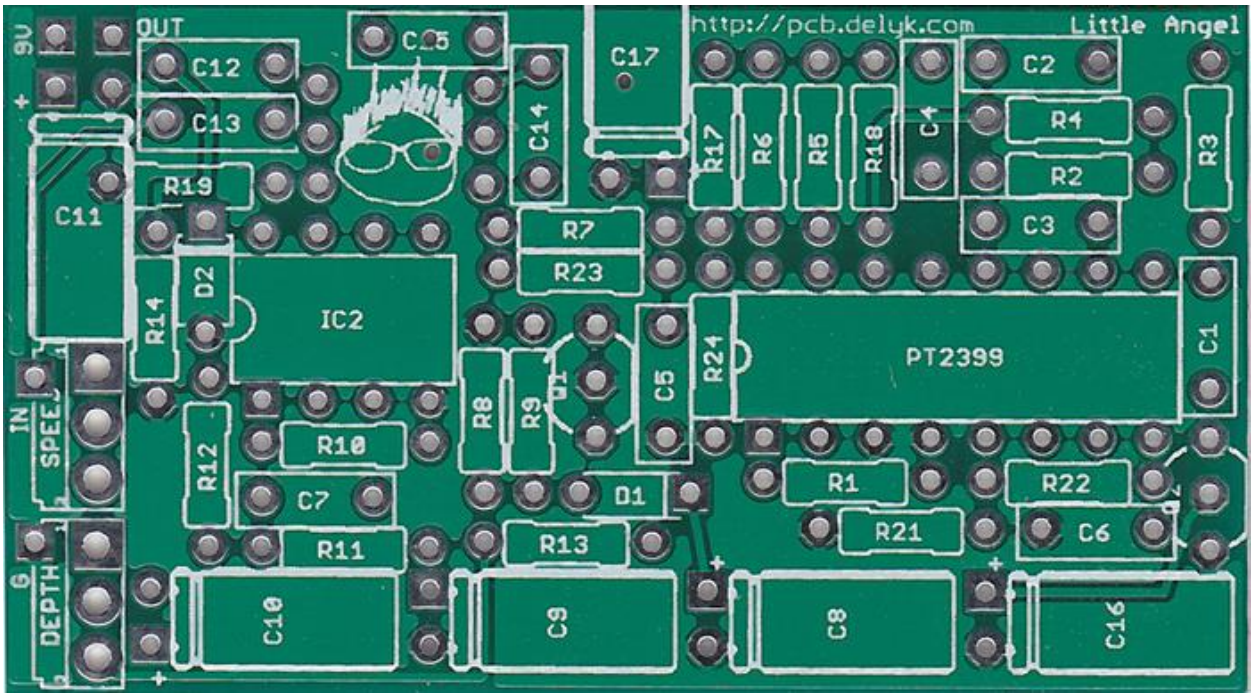

Little Angel

Build Document

Capacitors

I obtained all of my caps from Tayda, except C17. That's what the layout was setup for.

P/N	Value	Type	Notes
C1	100nF	Film Box	
C2	10nF	Film Box	
C3	100nF	Film Box	
C4	3.3nF	Film Box	
C5	100nF	Film Box	
C6	100nF	Film Box	
C7	10nF	Film Box	
C8	47uF	Aluminum Electrolytic	
C9	10uF	Aluminum Electrolytic	
C10	10uF	Aluminum Electrolytic	
C11	100uF	Aluminum Electrolytic	
C12	100nF	Film Box	
C13	100nF	Film Box	
C14	100nF	Film Box	
C15	100nF	Film Box	
C16	47uF	Aluminum Electrolytic	
C17	10uF	Aluminum Electrolytic/MLCC	Laying an aluminum electrolytic down **might** fit in a 1590A. (It has before.) However, the MLCC will fit without any issues. You just have to source them from somewhere other than Tayda.

Diodes

I obtained all of my diodes from Tayda. That's what the layout was setup for.

P/N	Value	Notes
D1	1N4148	
D2	1N400x	Polarity protection.

Integrated Circuits

I obtained all of my ICs from Tayda. That's what the layout was setup for.

P/N	Value	Notes
IC1	PT2399	These ICs are hit-or-miss. You may want to order a few extra just in case.
IC2	NE5532	You can use other op-amps, like the TL072.

Transistors

I obtained all of my transistors from Tayda. That's what the layout was setup for.

P/N	Value	Notes
Q1	78L05	5V voltage regulator
Q2	2N3904	

Resistors

P/N	Value
R1	68k
R2	10k
R3	10k
R4	10k
R5	10k
R6	10k
R7	330k
R8	47k
R9	100k
R10	220k
R11	220k
R12	4k7
R13	10k
R14	100k
R15	1M
R16	470k
R17	10k
R18	4k7
R19	1M
R20	10k
R21	2k2
R22	100R
R23	10k
R24	10k

Potentiometers

The original schematic called for higher values on the pots. I found them to only have a small usable sweep.

The pots require offboard wiring because this was designed for a 1590A (and it's a super tight fit in that Twinkie can).

There is **no connection** for pin 1 of the pots. You don't need to wire that pin up. (Yay! Instead of 6 offboard wires, you only need 4.)

P/N	Value	Notes
DEPTH	B100k	If wanting to do a 1590A, I recommend this one.
SPEED	B50k	If wanting to do a 1590A, I recommend this one.

Other Parts

I obtained all of these from Tayda. That's what the layout was setup for.

Qty	Value	Notes
1	16-pin socket	
2	8-pin socket	Use one, if you want, to split in half. Then use each half for the transistors.