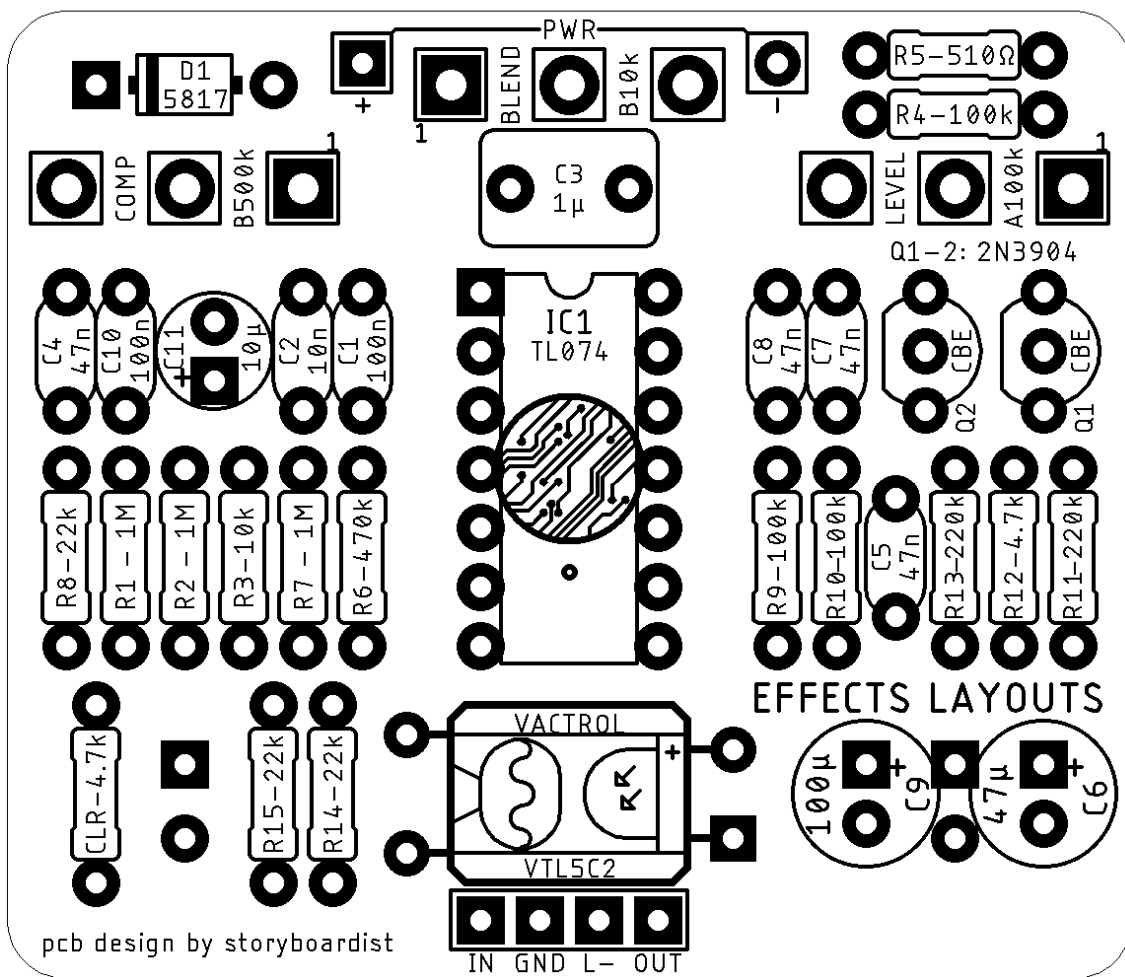
\*A red LED and a KE-10720 photoresistor (LDR) worked well in prototyping. Other combinations of LED and LDR may also work. YMMV I would recommend using the same color as the compression indicator LED (LED1).

## SHOPPING LIST

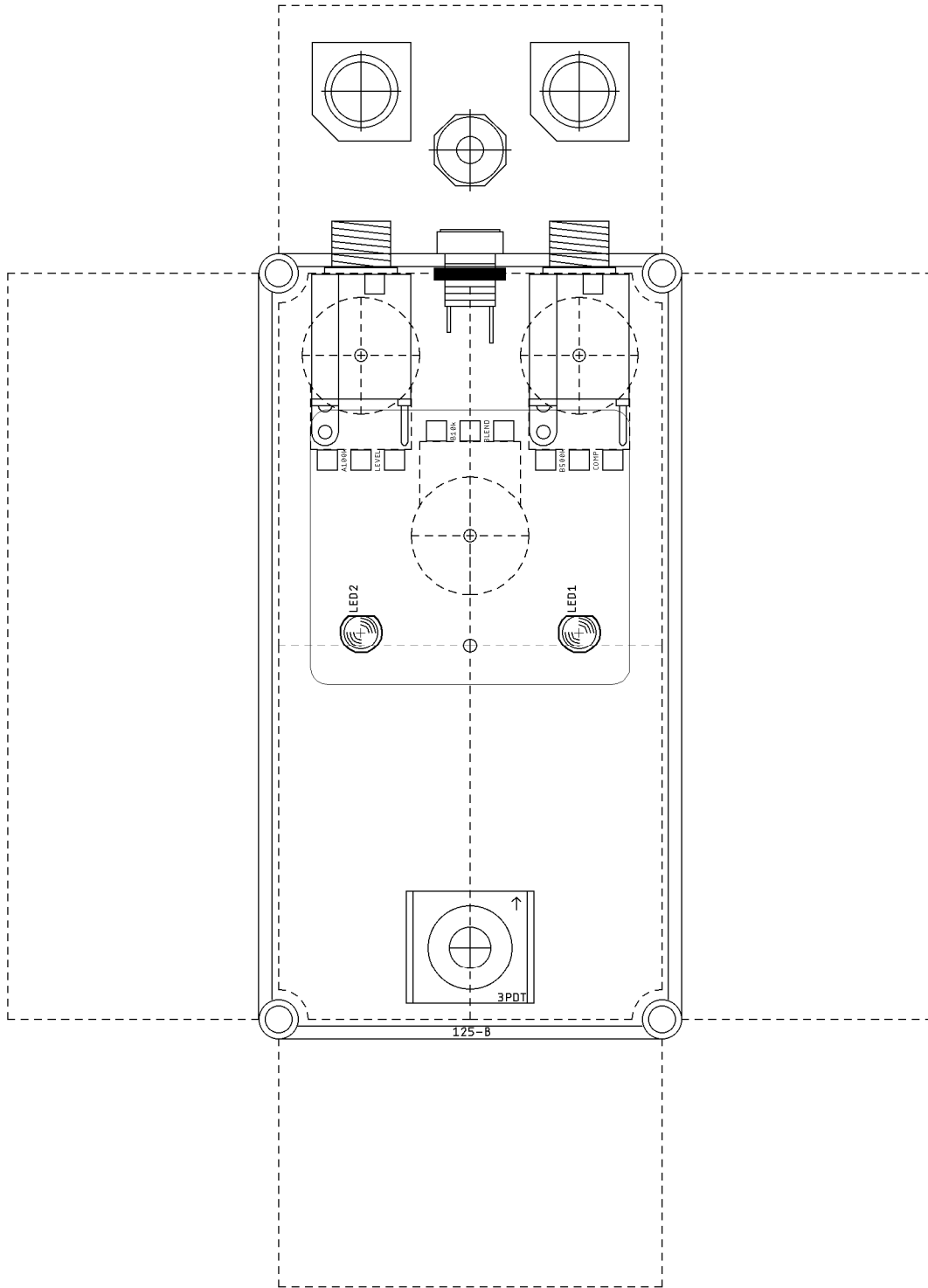
Part	Type (suggested)	Quantity
510Ω	¼ watt carbon or metal film	1
4.7k	¼ watt carbon or metal film	2
10k	¼ watt carbon or metal film	1
22k	¼ watt carbon or metal film	3
100k	¼ watt carbon or metal film	3
220k	¼ watt carbon or metal film	2
470k	¼ watt carbon or metal film	1
1M	¼ watt carbon or metal film	3
10n	Film	1
47n	Film	4
100n	Film	2
1μ	Film	1
10μ	Electrolytic (35v or higher)	1
47μ	Electrolytic (35v or higher)	1

100μ	Electrolytic (35v or higher)	1
1N5817	Schottky rectifier diode	1
TL074	Quad opamp	1
LED	5mm red LED	2
2N3904	BJT	2
VTL5C2	Vactrol	1
A100k	16mm right angle PC mount	1
B10k	16mm right angle PC mount	1
B500k	16mm right angle PC mount	1

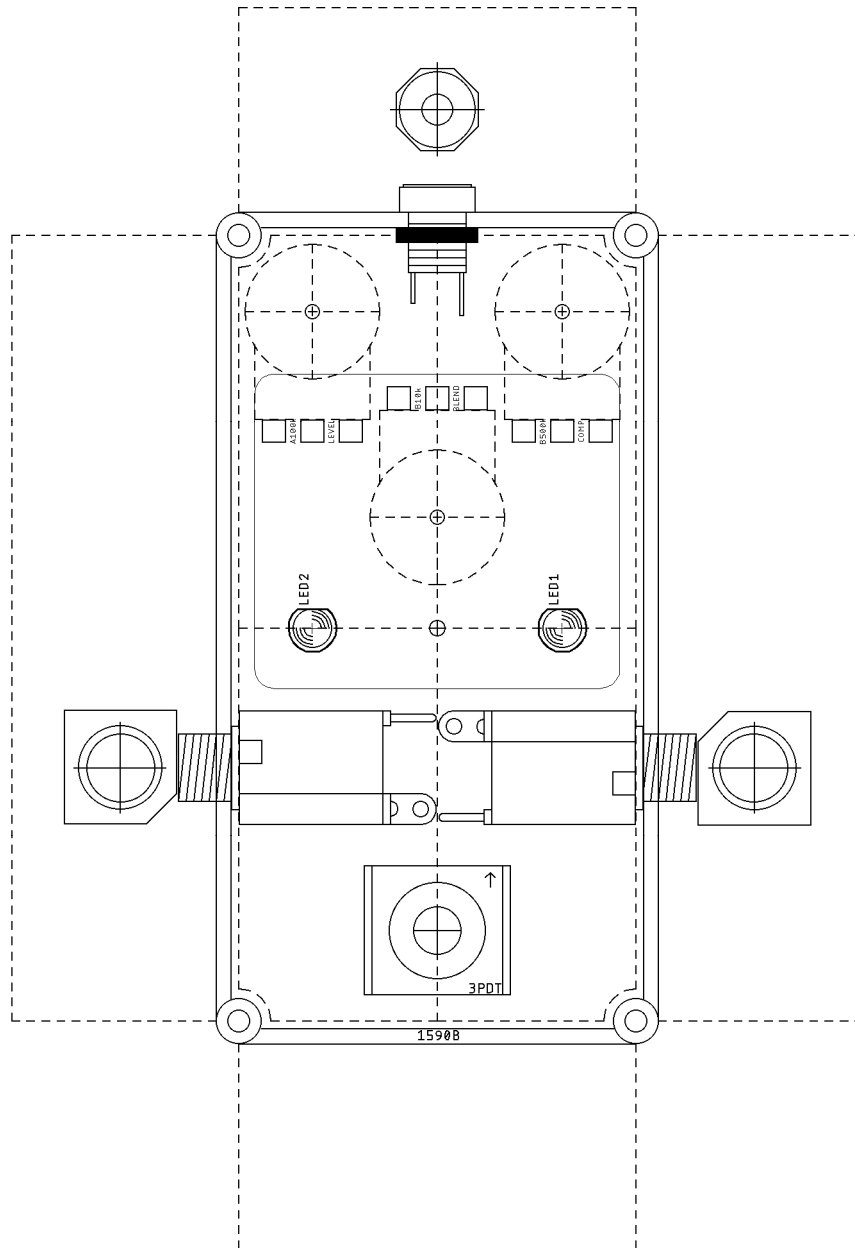
## LAYOUT



**DRILLING TEMPLATE (125B)**



# DRILL TEMPLATE (1590B)



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Not for non-peer to peer resale.