

Blues Driver Clone

gaussmarkov and stobiepole

May 21, 2007

<http://gaussmarkov.net/index.php?page=layouts#bd2>

Notes

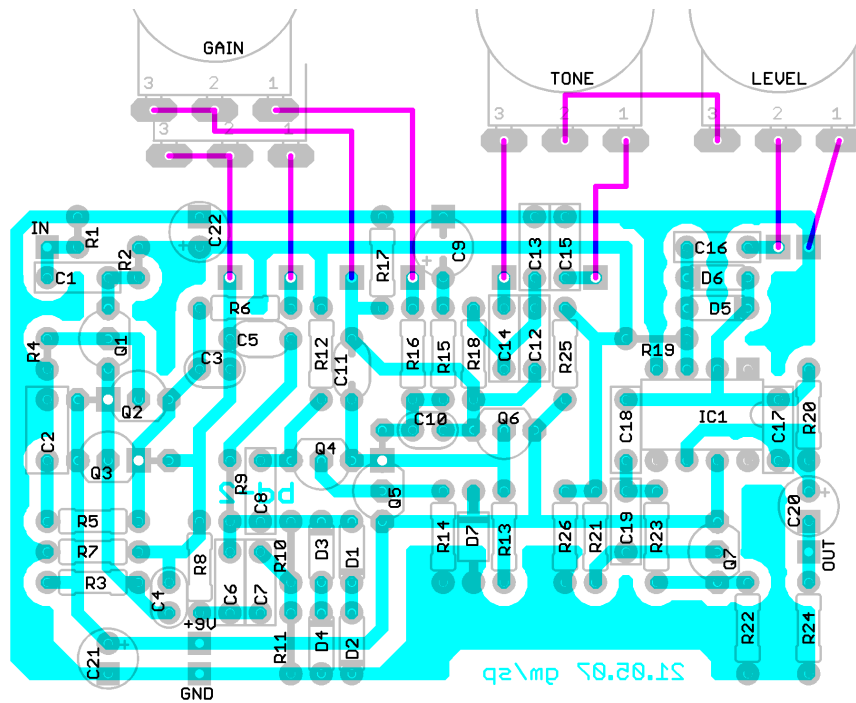
The online source is <http://www.freeinfosociety.com>.

We have removed the input and output buffers and the switching circuitry. The power supply is also simpler. Our version runs at 9 volts, whereas the original runs at 8 volts. Nevertheless, we are providing two versions: one with, and one without, an op amp buffer for the the voltage reference supply that appears in the original Boss schematic. Use a

Note that the transistors can be socketed with in-line sockets. Q2, Q3, and Q5 require 4-hole sockets so that one lead can jump over a trace. We have included pads and holes for the extra (unused) socket. Do not use socket connected to the square pad. If you are not using sockets, then do not use the square pad.

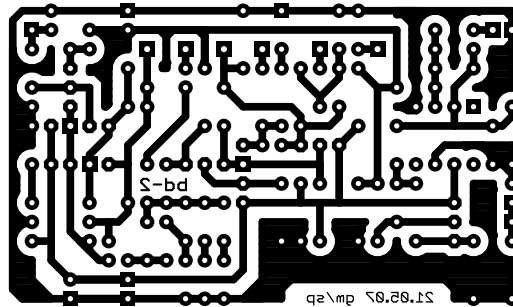
We also recommend socketing the diodes so that one can try different kinds and asymmetric configurations. Many builders will also socket the op amp, in order to try different components there. The simple power supply version uses a single op amp, like the TL071, and the other version uses a dual op amp, like the TL072.

Layout (no Vref op amp)

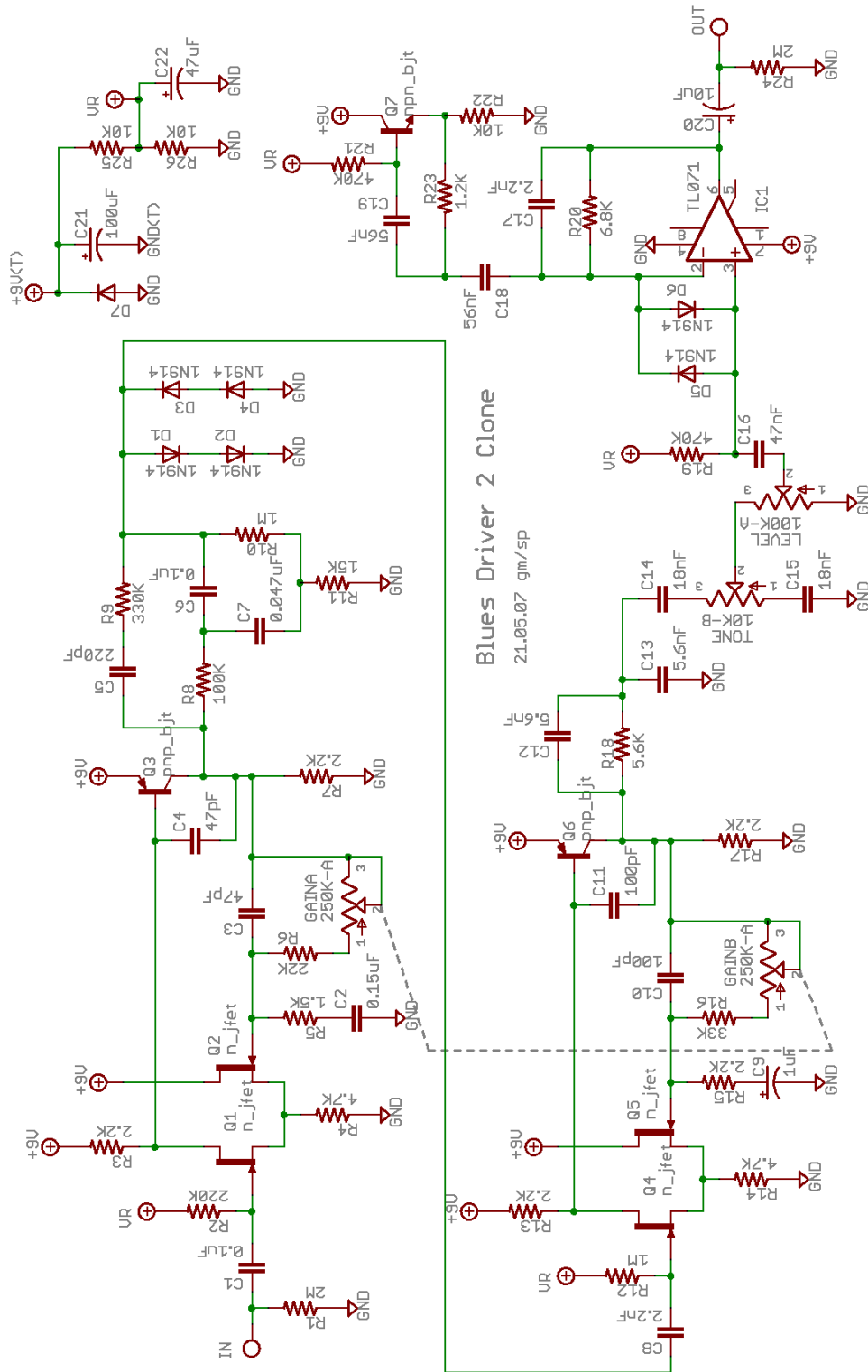


PCB Image (no Vref op amp)

When printing this image, use “Page Scaling: None” in the Adobe Reader print dialog.



Schematic (no Vref op amp)

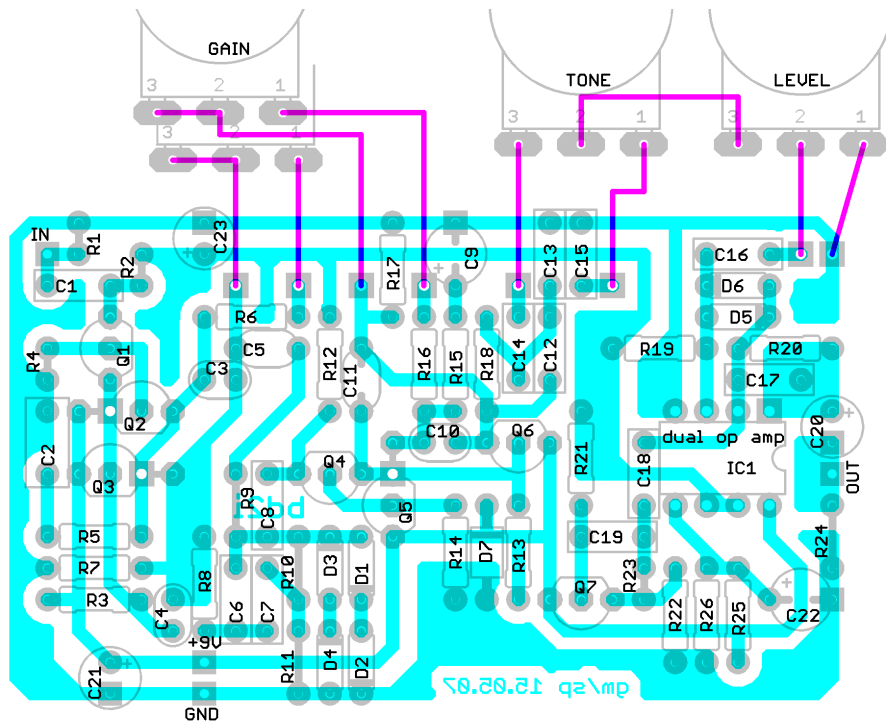


Parts List (no Vref op amp)

Partlist for Blues Driver Clone on gaussmarkov.net

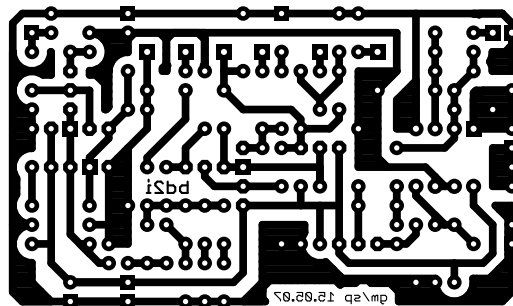
Part	Value	Library	Part	Value	Library
C1	0.1uF	gm-caps-film-box	R1	2M	gm-resistors
C2	0.15uF	gm-caps-film-box	R2	220K	gm-resistors
C3	47pF	gm-caps-ceramic	R3	2.2K	gm-resistors
C4	47pF	gm-caps-ceramic	R4	4.7K	gm-resistors
C5	220pF	gm-caps-ceramic	R5	1.5K	gm-resistors
C6	0.1uF	gm-caps-film-box	R6	22K	gm-resistors
C7	0.047uF	gm-caps-film-box	R7	2.2K	gm-resistors
C8	2.2nF	gm-caps-film-box	R8	100K	gm-resistors
C9	1uF	gm-caps-electro-pol	R9	330K	gm-resistors
C10	100pF	gm-caps-ceramic	R10	1M	gm-resistors
C11	100pF	gm-caps-ceramic	R11	15K	gm-resistors
C12	5.6nF	gm-caps-film-box	R12	1M	gm-resistors
C13	5.6nF	gm-caps-film-box	R13	2.2K	gm-resistors
C14	18nF	gm-caps-film-box	R14	4.7K	gm-resistors
C15	18nF	gm-caps-film-box	R15	2.2K	gm-resistors
C16	47nF	gm-caps-film-box	R16	33K	gm-resistors
C17	2.2nF	gm-caps-film-box	R17	2.2K	gm-resistors
C18	56nF	gm-caps-film-box	R18	5.6K	gm-resistors
C19	56nF	gm-caps-film-box	R19	470K	gm-resistors
C20	10uF	gm-caps-electro-pol	R20	6.8K	gm-resistors
C21	100uF	gm-caps-electro-pol	R21	470K	gm-resistors
C22	47uF	gm-caps-electro-pol	R22	10K	gm-resistors
D1	1N914	gm-diodes	R23	1.2K	gm-resistors
D2	1N914	gm-diodes	R24	2M	gm-resistors
D3	1N914	gm-diodes	R25	10K	gm-resistors
D4	1N914	gm-diodes	R26	10K	gm-resistors
D5	1N914	gm-diodes	GAIN	250K-A	gm-pots
D6	1N914	gm-diodes	LEVEL	100K-A	gm-pots
D7	1N400x	gm-diodes	TONE	10K-B	gm-pots
IC1	TL071	gm-ics			
Q1	n_jfet	gm-trans			
Q2	n_jfet	gm-trans			
Q3	pnp_bjt	gm-trans			
Q4	n_jfet	gm-trans			
Q5	n_jfet	gm-trans			
Q6	pnp_bjt	gm-trans			
Q7	nnp_bjt	gm-trans			

Layout (Vref op amp)

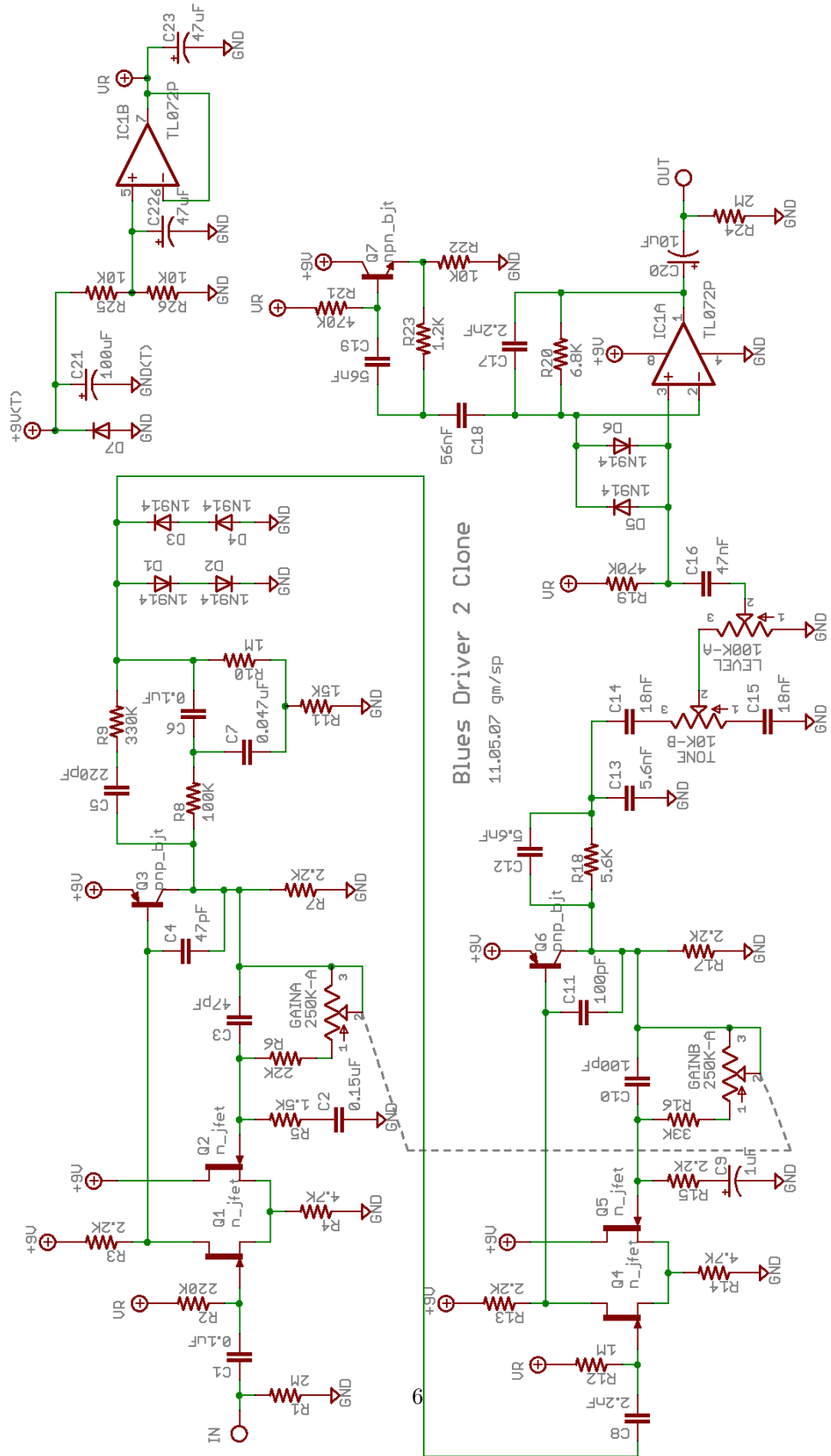


PCB Image (Vref op amp)

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Schematic (Vref op amp)



Parts List (Vref op amp)

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Q3	pn_p_bjt	gm-trans			
Q4	n_jfet	gm-trans			
Q5	n_jfet	gm-trans			
Q6	pn_p_bjt	gm-trans			
Q7	npn_bjt	gm-trans			