

nonlinearcircuits

It's 555...(eurorack) build & BOM

This design is based on the Electronotes EN#93 Cascaded Monostable Generalized Resonator. The main changes from the EN version are it has been expanded to 5 stages and uses larger valued capacitors to allow the pulses to get wide enough to merge with each other and promote mayhem.

Additional notes:

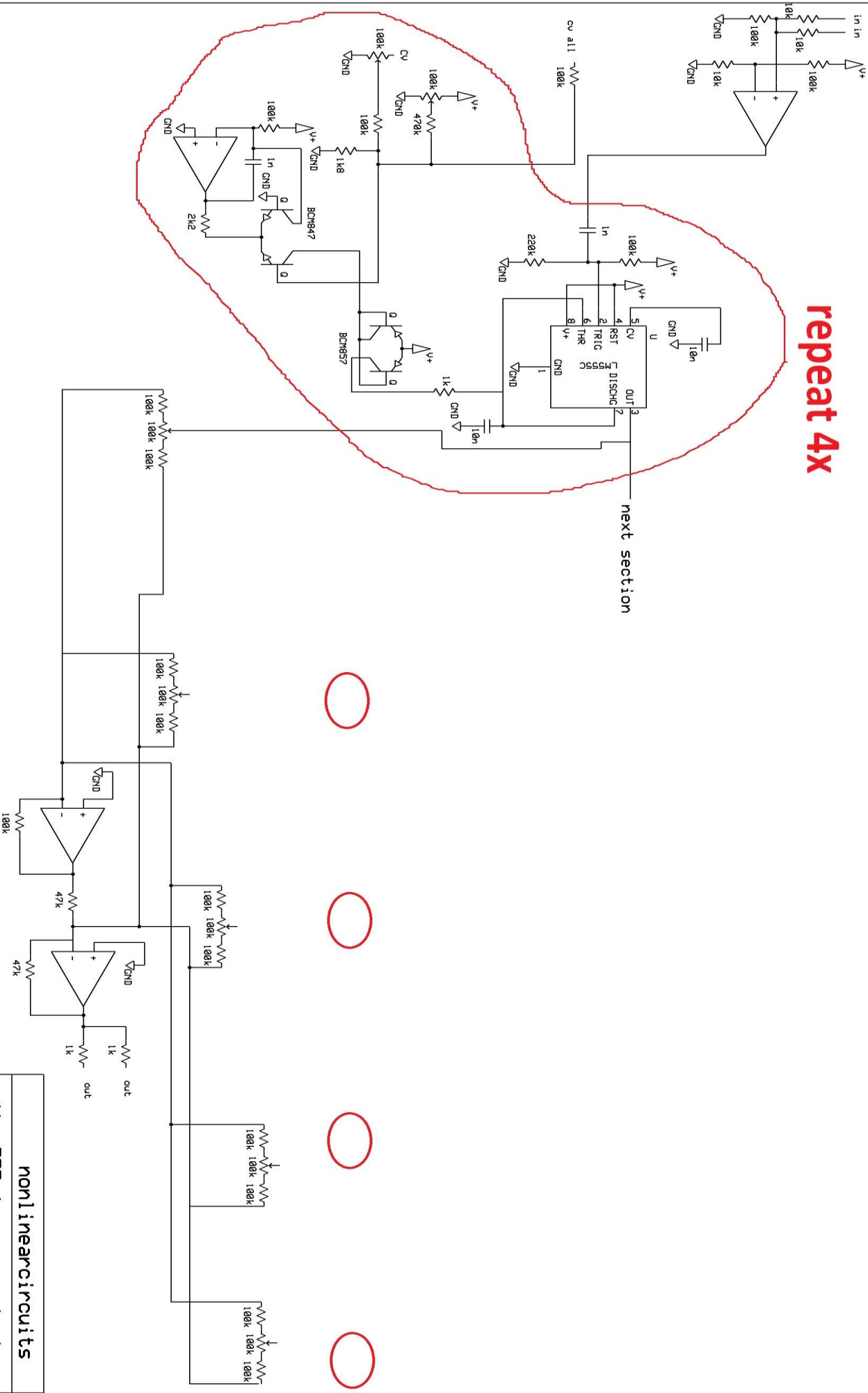
1. SMD capacitors are currently in short supply globally (May 2018). At least for the 10uF caps on the PCB, feel free to substitute any value you can get, preferably over 100nF.
2. If you can get them, the prices for these 10uF 0805 capacitors drops to approx. 10c each when buying more than 10...and you should always get plenty of spares, it is easy to drop and lose smd parts.
3. S1JL Power diodes are for Reverse voltage protection - Mouser Part No: 821-S1JL. Any similar rectifier with at least 1A rating should be okay, such as 1N4001, 1N4002, 1N4004. **Get these sizes; SOD-123 or sub-SMA** (DO-214 is a bit too big, so avoid)
4. Most of the components are cheapest from Tayda. Part numbers are given but consider these as examples. Feel free to buy from wherever you like.
5. Join the **Nonlinearcircuits Builders Guild** on FB

(<https://www.facebook.com/groups/174583056349286/>) and ask questions there if you have any. If you prefer not to FB then email is fine.

BOM

VALUE	QUANTITY	DETAILS
1nF	10	0805
10nF	10	0805
100nF	3	0805
10µF	8	0805 25V rating or higher Mouser No: 81-GRM21BR61E106KA3L (or similar)
1k	7	0805
1k8	5	0805
2k2	5	0805
10k	3	0805
100k	35	0805
220k	5	0805
470k	5	0805
BCM847DS	5	NPN, sot23-6 or SOT457
BCM857DS	5	PNP, SOT23-6 or SOT457 Mouser: 771-BCM857DS-T/R
555 or 7555	5	SOIC
TL072 or TL082	4	SOIC
Eurorack 10 pin power connector	1	Tayda: A-198
1N400x or S1JL or similar, optional - for reverse voltage protection	2	SMD, standard power diode 200-600V 1A, dot on PCB indicates CATHODE (stripe on component) SEE NOTES #2
3.5MM SOCKET Kobiconn style	10	Tayda: A-865 or preferably get Thonkiconn Jacks (PJ301M-12) from Thonk or Modular Addict
100kB pots	15	Tayda: A-1848

repeat 4x

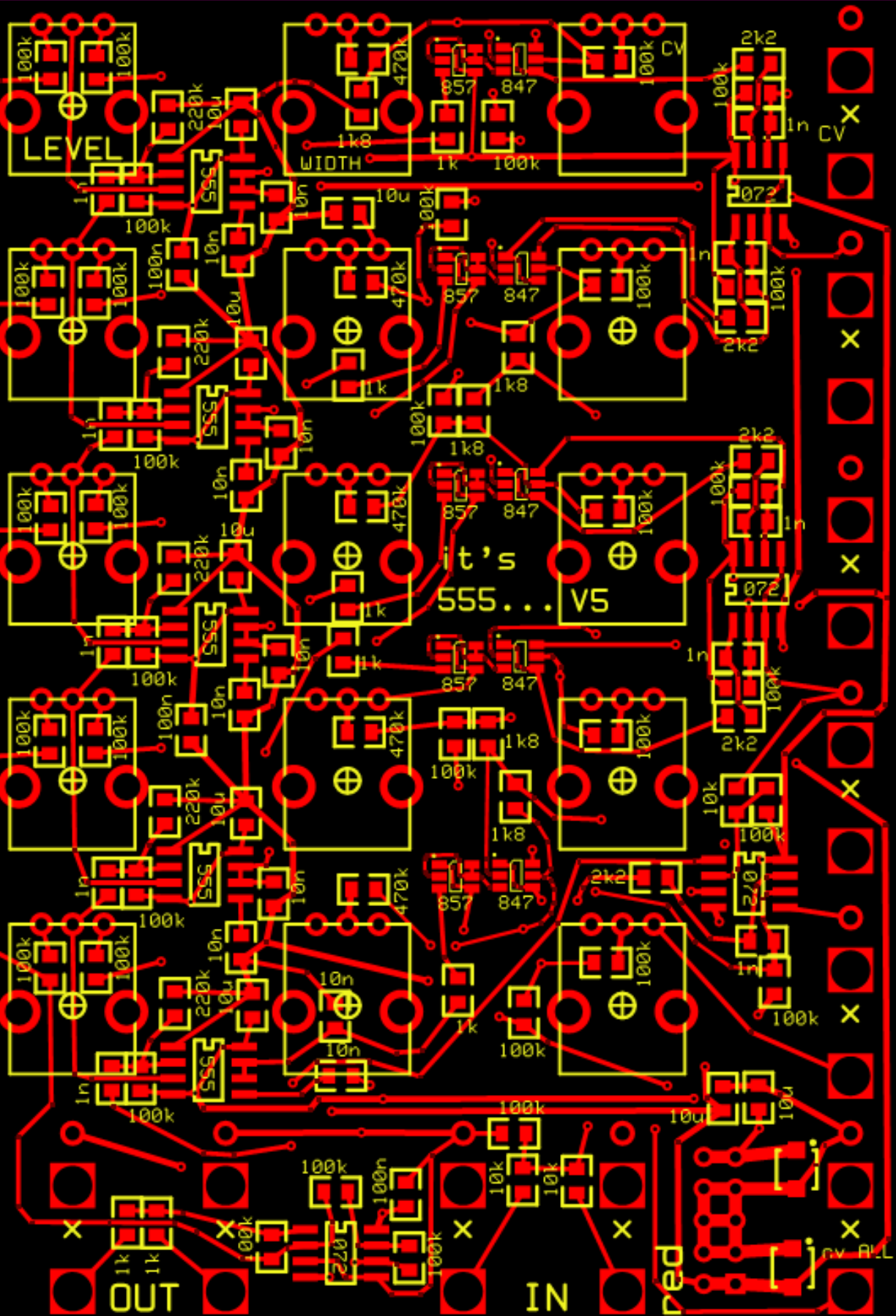


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its 555 (euro version)

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nonlinearcircuits



LEVEL

WIDTH

it's
555... V5

OUT

IN

red

CV R/L

IT'S 555...

CV

CV

WIDTH

LEVEL

5

4

3

2

1

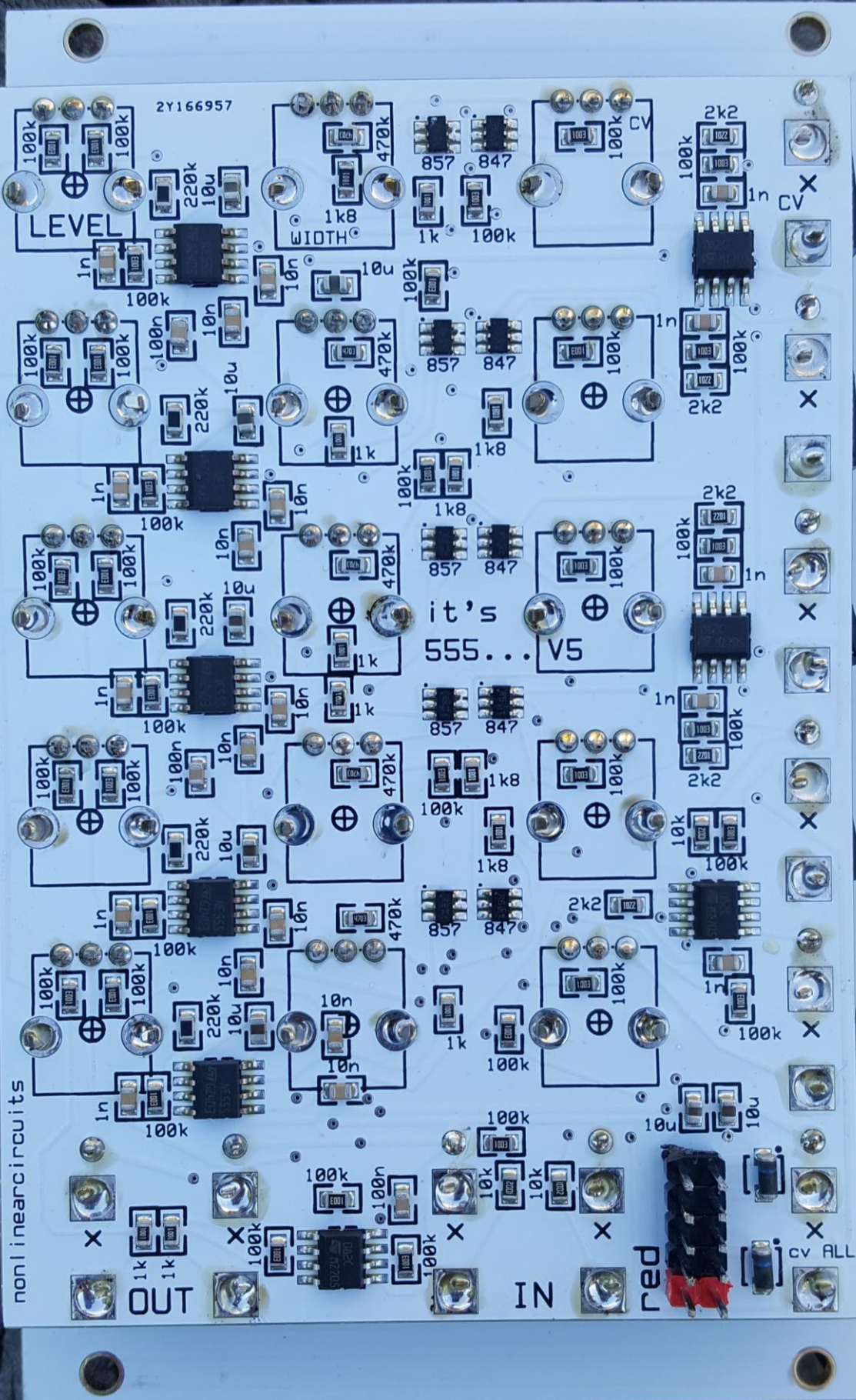
CV ALL

IN

OUT



ALL-2C080282



2Y166957

LEVEL

WIDTH

it's
555... V5

nonlinearcircuits

OUT

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red

CV ALL

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