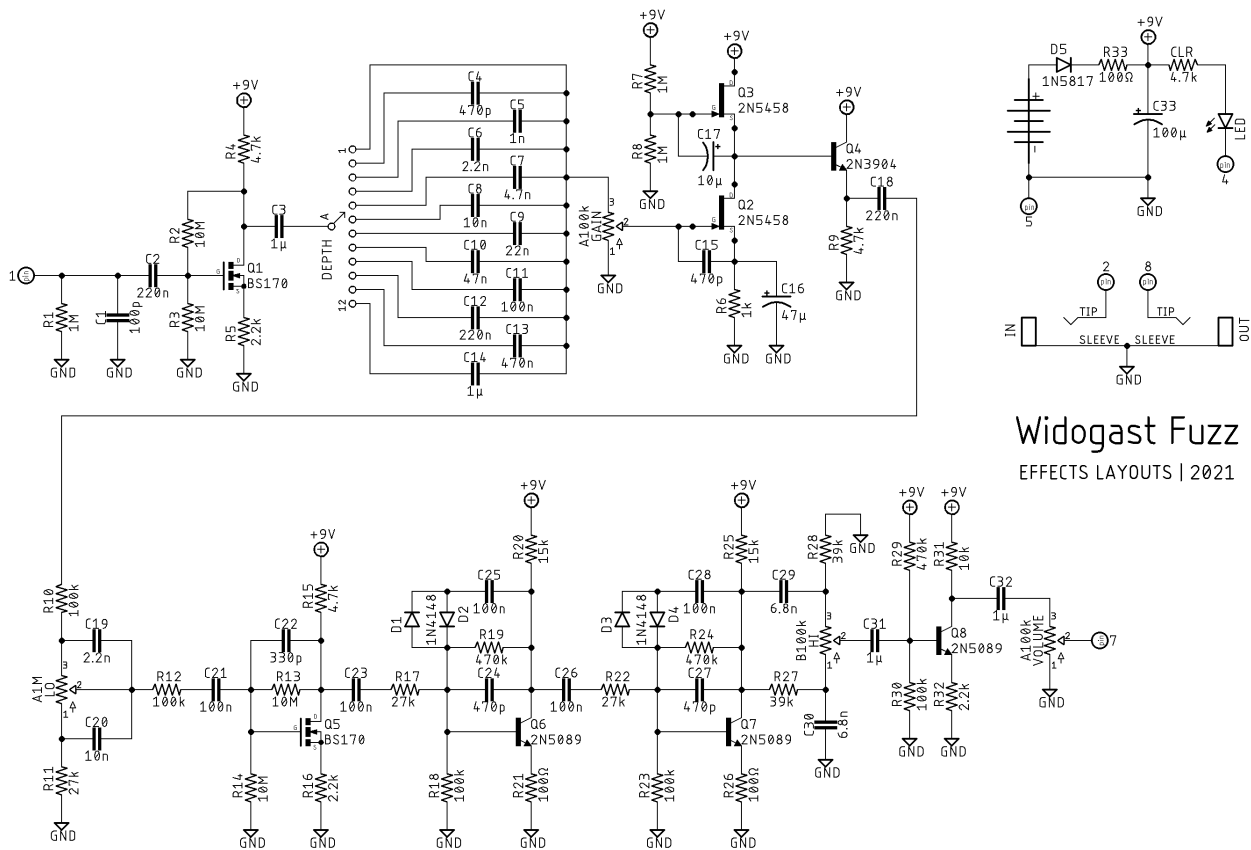


WIDOGAST

DESCRIPTION

The WIDOGAST is massively tweakable doom machine inspired by the EHX Big Muff and based on the Dunwich Amplification Wizard. It adds an input cap selector rotary pushed by a MOSFET booster, followed by a mu-amp stage and BJT buffer pushing a bass control. All this goes into a Muff circuit with the first stage being another MOSFET gain stage. Bottom line: this thing rips.

SCHEMATIC



Widogast Fuzz
EFFECTS LAYOUTS | 2021

BOM

Resistors

R1	1M
R2	10M
R3	10M
R4	4.7k
R5	2.2k
R6	1k
R7	1M
R8	1M
R9	4.7k
R10	100k
R11	27k
R12	100k
R13	10M
R14	10M
R15	4.7k
R16	2.2k
R17	27k
R18	100k
R19	470k
R20	15k
R21	100Ω
R22	27k
R23	100k
R24	470k
R25	15k
R26	100Ω
R27	39k
R28	39k
R29	470k
R30	100k
R31	10k
R32	2.2k
R33	100Ω
CLR	4.7k

Capacitors

C1	100p
C2	220n
C3	1μ
C4	470p
C5	1n
C6	2.2n

C7	4.7n
C8	10n
C9	22n
C10	47n
C11	100n
C12	220n
C13	470n
C14	1μ
C15	470p
C16	47μ
C17	10μ
C18	220n
C19	2.2n
C20	10n
C21	100n
C22	330p
C23	100n
C24	470p
C25	100n
C26	100n
C27	470p
C28	100n
C29	6.8n
C30	6.8n
C31	1μ
C32	1μ
C33	100μ

Semiconductors

D1	1N4148
D2	1N4148
D3	1N4148
D4	1N4148
D5	1N5817
LED	3 or 5mm
Q1	BS170
Q2	2N5458
Q3	2N5458
Q4	2N3904
Q5	BS170
Q6	2N5089
Q7	2N5089
Q8	2N5089

Electromechanical

Depth	1P12T rotary switch
Gain	A100k
Hi	B100k
Lo	A1M
Volume	A100k

Note

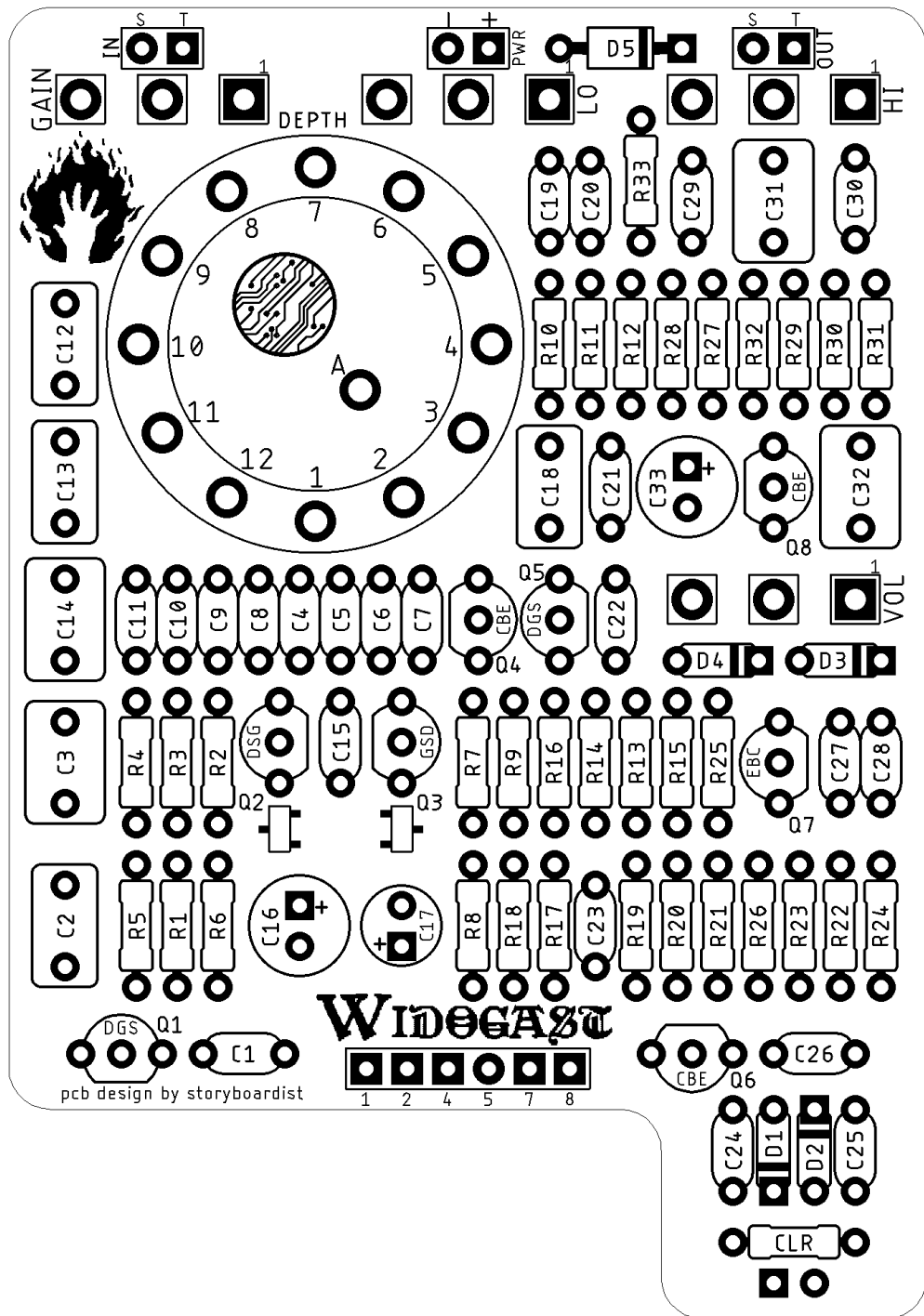
Pads are provided for SMD equivalents for Q2 and Q3. 2N5457/MMBF5457 or J201/MMBFJ201s are good substitutes.

SHOPPING LIST

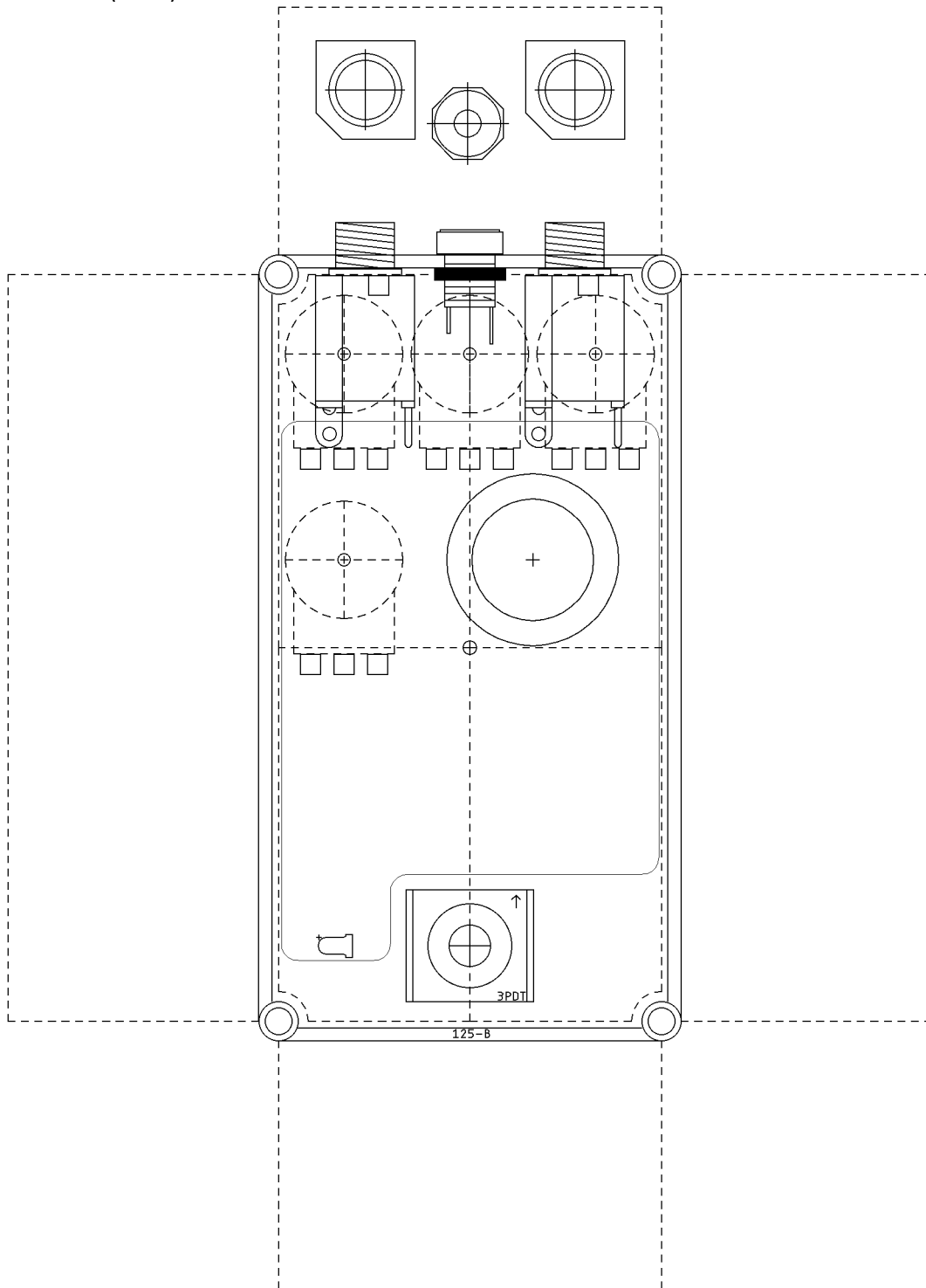
Value	Type (suggested)	Quantity
100Ω	¼ watt metal or carbon film	3
1k	¼ watt metal or carbon film	1
2.2k	¼ watt metal or carbon film	3
4.7k	¼ watt metal or carbon film	4
10k	¼ watt metal or carbon film	1
15k	¼ watt metal or carbon film	2
27k	¼ watt metal or carbon film	3
39k	¼ watt metal or carbon film	2
100k	¼ watt metal or carbon film	5
470k	¼ watt metal or carbon film	3
1M	¼ watt metal or carbon film	3
10M	¼ watt metal or carbon film	4
100p	Ceramic	1
330p	Ceramic	1
470p	Ceramic	4
1n	Film	1
2.2n	Film	2
4.7n	Film	1
6.8n	Film	2
10n	Film	2
22n	Film	1
47n	Film	1
100n	Film	6
220n	Film	3
470n	Film	1
1μ	Film	4
10μ	Electrolytic (25v+)	1
47μ	Electrolytic (25v+)	1
100μ	Electrolytic (25v+)	1
1N4148	Switching diode	4
1N5817	Schottky rectifier diode	1
2N3904	BJT	1
2N5089	BJT	3
2N5458/MMBF5458	JFET	2
BS170	MOSFET	2

LED	3 or 5mm	1
1P12T	Alpha SR2612F-0112-21ROB-D8-N	1
A100k	16 mm right angle PC mount	2
A1M	16 mm right angle PC mount	1
B100k	16 mm right angle PC mount	1

LAYOUT



DRILL TEMPLATE (125B)



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Not for non-peer to peer resale.