



# Kano Computer Kit Touch Heatsink Replacement

In this guide, I will be adding Heatsinks to both the CPU and the RAM of the Raspberry Pi 3 Board.

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**TOOLS:**

- [Isopropyl Alcohol 99%](#) (1)  
Pad
- [ESD Safe Tweezers Blunt Nose](#) (1)

**PARTS:**

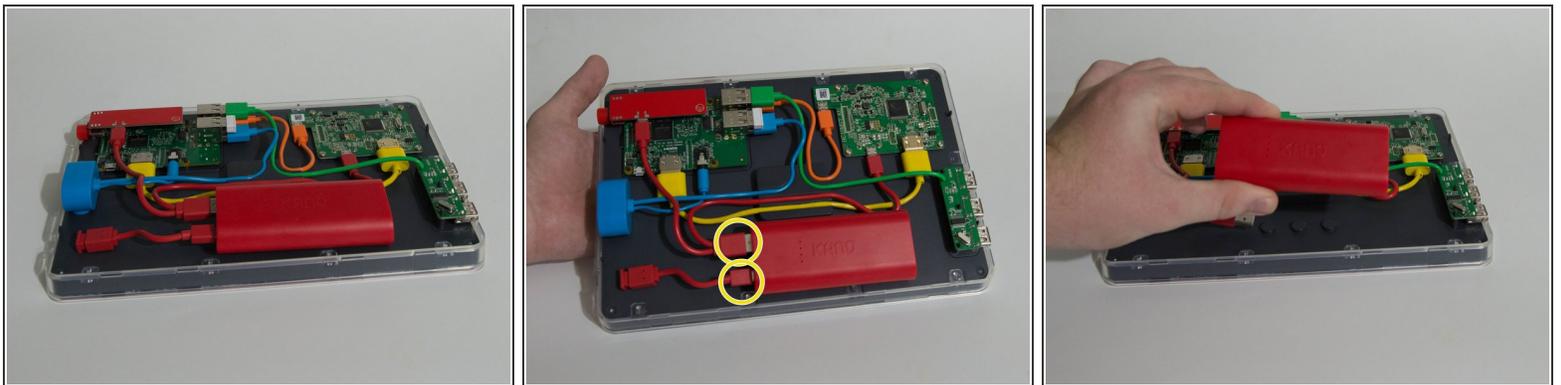
- [Heatsink](#) (1)

## Step 1 — Removing the Keyboard and the back of the case



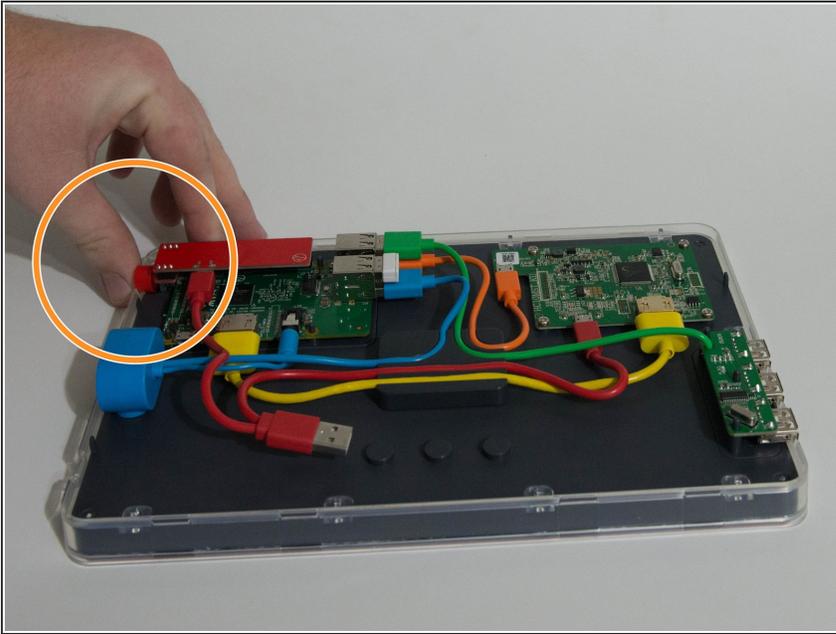
- The first step is to place the device face down on a table in order to remove the keyboard.
- After the device is laying on its screen we remove the keyboard
- After removing the Keyboard there's a hole in the case that's meant to allow some airflow. We will use this hole to put our finger in to aid in removing the case.

## Step 2 — Removing the Battery



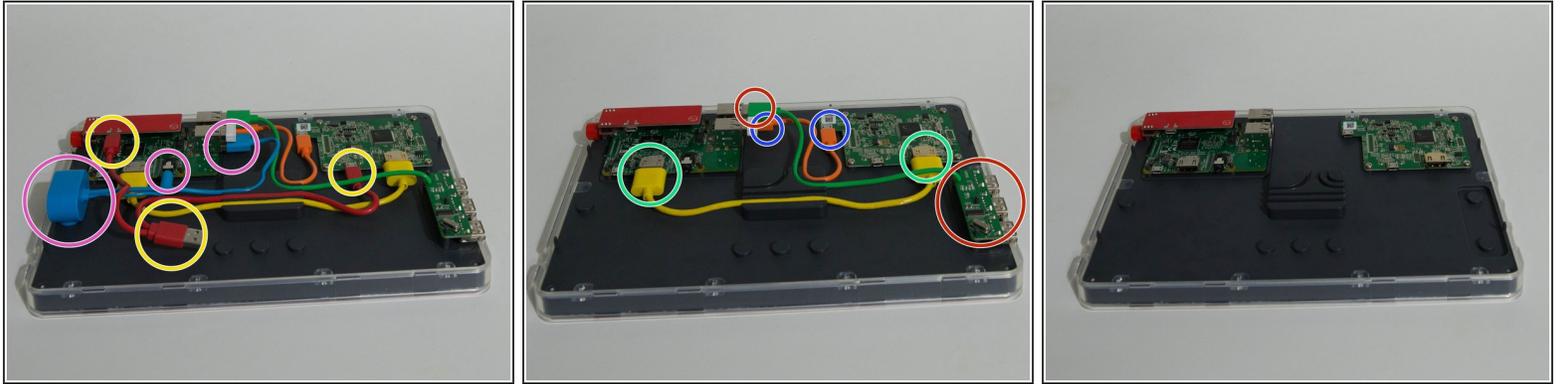
- The first picture is a view of the inside of the computer.
- Unplug the USB connectors from the battery.
- Remove the battery from the case.

### Step 3 — Press and Hold the Power Button



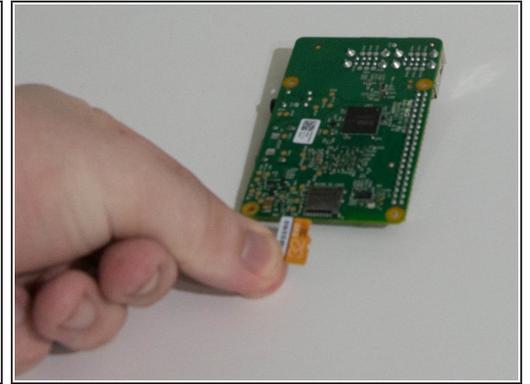
- After removing the battery it's always a good idea to press and hold the power button for 3 seconds to make sure you don't get a little shock.

## Step 4 — Removing the Cables



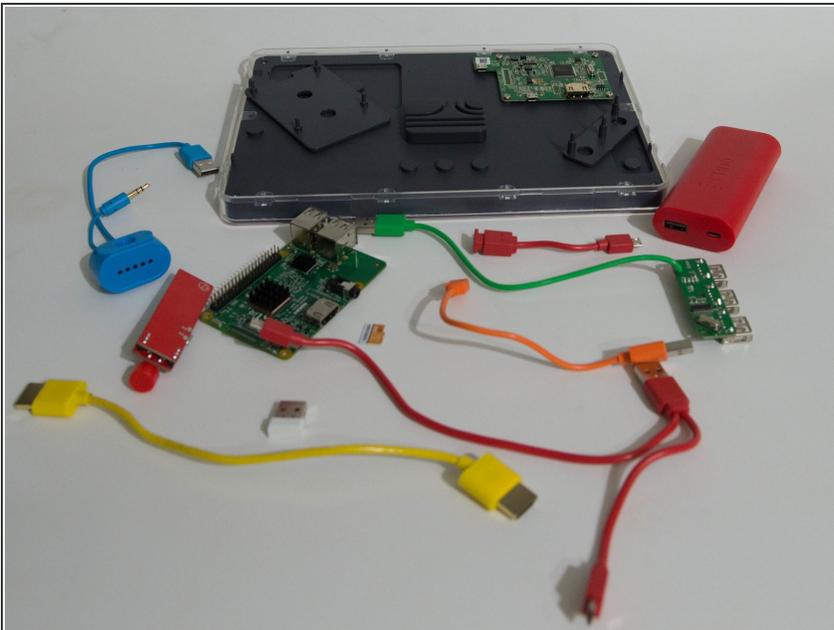
- Remember the power cable we removed from the battery? Let's go ahead and get that out of the way. It's plugged in to the power control board we used earlier, and the video driver board on the right of the image.
- Next we will get this speaker out of the way. The speaker circled on the far left has a 3.5mm plug circled in the middle that carries the audio signal, and a USB connector circled towards the right that powers the speaker.
- The yellow cable here is our HDMI cable that carries the video signal to the screen. We will remove it by unplugging it.
- This little orange cable is a USB cable that allows the touch screen to operate. All we need to do to remove it is unplug it.
- This green cable is a 3 port USB hub that lets us plug more than 4 USB devices in. We will remove it by unplugging it and then lifting the hub circled on the right up.
- The last picture is with all of the cables removed.

## Step 5 — Removing the Raspberry Pi



- Remove the power board from the Raspberry Pi headers by simply lifting up.
- Removing the Raspberry Pi is as simple as lifting it up and out of the case.
- After the Pi is out flip it over and remove the Micro SD Card.

## Step 6 — Finished



- Finally we are left with all of the individual pieces.

## Step 7 — Gather Your Parts and Tools



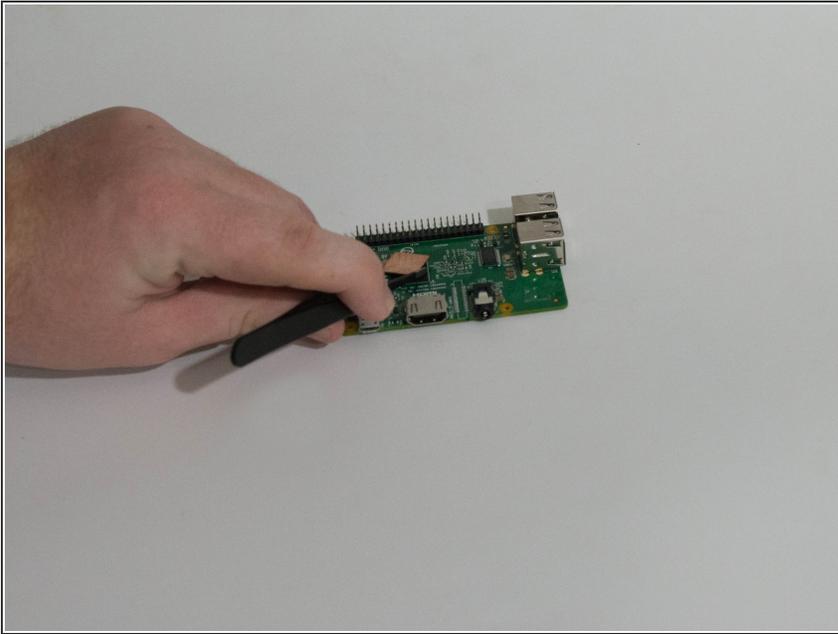
- Gather your parts and tools:
- For tools I used a rubbing alcohol pad, and the blunt nosed iFixit tweezers.
- For parts I used the copper plate, the large heatsink, and the smallest heatsink.

## Step 8 — Clean the CPU and RAM



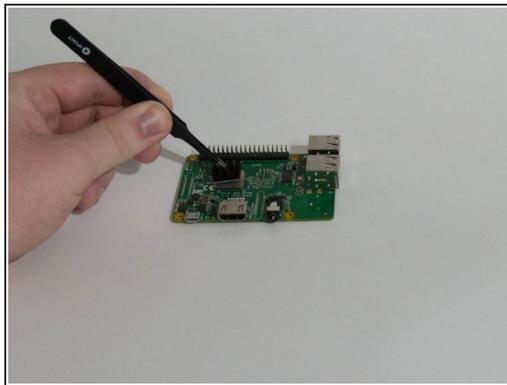
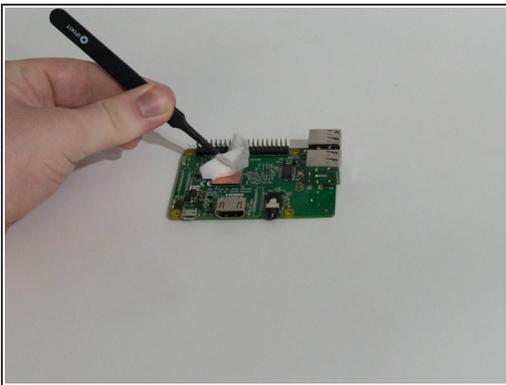
- First I used the alcohol pad to clean the CPU and RAM.

## Step 9



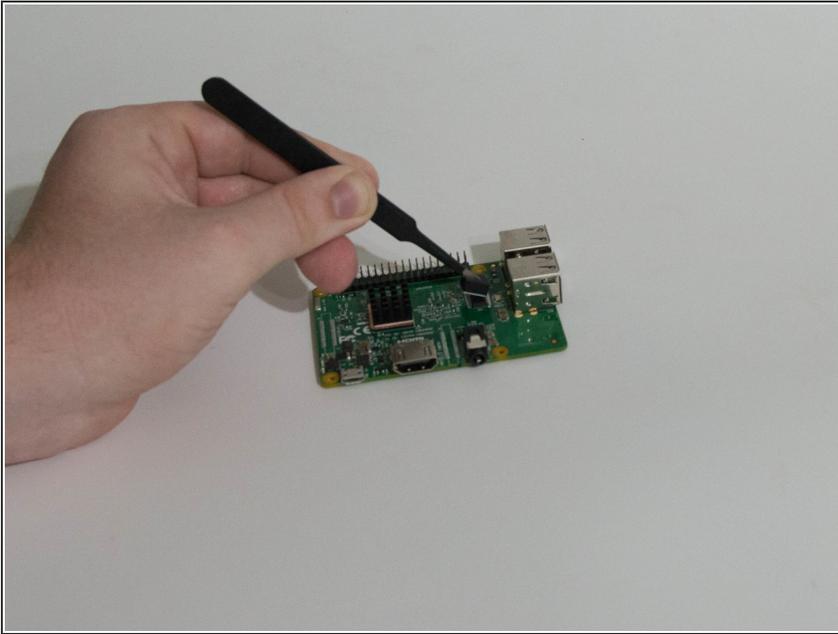
- Next I peeled the adhesive backing off of the copper plate.
- Then you center the plate and press down firmly.

## Step 10 — Adding the Heatsink



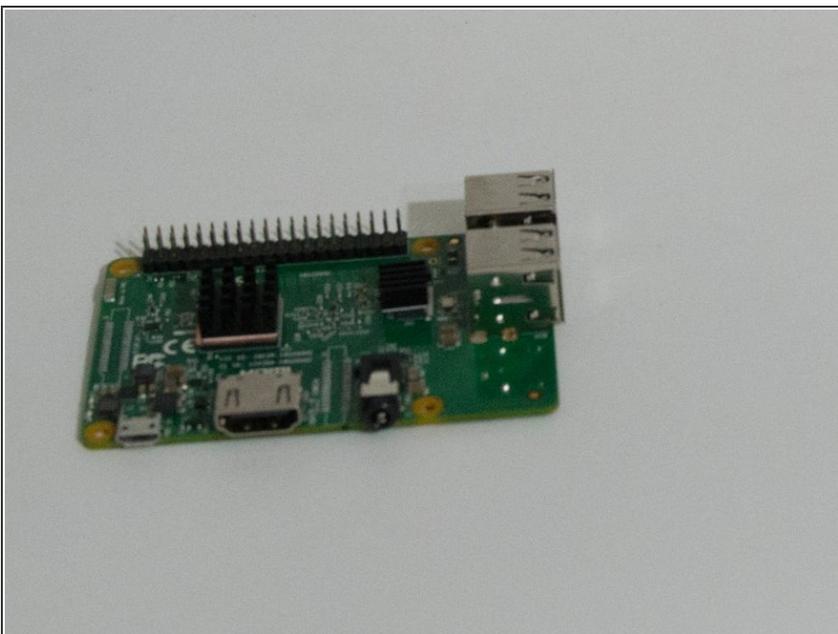
- Clean the copper plate with the alcohol pad.
- Then we will remove the adhesive backing from the heatsink, and center it on the copper plate, and press down firmly.

## Step 11 — Placing the Heatsink on the RAM



- We will remove the adhesive backing from the small heatsink, and center it over our RAM chip, and press down firmly.

## Step 12 — Finished



- Admire your handiwork.

To reassemble your device, follow these instructions in reverse order.