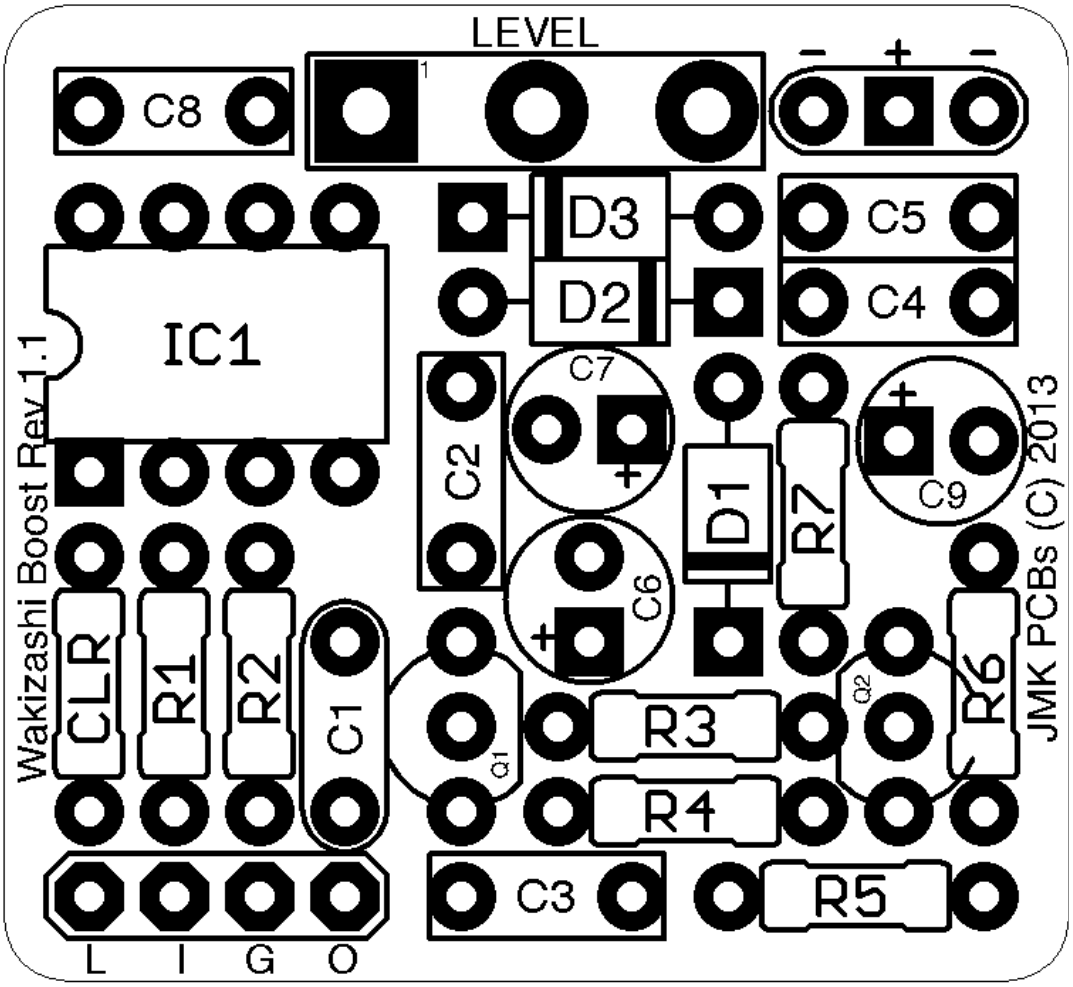
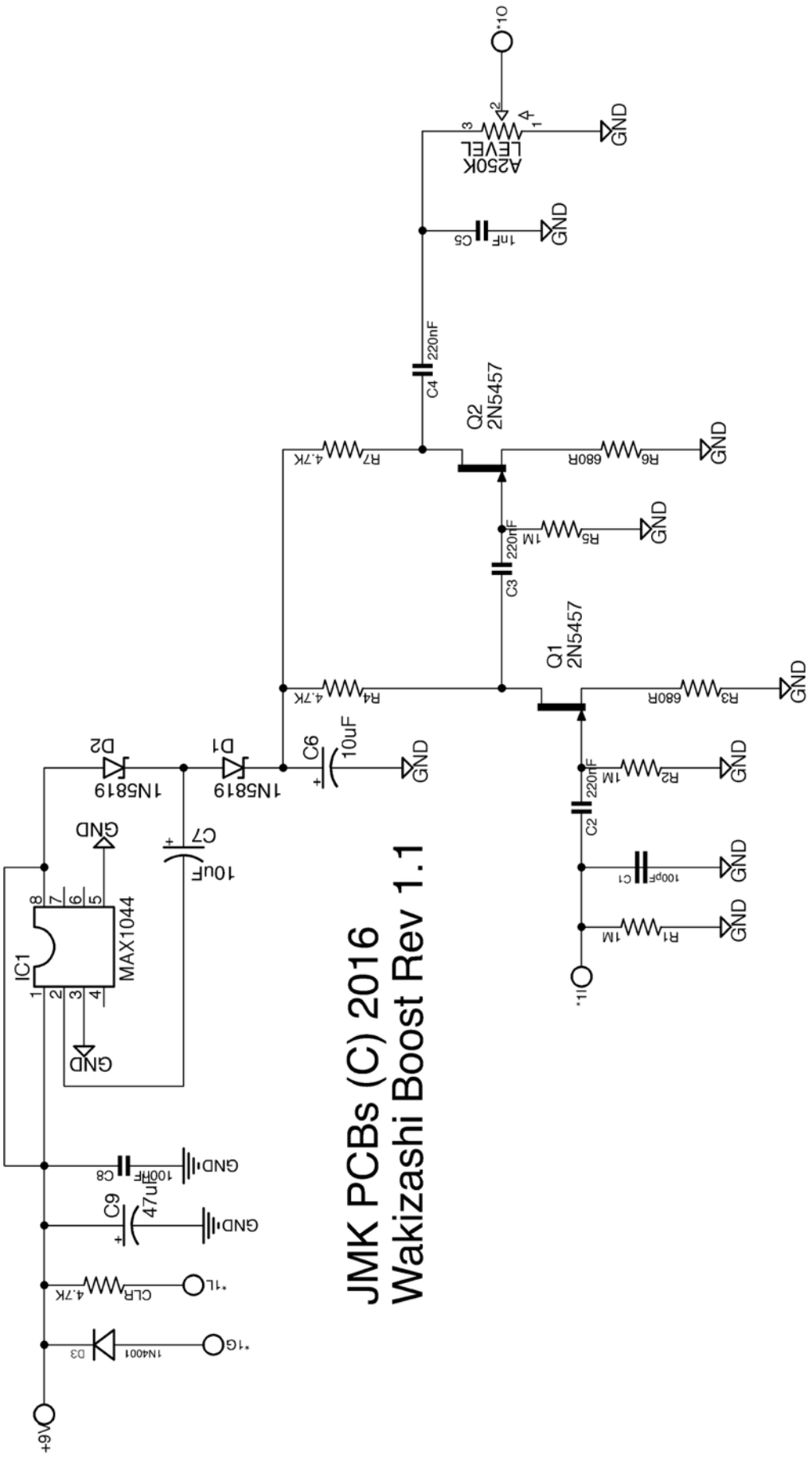
JMK PCBS PRESENTS...

WAKIZASHI BOOST

VERSION 1.1: 11/19/2016



Resistors				Capacitors				Transistors	
R1	1M	R5	1M	C1	100pF	C6	10uF*	Q1, Q2	2N5457
R2	1M	R6	680R	C2	220nF	C7	10uF*	**Potentiometers**	
R3	680R	R7	4.7K	C3	220nF	C8	100nF	LEVEL	A250K
R4	4.7K	CLR	4.7K	C4	220nF	C9	47uF*	**Diodes**	
ICs				C5	1nF			D1, D2	1N5819
IC1		MAX1044						D3	1N4001



Build Notes

• The Wakizashi is a slightly modified version of the Famous Keeley Katana Booster. Essentially, what we've done is removed the switchable caps which the Keeley unit included on a push/pull pot switch. The circuit works as a charge pumped jFet boost, meaning that the jFets work at ~18V, so you've got quite a bit of headroom available.

• Hooking up the PCB is fairly straight forward: L = the connection for the + side of the LED; I = PCB Input; G = Ground (for the switch); O = PCB Output; + = 9V Jack positive connection; - = 9V Jack negative connection; and there is extra ground connection for your input or output jack.

• Some of the parts used in this project may be odd, so you can use common substitutes as suggested below. Keep in mind that pinouts on some parts may be different, so double check to make sure your part doesn't require a different orientation or pin swap.

Part Number	Original Value	Common Substitute
IC1	MAX1044	TC1044SCPA
Q1, Q2	2N5457	J201, 2N5952
D1, D2	1N5819	1N5817, 1N4001

• In particular, D1 and D2 may not be a common part. These diodes are suggested because they give you the closest voltage to 18V coming off of the charge pump (IC1). Using 1N4001 or similar silicon diodes is acceptable, but may lower your voltage to ~17V.

• Please note that the Pot orientation is different than the usual orientation for pots in other JMK PCB projects. The Pad numbering is 1-2-3, so the PCB would rest over the back of the Pot if a PCB mount Pot is used.

• The PCB is small enough to fit into a 1590a/1090ns, though careful measuring before drilling is recommended.

True Bypass Wiring Diagram