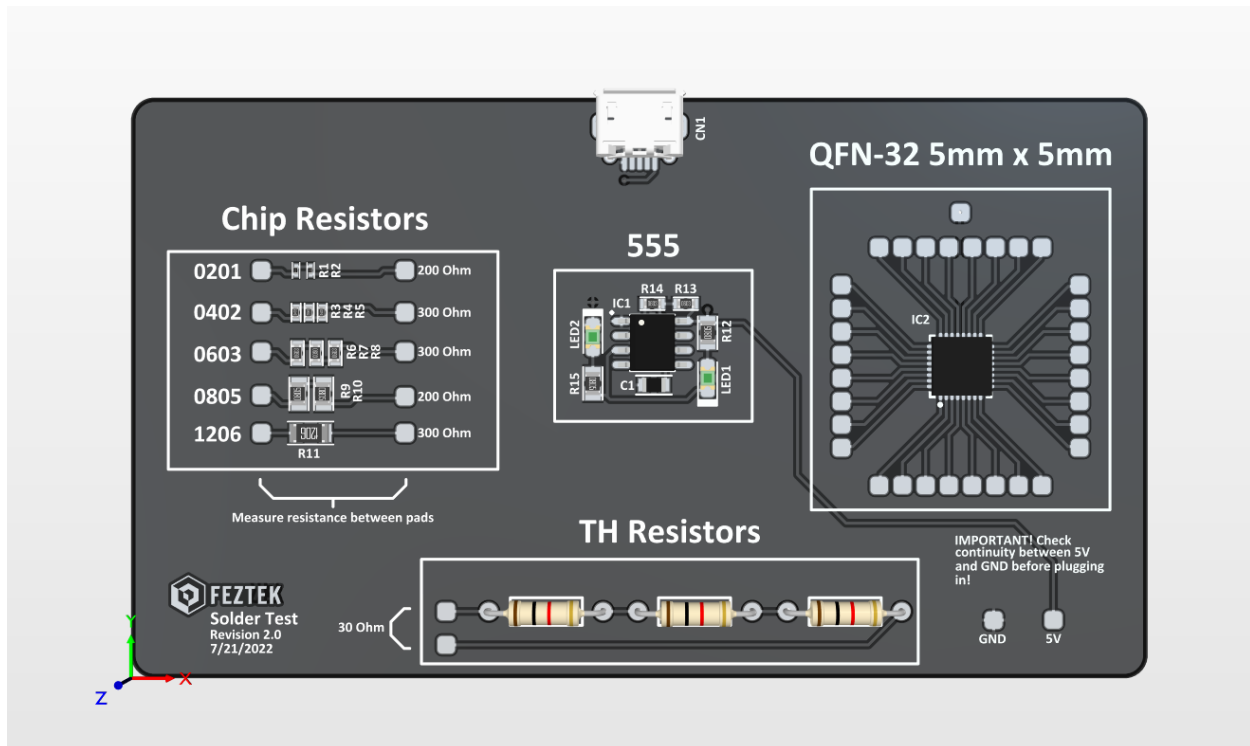


# Feztek Solder Board



## Features:

- 24 Components to solder down
- Both through-hole and SMD packages
- Difficult QFN-32 with EPAD
- Pads to measure resistance and continuity
- Quick-check feature for the 555 Circuit

## What to Look for by Section:

### Chip Resistors

- **Actual Continuity** - Is the resistor actually soldered down on both sides? If you measure across the pads do you see resistance?
- **Joint Quality** - How much solder is there? Is there too much or too little? Is the solder oxidized from repeat heating?
- **Evenness** - Are all of the resistors straight? Are they even on both sides?

- Orientation - For resistors it doesn't matter because they are non-polar but if the subject is hand placing them you can see if they have a knack for detail. Are all the horizontal resistors with numbers in them facing the same way? What about the vertical ones?

### 555

- Component Knowledge - Only the resistors are color coded. Could the subject identify the other components like the LEDs and Capacitor without having to ask or look it up? Were they able to see the cathode on the LED and then orient it correctly on the board? Were they able to read the pin one designator on the 555 silkscreen?
  - \*If done correctly, the LEDs will blink green back and forth at .69Hz when plugged in via micro USB.
- Same Principles as above

### QFN-32 5mm x 5mm

- Technique - This part of the test will separate some skill levels. Are there any bridges? Is it soldered down all the way? What strategy did they use? Did they solder the EPAD? What tools did they use?

### TH Resistors

- Attention to Detail - This part of the test is the simplest but there are still some key things to look for. Does the body of the resistor fall within the white box? Are the leads even on both sides? Are the tolerance bands facing the same way?