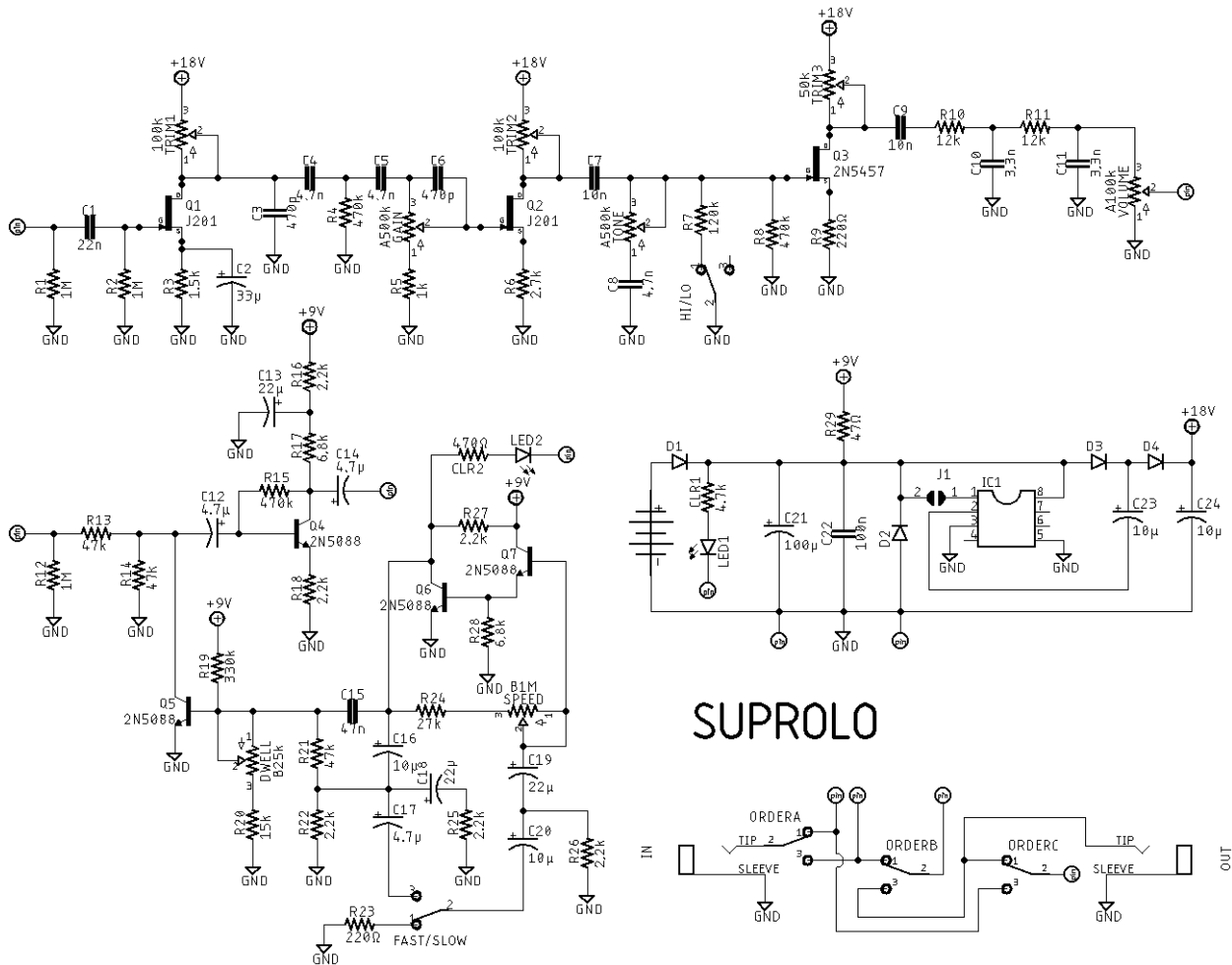


SUPROLO

DESCRIPTION

The SUPROLO was born out of a custom 2-in-1 box I built ages ago that consisted of a Supro amp emulator and a Heart Throb tremolo. With this iteration, the Supro emulator is based on the JHS Superbolt (with the 18v charge pump) and the tremolo is the Heart Throb (running on 9v), all with an order switch to allow you to select which circuit is first in the chain.

SCHEMATIC



BOM

Resistors

R1	1M
R2	1M
R3	1.5k
R4	470k
R5	1k
R6	2.7k
R7	120k
R8	470k
R9	220Ω
R10	12k
R11	12k
R12	1M
R13	47k
R14	47k
R15	470k
R16	2.2k
R17	6.8k
R18	2.2k
R19	330k
R20	15k
R21	47k
R22	2.2k
R23	220Ω
R24	27k
R25	2.2k
R26	2.2k
R27	2.2k
R28	6.8k
R29	47Ω
CLR1	4.7k
CLR2	470Ω

Capacitors

C1	22n
C2	33μ
C3	470p
C4	4.7n
C5	4.7n
C6	470p
C7	10n
C8	4.7n
C9	10n
C10	3.3n

C11	3.3n
C12	4.7μ
C13	22μ
C14	4.7μ
C15	47n
C16	10μ
C17	4.7μ
C18	22μ
C19	22μ
C20	10μ
C21	100μ
C22	100n
C23	10μ
C24	10μ

Semiconductors

D1	1N5817
D2	12v zener
D3	1N5817
D4	1N5817
IC1	MAX1044 or LT1054
LED1	3 or 5mm LED
LED2	3 or 5mm LED
Q1	J201 or MMBFJ201
Q2	J201 or MMBFJ201
Q3	2N5457 or MMBF5457
Q4	2N5088
Q5	2N5088
Q6	2N5088
Q7	2N5088

Electromechanical

Dwell	B25k
Fast/Slow	SPDT on/on
Gain	A500k
Hi/Low	SPDT on/on
Order	3PDT toggle
Speed	B1M
Tone	A500k
Trim1	100k
Trim2	100k
Trim3	100k
Volume	A100k

Notes

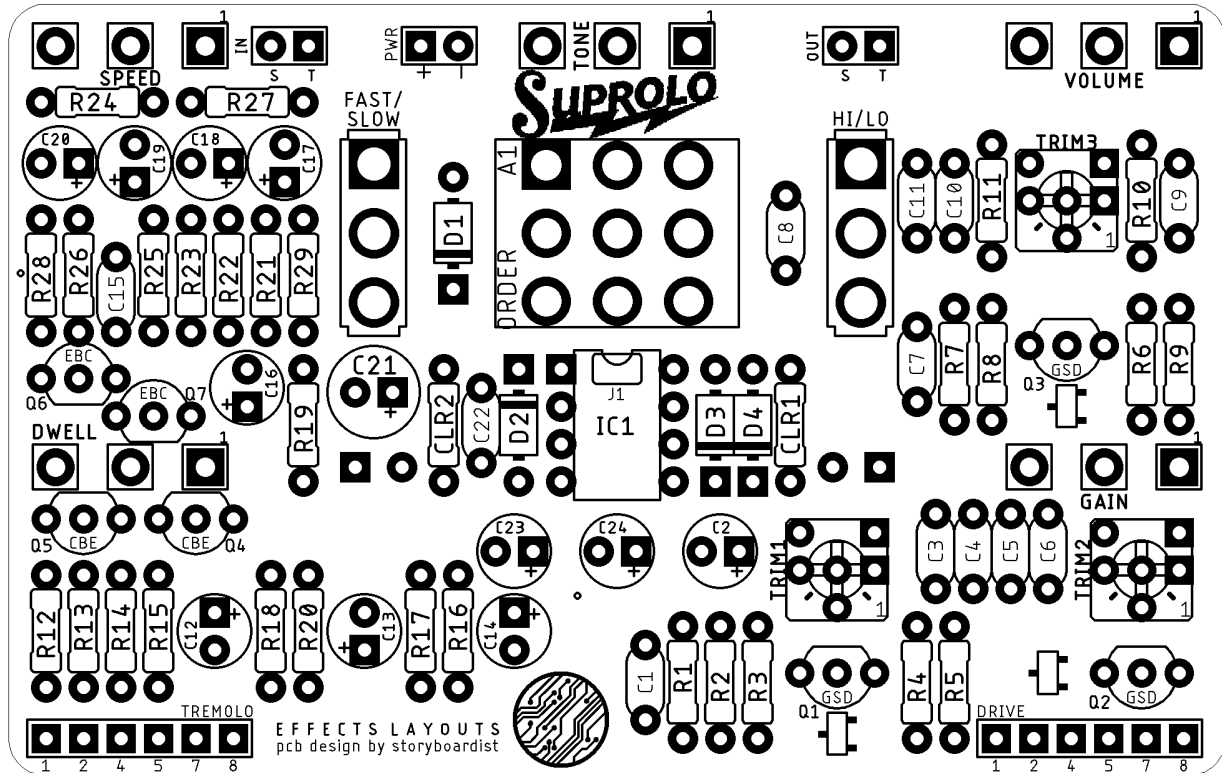
For Q1-3 there are extra pads for SMD JFETs. There's no need to populate both through-hole and SMD components. Use one or the other. Tune trim pots to about 9v on the drains of Q1-3, the adjust by ear. If using the MAX1044 bridge J1 with solder.

SHOPPING LIST

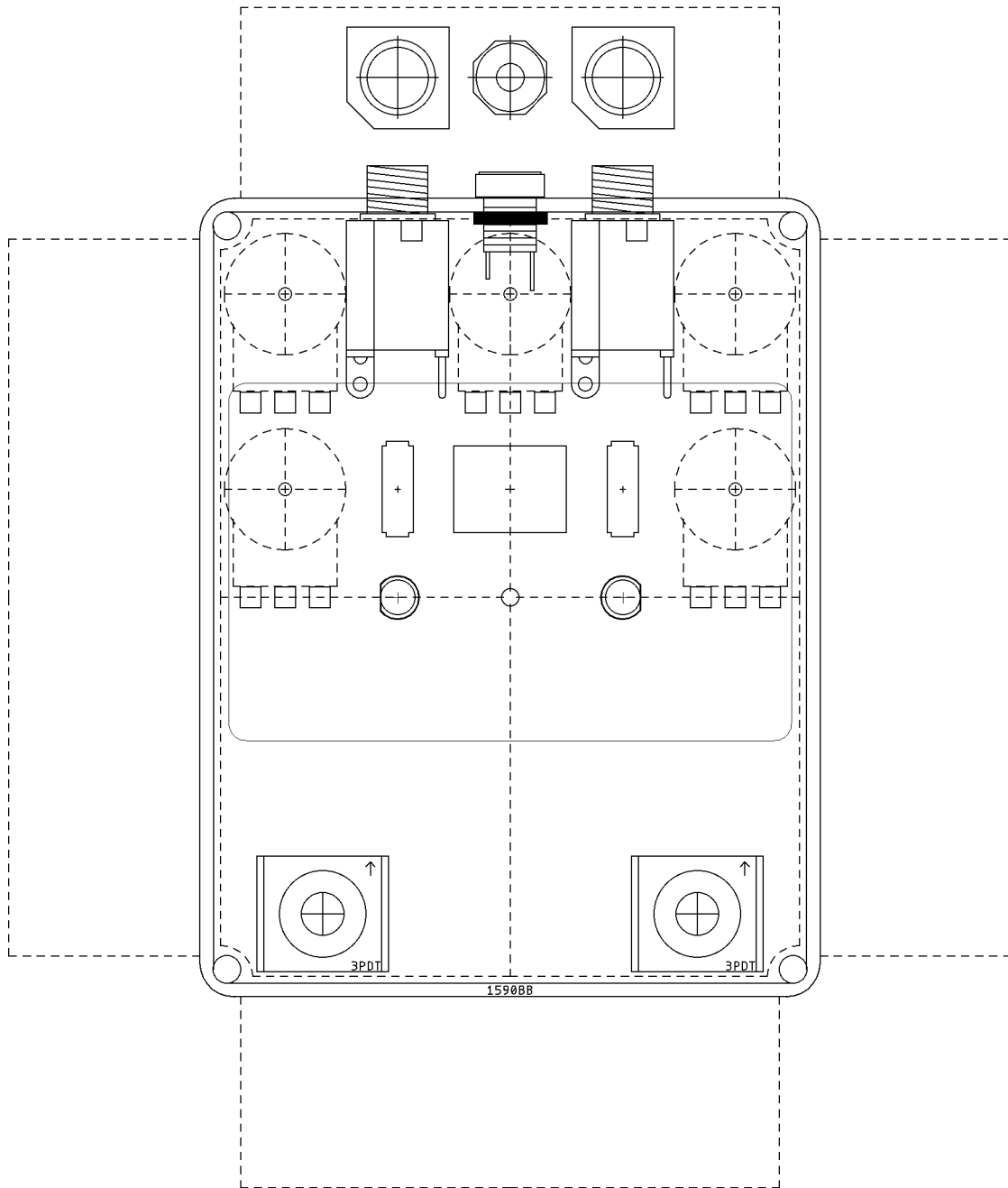
Part	Type (suggested)	Quantity
47Ω	¼ watt metal or carbon film	1
220Ω	¼ watt metal or carbon film	2
470Ω	¼ watt metal or carbon film	1
1k	¼ watt metal or carbon film	1
1.5k	¼ watt metal or carbon film	1
2.2k	¼ watt metal or carbon film	6
2.7k	¼ watt metal or carbon film	1
4.7k	¼ watt metal or carbon film	1
6.8k	¼ watt metal or carbon film	2
12k	¼ watt metal or carbon film	2
15k	¼ watt metal or carbon film	1
27k	¼ watt metal or carbon film	1
47k	¼ watt metal or carbon film	3
120k	¼ watt metal or carbon film	1
330k	¼ watt metal or carbon film	1
470k	¼ watt metal or carbon film	3
1M	¼ watt metal or carbon film	3
470p	Ceramic	2
3.3n	Film	2
4.7n	Film	3
10n	Film	2
22n	Film	1
47n	Film	1
100n	Ceramic	1
4.7μ	Electrolytic (35v +)	3
10μ	Electrolytic (35v +)	4
22μ	Electrolytic (35v +)	3
33μ	Electrolytic (35v +)	1
100μ	Electrolytic (35v +)	1
1N5817	Schottky rectifier diode	3
12v zener	Zener diode	1
2N5088	BJT	4
2N5457/MMBF5457	JFET	1
J201/MMBFJ201	JFET	2
LED	3 or 5mm	2
MAX1044/LT1054	Charge pump	1
100k trim	Trim pot	3
A100k	16mm right angle PC mount	1

A500k	16mm right angle PC mount	2
B25k	16mm right angle PC mount	1
B1M	16mm right angle PC mount	1
3PDT	Toggle	1
SPDT	On/on toggle	2

LAYOUT



DRILL TEMPLATE (1590BB)



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Not for non-peer to peer resale.