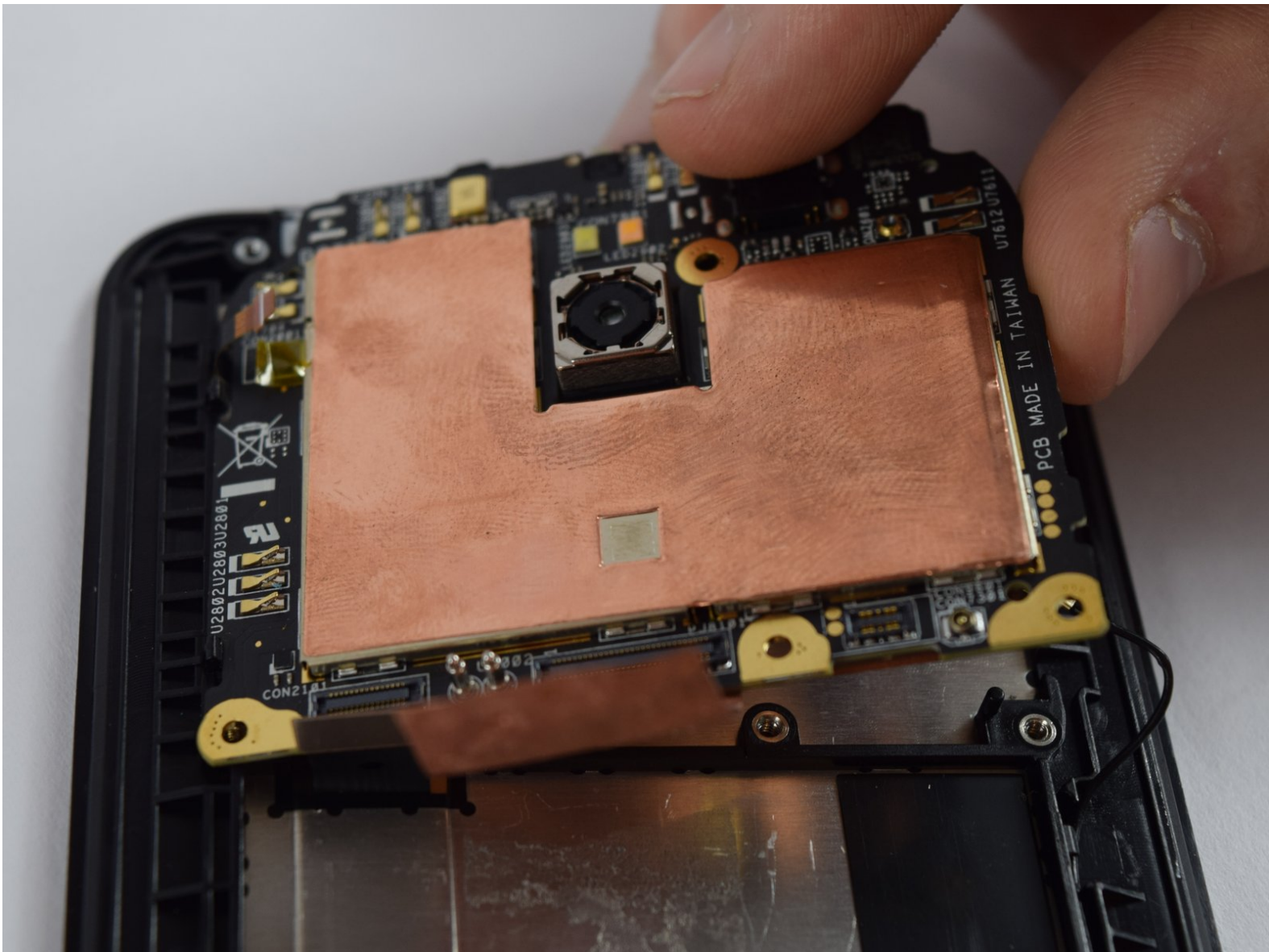




# Asus ZenFone 2 Motherboard Replacement

If you have problems with your phone rebooting at random times, you could have a faulty motherboard in your phone.

Written By: Eduardo Nodarse



## INTRODUCTION

Replacing the motherboard will take a good amount of time. Before replacing the motherboard, you will need to unplug the entire antenna and take out the battery.

---

### TOOLS:

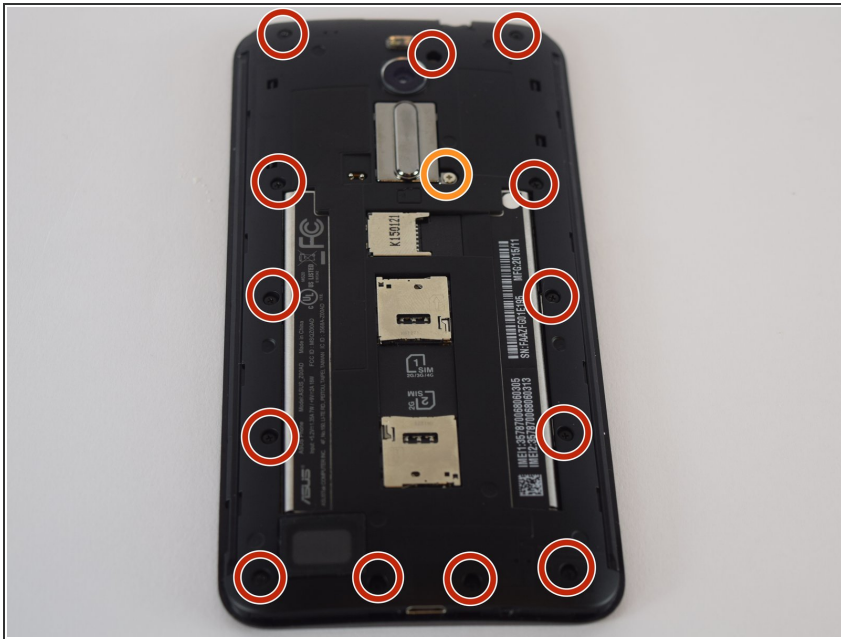
- [JIS Driver Set](#) (1)
  - [64 Bit Driver Kit](#) (1)
  - [iFixit Opening Tools](#) (1)
-

## Step 1 — Removing the Back Cover



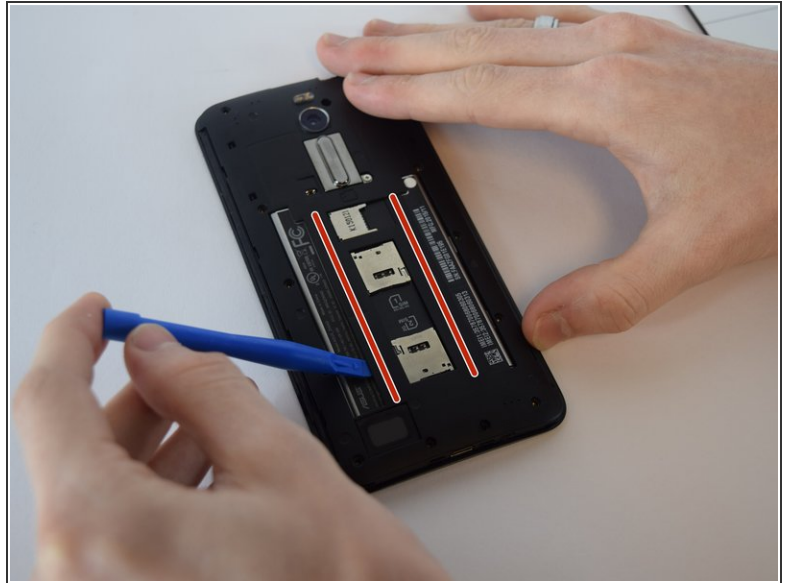
- Use your fingernail to gently pry off the phone's back cover at the indicated location. While your fingernail is under the back cover slide your finger around the edges of the phone until the cover pops off.

## Step 2 — Remove the Inner Cover Screws



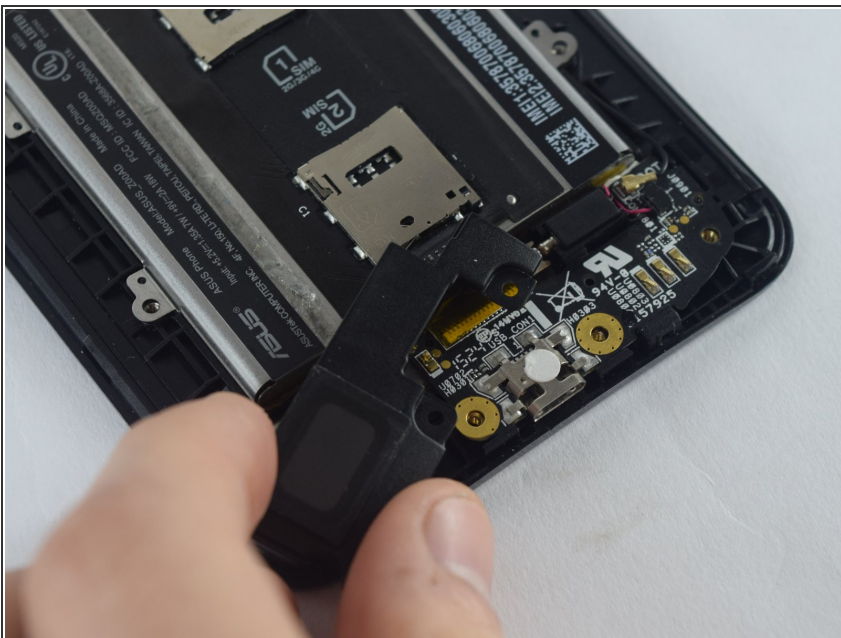
- Remove the thirteen black screws and the single silver screw from the back of the phone with a JIS size 00 screwdriver.
  - The black screws are 2.8 mm in length.
  - The silver screw is 5.5 mm in length.
- ⓘ The black screw next to the camera and the flash is covered by a sticker. This screw can be easily removed as if there were no sticker on top of it. The point of the screwdriver should be able to pierce through the sticker easily.

### Step 3 — Remove the Inner Cover



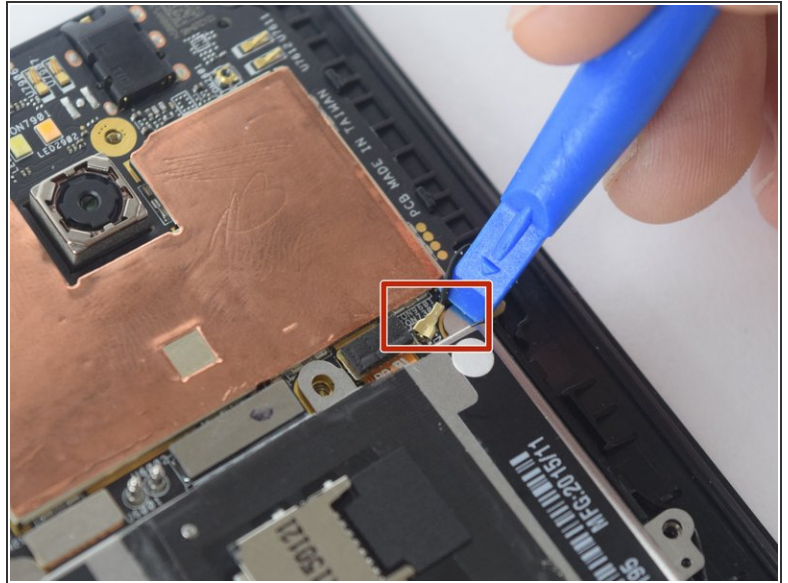
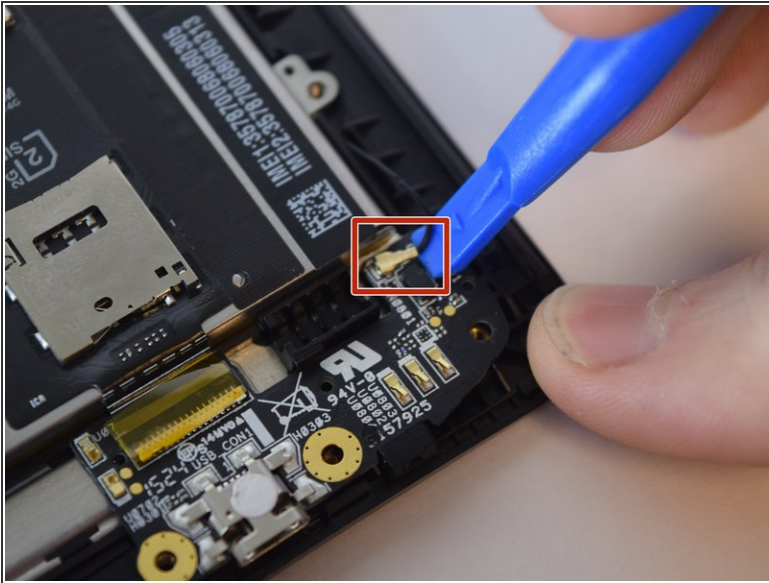
- Use a plastic opening tool to remove the inner phone backing.
- ❗ The parts of the inner backing held down by two strips of double sided tape can be easily loosened by inserting the plastic opening tool underneath it and gently lifting it up.

### Step 4 — Remove the Speaker



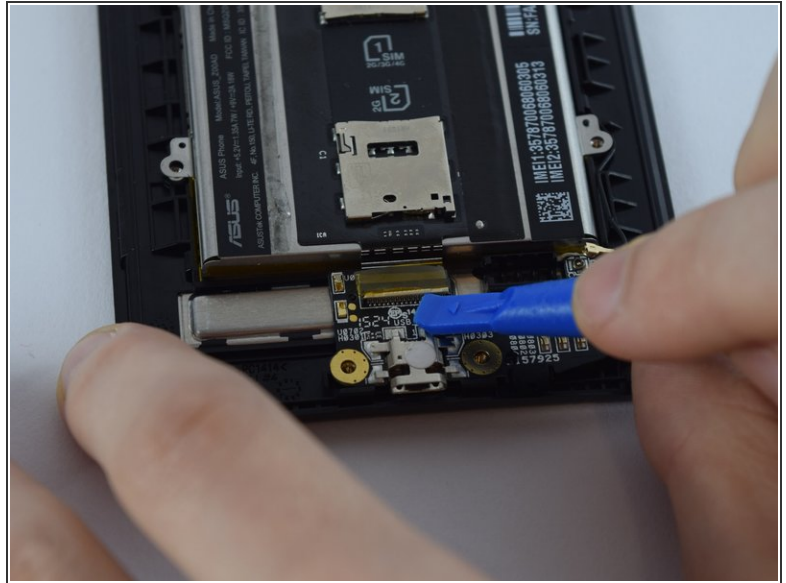
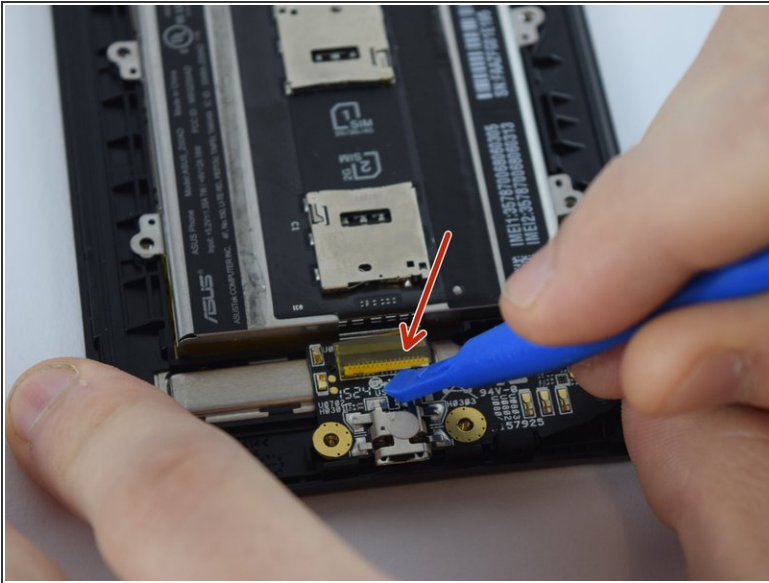
- ❗ Note the position of the speaker unit so you can replace it in the correct place during reassembly.
- Take the speaker out of the back of the phone. It should come out easily as soon as the inner back is removed because nothing is holding it down in place anymore.

## Step 5 — Remove the Antenna



- Use a plastic opening tool to gently pry up both ends of the antenna.
  - Carefully remove the antenna wire from the plastic keepers along the side. Note their position for reassembly.
- ⚠ The antenna connections can be easily bent out of shape. Be sure to lift from underneath the cable as shown.

## Step 6 — Unlock Circuit Board Ribbon Cable



- Using the plastic opening tool, unlock the ribbon cable attaching the battery to the circuit board by prying up the yellow tab.

## Step 7 — Remove Vibration Motor



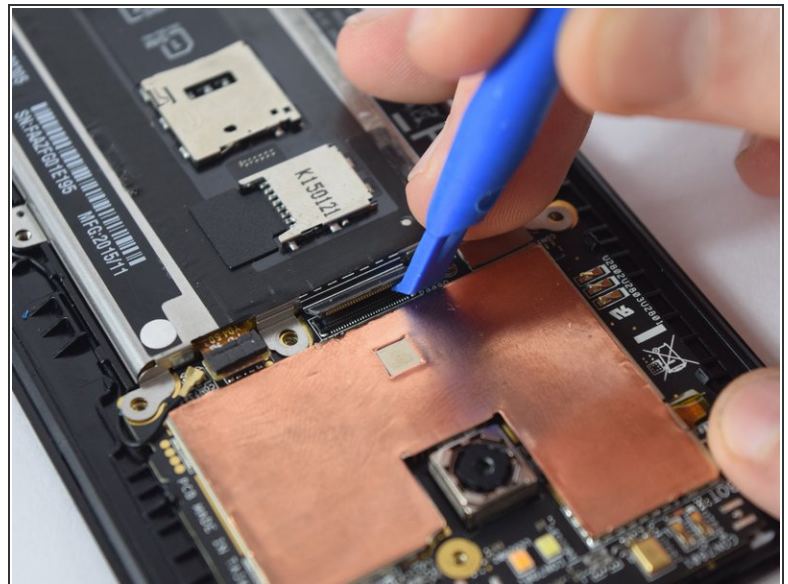
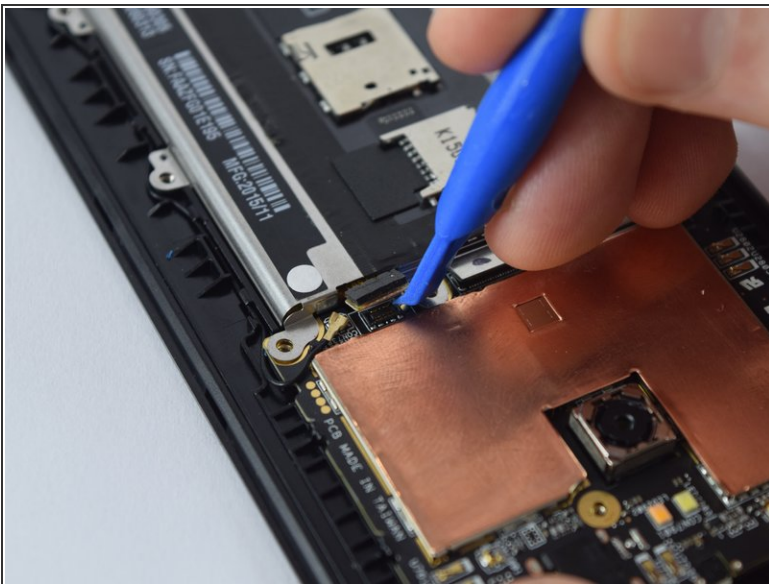
- Using a plastic opening tool, gently pry the vibration motor from its mount.

## Step 8 — Remove Circuit Board



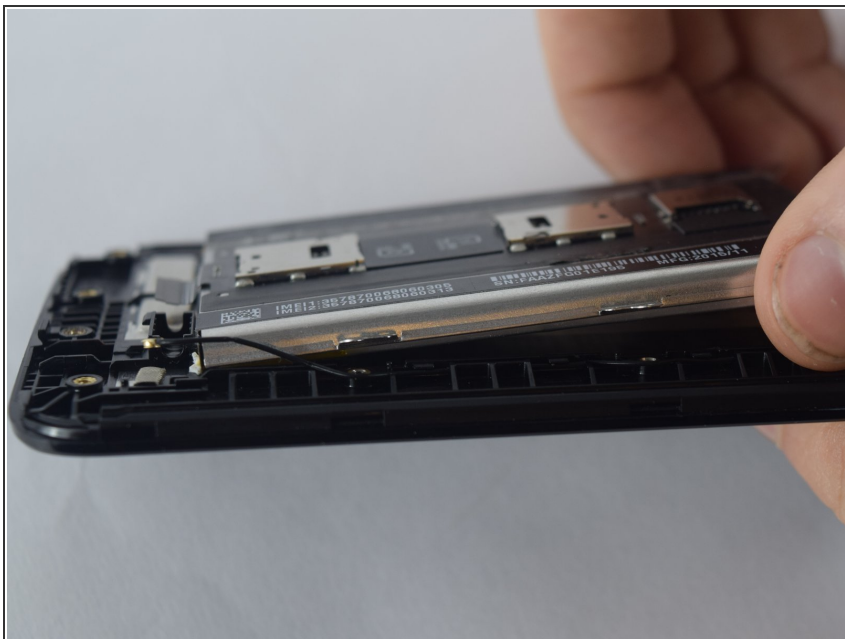
- Gently remove the circuit board from the phone by gently pulling it away from the bottom of the phone.

## Step 9 — Disconnect Ribbon Cables



- Using the plastic opening tool, disconnect the ribbon cables from their connectors by gently prying them up.

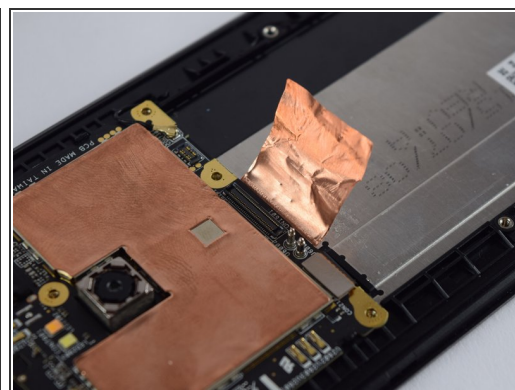
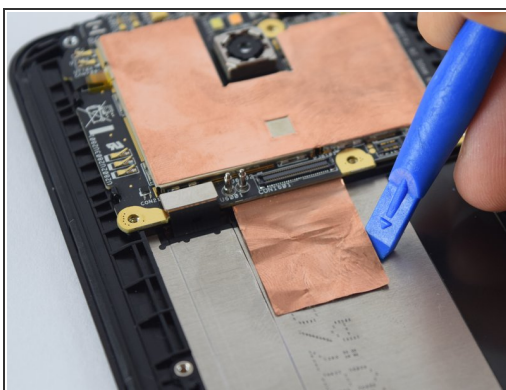
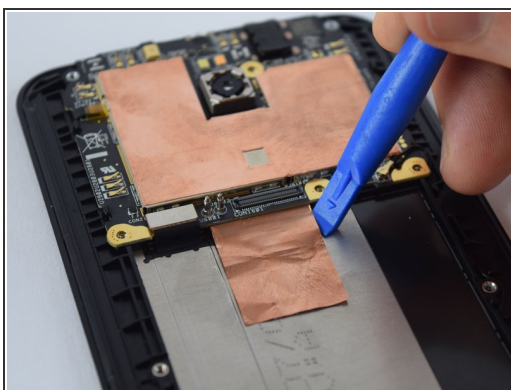
## Step 10 — Remove the Battery



- Carefully remove the battery pack from the phone using your hand. The battery is glued in place by a strip of adhesive on the top side so some force may be necessary.

⚠ There are fragile tabs on the left and right side of the battery, be careful not to break them off.

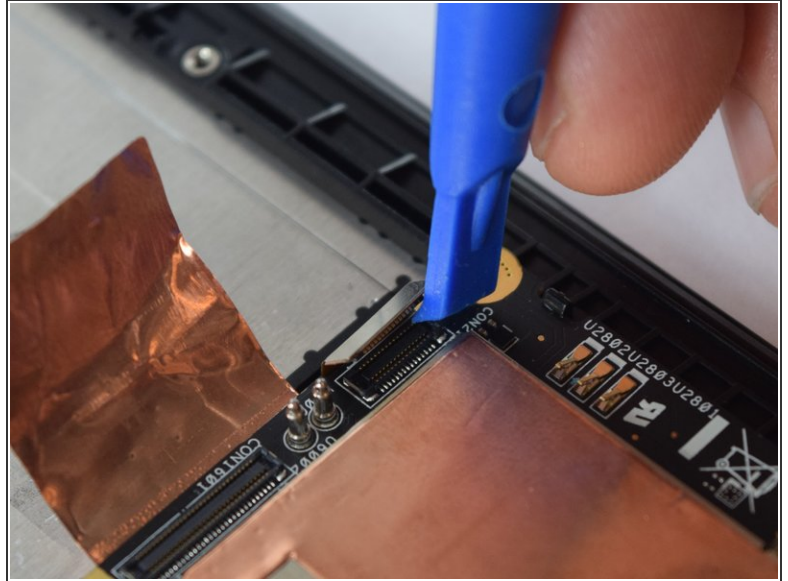
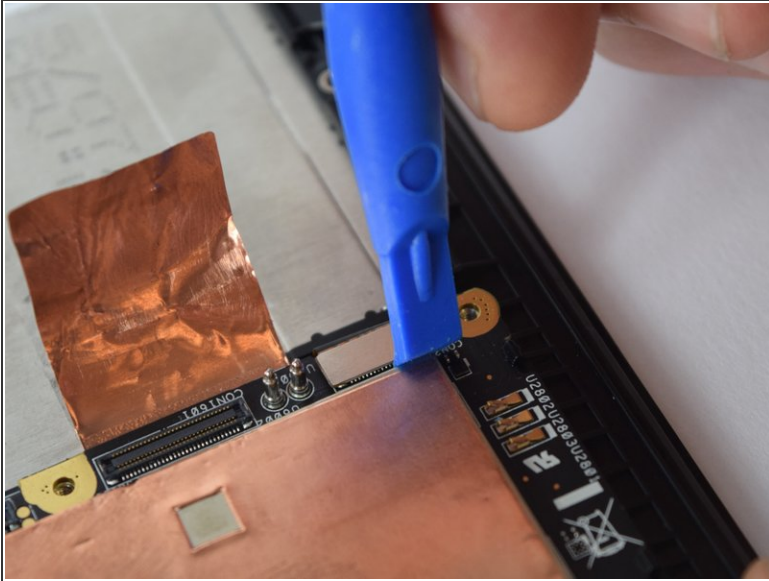
## Step 11 — Lift up the Copper Heat Strip



- Using a plastic opening tool, lift the copper sheet heat strip from the body of the phone by sticking the tool into one of the upper corner of the copper sheet and slowly sliding it along the edges.

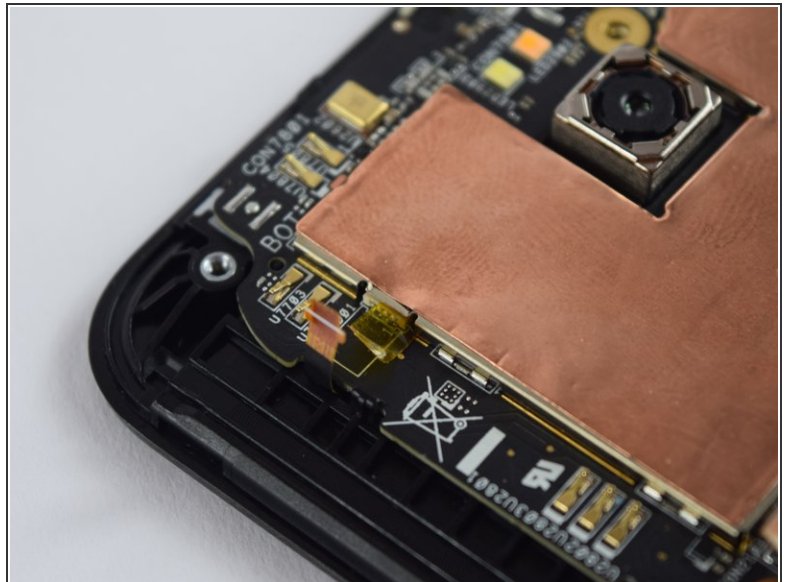
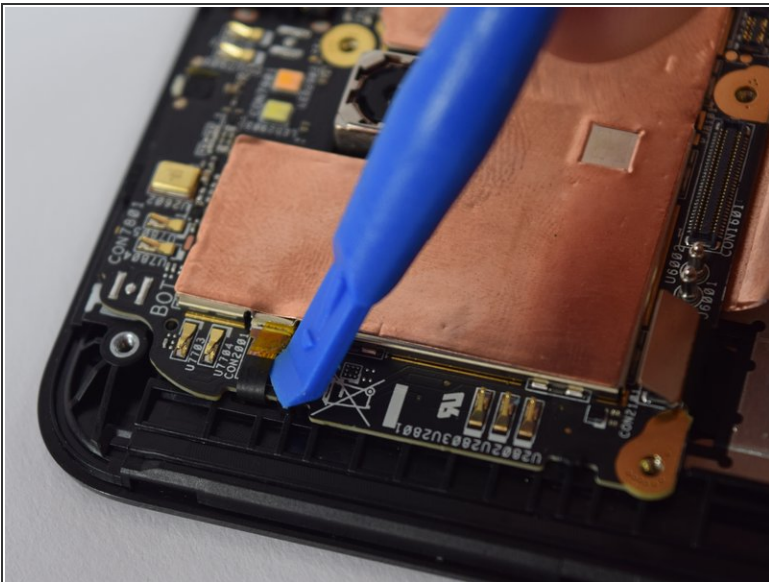
⚠ Be careful not to rip the copper sheet.

## Step 12 — Detach the Motherboard Ribbon Cable



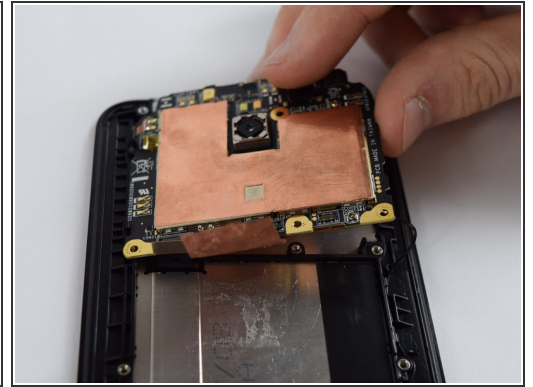
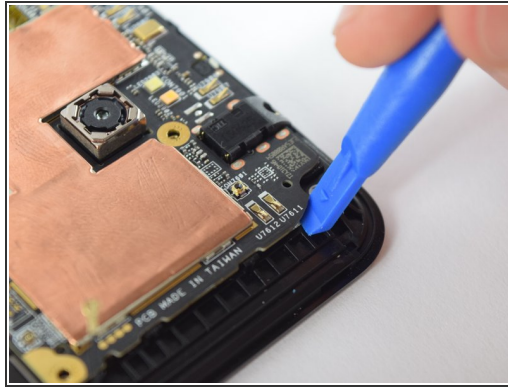
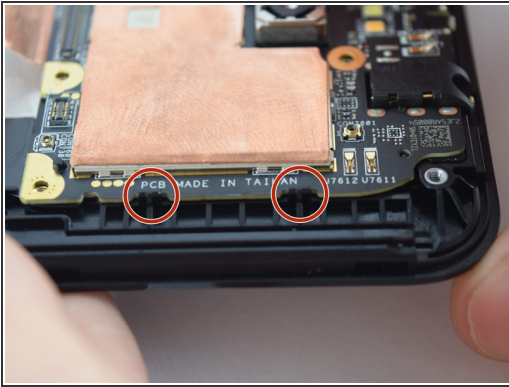
- Using a plastic opening tool, unplug the ribbon cable indicated in the picture.

## Step 13 — Detach the Screen Connector Ribbon Cable



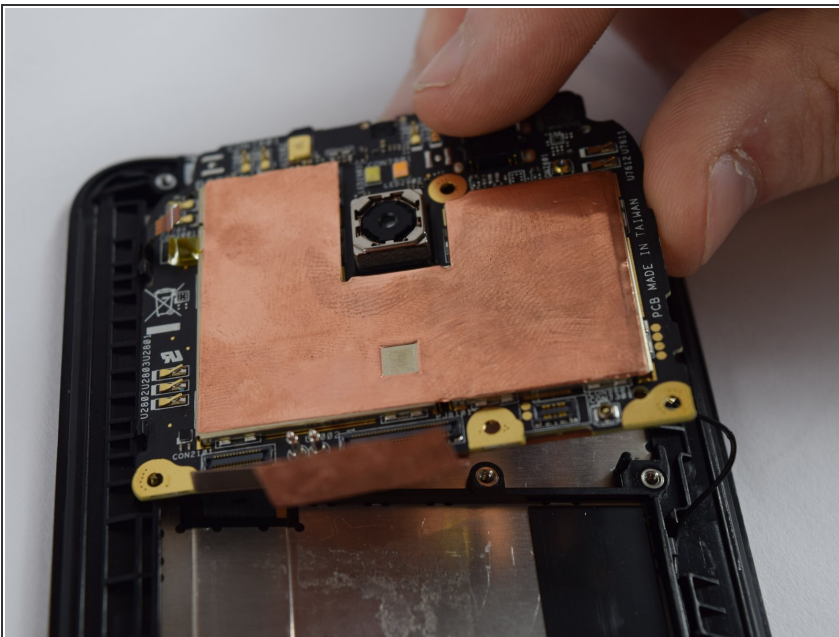
- Using a plastic opening tool, disconnect the display cable from the side of the motherboard by carefully sticking the tool underneath the display cable and gently pulling outward.

## Step 14 — Remove the Motherboard from the Retaining Clips



- There are four black plastic retainers, two on each side, that keep the motherboard fix in place. To get the motherboard out, stick a plastic opening tool under one top corner of the motherboard and carefully lift upward using a small amount of force to pop this side of the motherboard out of the plastic retainers.
- ⚠ Be careful not to break the black plastic retainers as these are needed to put the motherboard back in place.

## Step 15 — Finish Removing the Motherboard



- Once one side of the motherboard is out of the black plastic retainers, remove the whole motherboard from the phone.
- ⓘ The motherboard should come out easily once one side of it is freed from the black plastic retainers.

Put in a new motherboard and reassemble your device by following these instructions in reverse order.