

Cherry Pie Tap Tempo Harmonic Tremolo

Build Document



Introduction

I've been wanting to get some tap tempo stuff done. This was the first project I found that allowed me to do that.

I contacted the author of the schematic, David Rolo, to see if he'd allow me to do this. His version of the PCB was two PCBs sandwiched together. With his permission, I was able to turn the PCB and get everything on a single board.

Bill of Materials

Resistors

P/N	Value
R1	1M
R2	1M
R3	15k
R4	15k
R5	15k
R6	15k
R7	51k
R8	51k
R9	1M
R10	10k
R12	10k
R13	1k
R14	1k
R15	1k
R16	3k6
R17	1k
R18	1k
R19	10k
R20	10k
R21	10k
R22	10k
R23	10k
R24	100R
R25	100R
R26	100k
R27	100k
R28	33R
R29	33R
R30	33R
R31	100k
R32	100k
TEMPO_LED_CLR	10k



Diodes

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

P/N	Value	Notes
D1	LED	Choose whatever you like. This is the LFO indicator.
D2	3mm Red	This is used to change the voltage; just solder directly and flush to the board.
D3	1N400x	Polarity protection.

Capacitors

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

P/N	Value	Type	Notes
C1	100n	Film Box	
C2	470n	Film Box	
C3	6n8	Film Box	
C4	4n7	Film Box	
C5	10u	Aluminum Electrolytic	
C6	22p	Ceramic	
C7	22p	Ceramic	
C8	470n	Film Box	
C9	100n	Film Box	
C10	100n	Film Box	
C11	100n	Film Box	
C12	100n	Film Box	
C13	100n	Film Box	
C14	100n	Film Box	
C15	100n	Film Box	
C16	100u	Aluminum Electrolytic	
C17	47u	Aluminum Electrolytic	
C18	100n	Film Box	
C19	100u	Aluminum Electrolytic	
C20	100u	Aluminum Electrolytic	
C21	100n	Film Box	
C22	47u	Aluminum Electrolytic	

Integrated Circuits

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

The microcontroller is specific. You can get it from Electric Druid or me.

P/N	Value	Notes
IC1	TL074	
IC2	NE5532	
UC2	TAPLFO V2D	



Transistors

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

P/N	Value	Notes
U1	78L05	
U2	78L05	

Potentiometers

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

P/N	Value	Notes
DEPTH	B10k	
MULT	B10k	
RATE	B10k	
SHAPE	B10k	
SYMM	B10k	
TONE	B10k	
HP	5k	Trimpot.
LP	5k	Trimpot.
OFFSET	25k	Trimpot.
VOL	50k	Trimpot.

Switches

P/N	Value	Notes
SW2	2P4T	This is a mini plastic rotary. You can get them from me.
TAP	SPST	Momentary. I prefer soft touch.

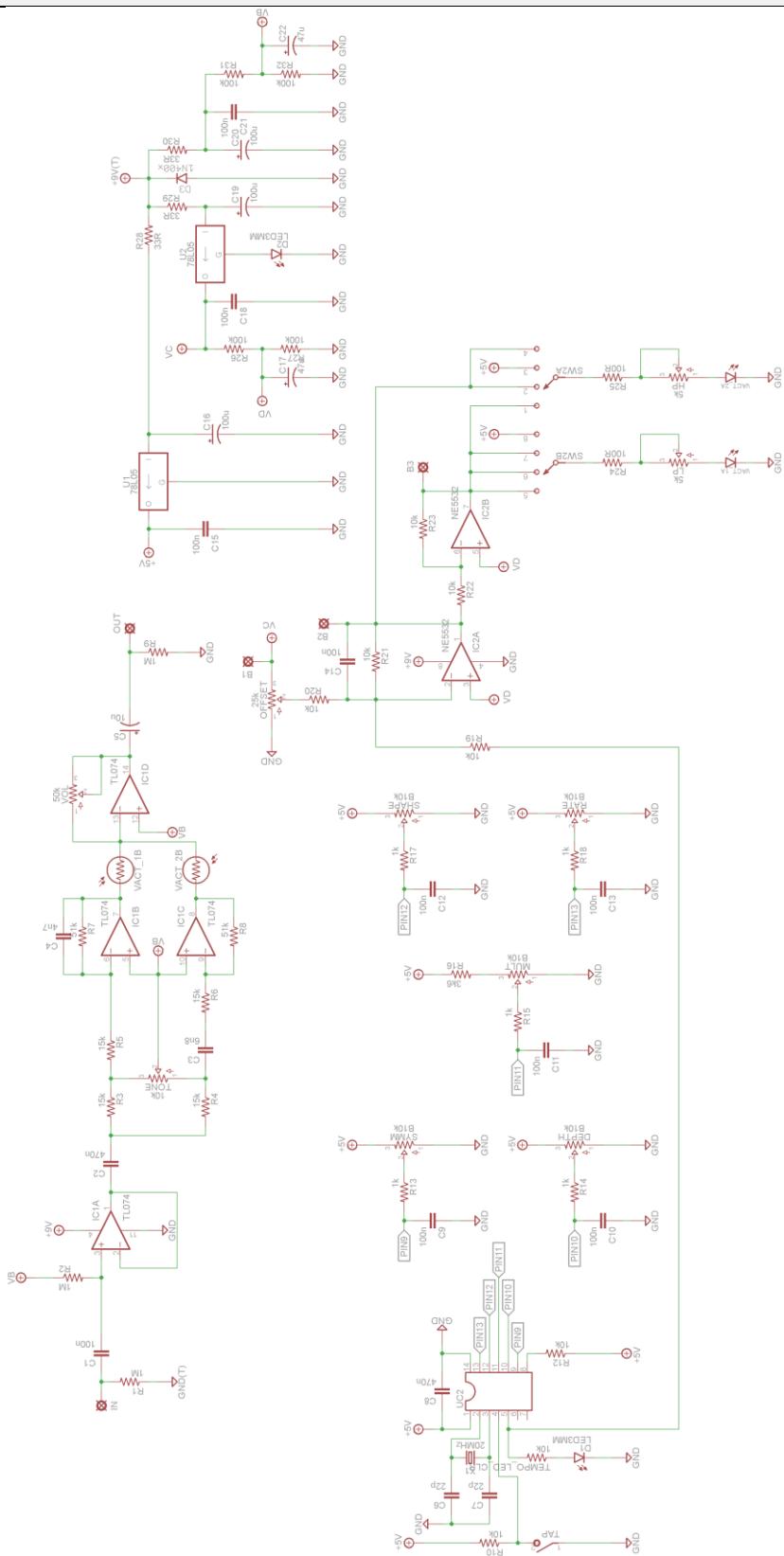
Other Parts

P/N	Value	Notes
X1	20MHz Crystal	I used this one .

Qty	Value	Notes
2	Vactrols	You can roll your own if you want. I used these and these .
1	8-pin socket	
2	14-pin socket	



Schematic



Images

Coming soon.

