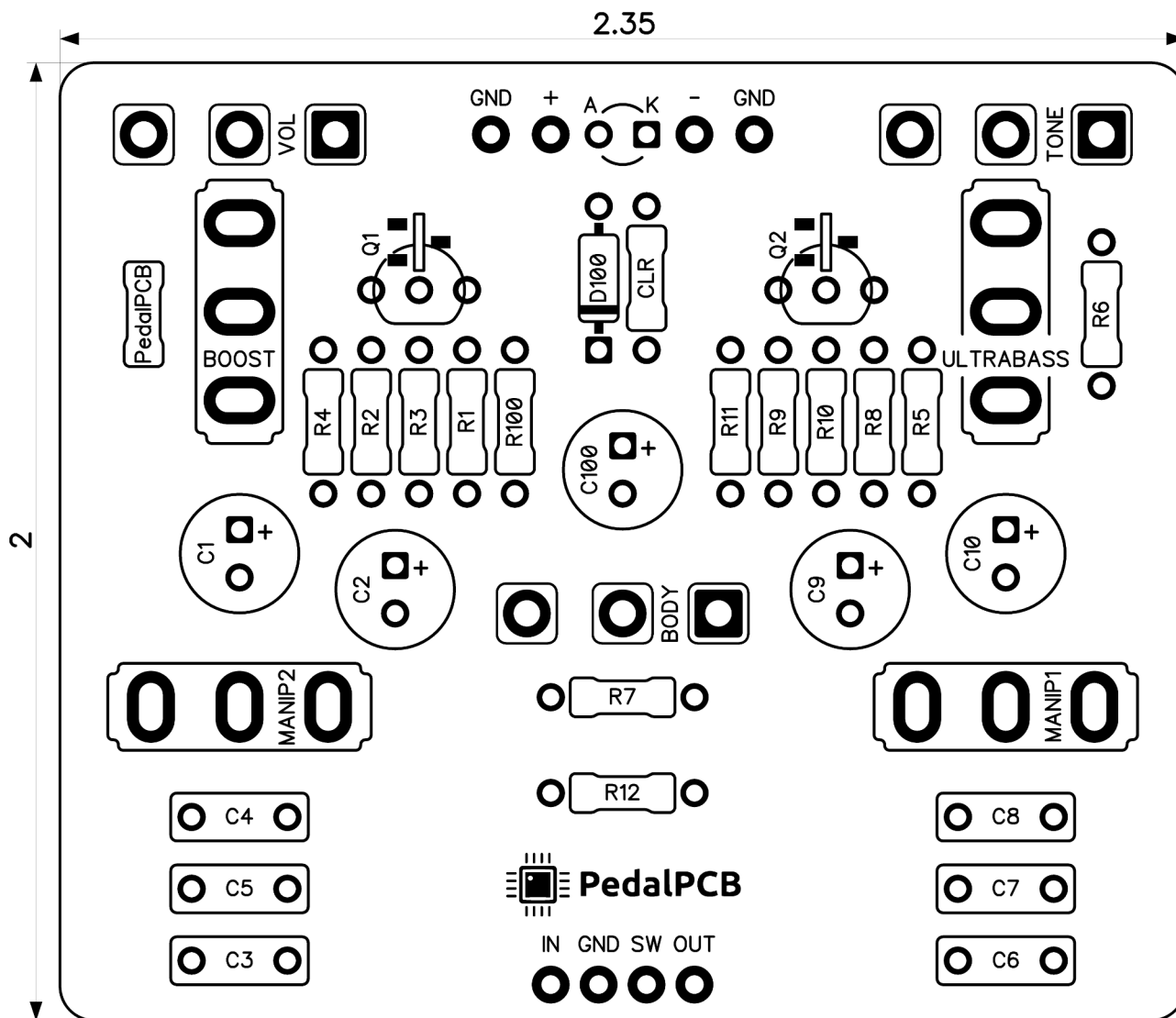


# PedalPCB

## Drebbel Bass Preamp/EQ

Revised 8/24/24



### CONTROLS AND FEATURES

- Tone
- Body
- Volume
- UltraBass (Toggle Switch)
- Boost (Toggle Switch)
- Manip 1 (Toggle Switch)
- Manip 2 (Toggle Switch)

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LOCATION	VALUE	TYPE	NOTES
R1	2M2	Resistor, 1/4W	
R2	6K8	Resistor, 1/4W	
R3	2K2	Resistor, 1/4W	
R4	47K	Resistor, 1/4W	
R5	330K	Resistor, 1/4W	
R6	100K	Resistor, 1/4W	
R7	1K	Resistor, 1/4W	
R8	4M7	Resistor, 1/4W	
R9	6K8	Resistor, 1/4W	
R10	2K2	Resistor, 1/4W	
R11	200R	Resistor, 1/4W	
R12	1M	Resistor, 1/4W	
R100	100R	Resistor, 1/4W	
CLR	4K7	Resistor, 1/4W	* LED current limiting resistor
C1	47u	Electrolytic capacitor, 5mm	
C2	4u7	Electrolytic capacitor, 5mm	
C3	2n2	Film capacitor, 7.2 x 2.5mm	
C4	2n2	Film capacitor, 7.2 x 2.5mm	
C5	56n	Film capacitor, 7.2 x 2.5mm	
C6	470p	Ceramic capacitor	
C7	12n	Film capacitor, 7.2 x 2.5mm	
C8	3n3	Film capacitor, 7.2 x 2.5mm	
C9	4u7	Electrolytic capacitor, 5mm	
C10	100u	Electrolytic capacitor, 5mm	
C100	220u	Electrolytic capacitor, 5mm	
D100	1N5817	Schottky diode, DO-41	
Q1	2N5457	JFET transistor, N-channel	
Q2	2N5457	JFET transistor, N-channel	
BOOST	ON/ON	Toggle switch, SPDT	2-position (ON/ON)
ULTRABASS	ON/ON	Toggle switch, SPDT	2-position (ON/ON)
MANIP1	ON/OFF/ON	Toggle switch, SPDT	3-position (ON/OFF/ON)
MANIP2	ON/OFF/ON	Toggle switch, SPDT	3-position (ON/OFF/ON)
VOL	B50K	16mm right-angle PCB mount pot	
TONE	B250K	16mm right-angle PCB mount pot	
BODY	B250K	16mm right-angle PCB mount pot	

**Q1**

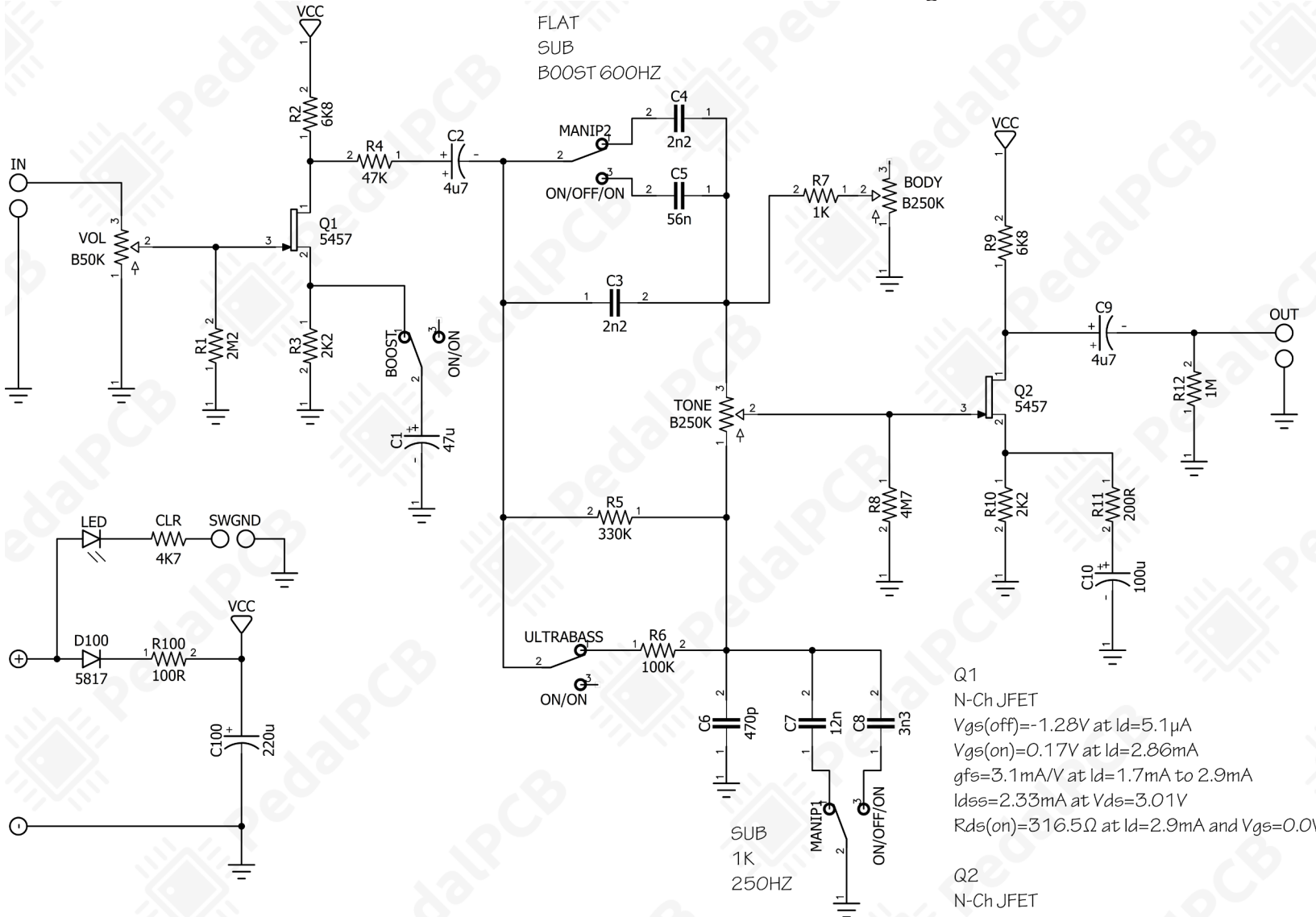
$V_{gs(off)} = -1.28V$  at  $I_d = 5.1\mu A$   
 $V_{gs(on)} = 0.17V$  at  $I_d = 2.86mA$   
 $g_{fs} = 3.1mA/V$  at  $I_d = 1.7mA$  to  $2.9mA$   
 $I_{dss} = 2.33mA$  at  $V_{ds} = 3.01V$   
 $R_{ds(on)} = 316.5\Omega$  at  $I_d = 2.9mA$  and  $V_{gs} = 0.0V$

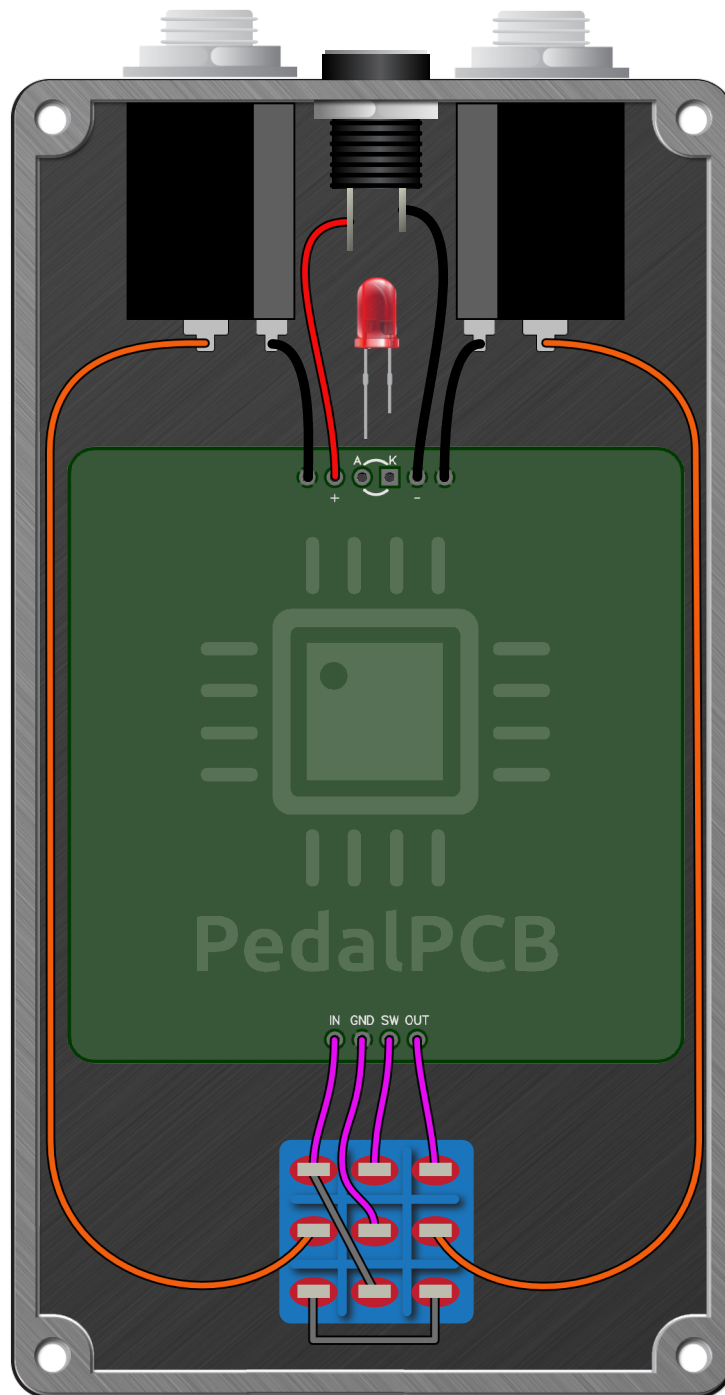
**Q2**

$V_{gs(off)} = -1.38V$  at  $I_d = 5.3\mu A$   
 $V_{gs(on)} = 0.15V$  at  $I_d = 3.18mA$   
 $g_{fs} = 3.2mA/V$  at  $I_d = 1.9mA$  to  $3.2mA$   
 $I_{dss} = 2.67mA$  at  $V_{ds} = 2.99V$   
 $R_{ds(on)} = 302.4\Omega$  at  $I_d = 3.2mA$  and  $V_{gs} = 0.0V$

# Drebbel Bass Preamp/EQ

Schematic Diagram





# Drebbel Bass Preamp/EQ

Drill Template  
125B Enclosure

