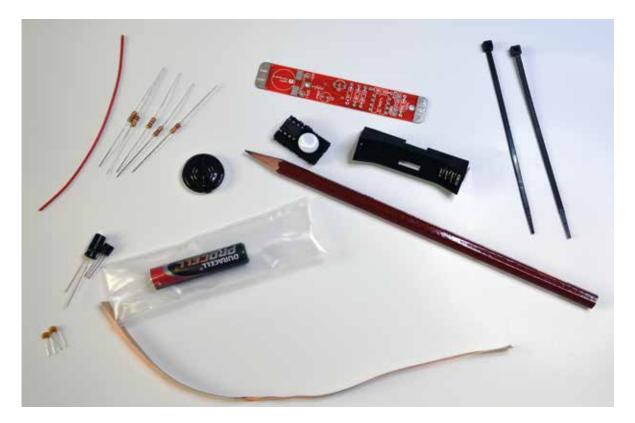
Drawdio Kit



Article: 20110546



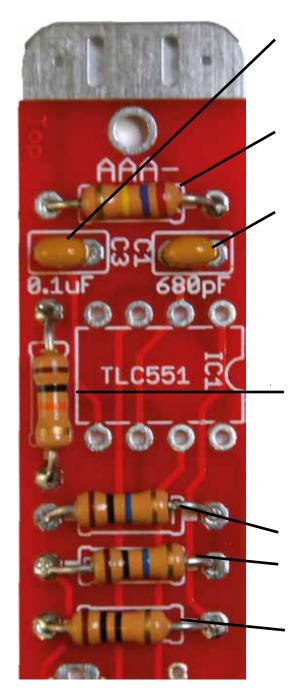


Partlist:

- Pencil, Thumbtack, Cable-Ties
- Battery Holder + Battery
- PCB
- Speaker
- -TLC551 IC
- 680pF Capacitor
- 100nF Capacitor
- 100µF electrolytic Capacitor
- 10 Ohm Resistor
- 10k Ohm Resistor
- 270k Ohm Resistor
- 2pcs 10M Ohm Resistor
- BC327 Transistor
- 10 cm Copper Tape
- 10 cm Wire

We are starting with soldering the resistors. You can identify the values on the colored rings. Now mount the two small capacitors and **pay attention on the marking**.

After soldering a component you can cut off the pins on the soldering/bottom side of the PCB.



Cap 100nF

Marked: K5K / 104

Resistor 270k

red-violet-yellow-gold

Cap 680pF

Marked: 681

Resistor 10k

brown-black-orange-gold

Resistor 10M

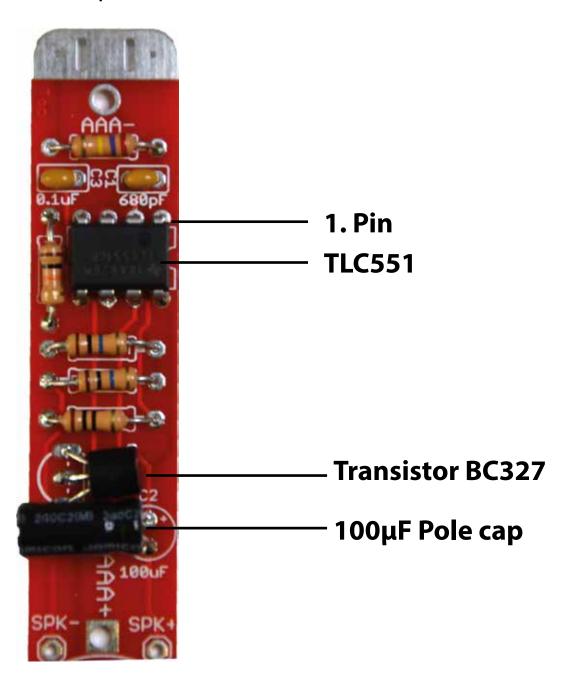
brown-black-blue-gold or brown-black-black-green-brown

Resistor 10 Ohm

brown-black-black-gold

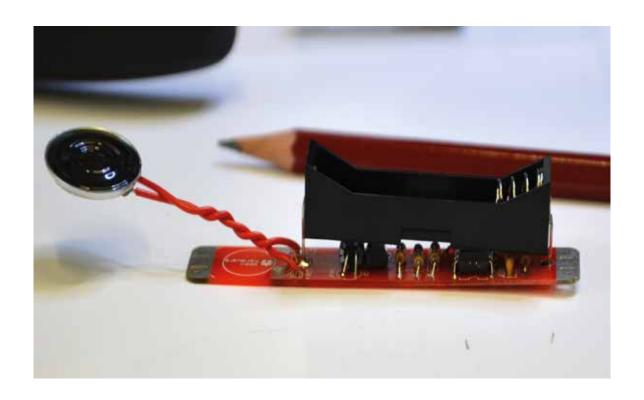
Now the 100uF pole capacitor can be mounted: Bend the pins in right angle and pay attention on the right direction/polarity.

The minus pole is marked on the side of the cap. The parts must be as low as possible, because the battery holder will be on top of this parts later. The transistor **BC327** is mounted in the same way. Now we can start with the IC **TLC551**. The first pin is marked with a dot on the IC



The next step is the mounting of the speaker and the battery holder:

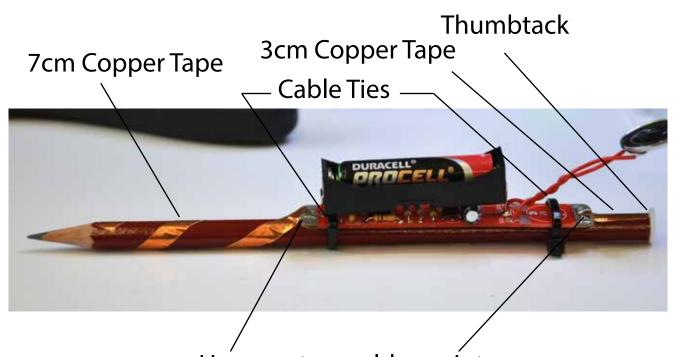
- 1. Cut the wire into two stripes and strip off the ends (3-5 mm is enough).
- 2. Solder the wires to the PCB, one to SPK- and one to SPK+. The other sides of the wires are connected to the speaker. **Do not heat the speaker too long, this can cause a damage.**
- 3. Now the battery holder can be soldered. The plus contact of the holder is marked with AAA+ on the PCB. Mount it directly above the the other parts.



The last step is the assembling of the whole Drawdio.

- 1. The PCB is fixed with the two cables ties on the pencil.
- 2. Cut a 3cm long stripe of the copper tape and tape it on the top side of the PCB/pencil. The thumbtack is pressed through the copper tape into the middle graphite of the pen.
- 3. The rest of the copper tape is taped around the pen on the other side.
- 4. Now you have to solder the copper tape to the contact of the PCB, because you need a good electronic connection of this two parts.

The Drawdio is ready for testing. Place the battery into the holder and have fun...



Here are two solder points for connecting the copper tape and the PCB