



# Samsung Galaxy Tab S2 9.7 SM-T813

## Motherboard Replacement

How to replace a Samsung Galaxy Tab S2 9.7 SM-T813 motherboard.

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## INTRODUCTION

Replacement of the motherboard requires removal of a few other components first. See the prerequisite guides before attempting just the motherboard.

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### TOOLS:

- [JIS #00 Screwdriver](#) (1)
- [Phillips #0 Screwdriver](#) (1)
- [iOpener](#) (1)
- [Suction Handle](#) (1)
- [iFixit Opening Picks set of 6](#) (1)

*A set of 6 picks will suffice, but more picks will make removing the screen easier.*

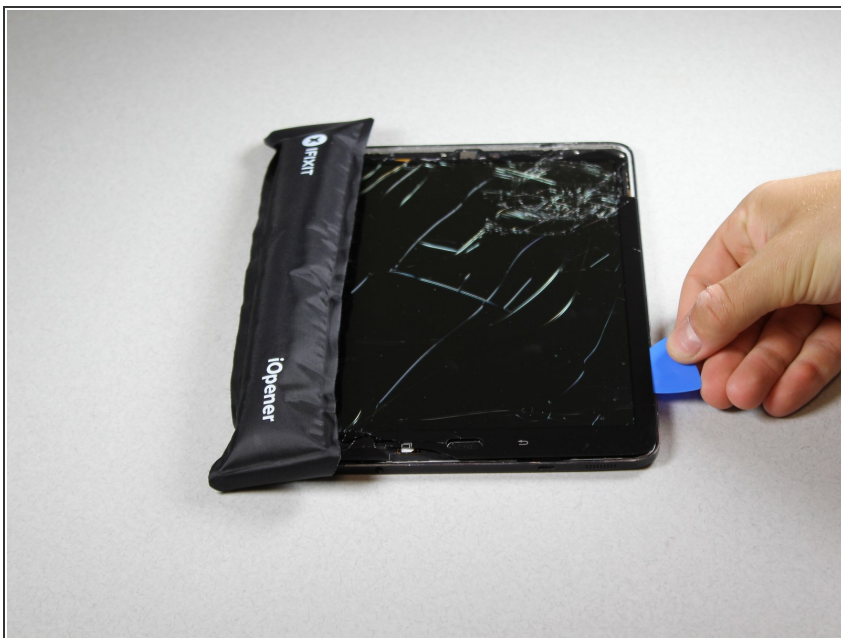
- [iFixit Opening Tools](#) (1)
  - [Tweezers](#) (1)
  - [Spudger](#) (1)
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## Step 1 — Screen



- Heat the iOpeners in a microwave for 1-2 minutes.
- ⚠ The iOpeners will be hot. Use caution and hold the tabs on the ends.
- Place heated iOpeners on screen edges to heat the adhesive.
- ⓘ For more detailed instructions on how to use the iOpeners, please refer to the [iOpener Instructions](#).

## Step 2



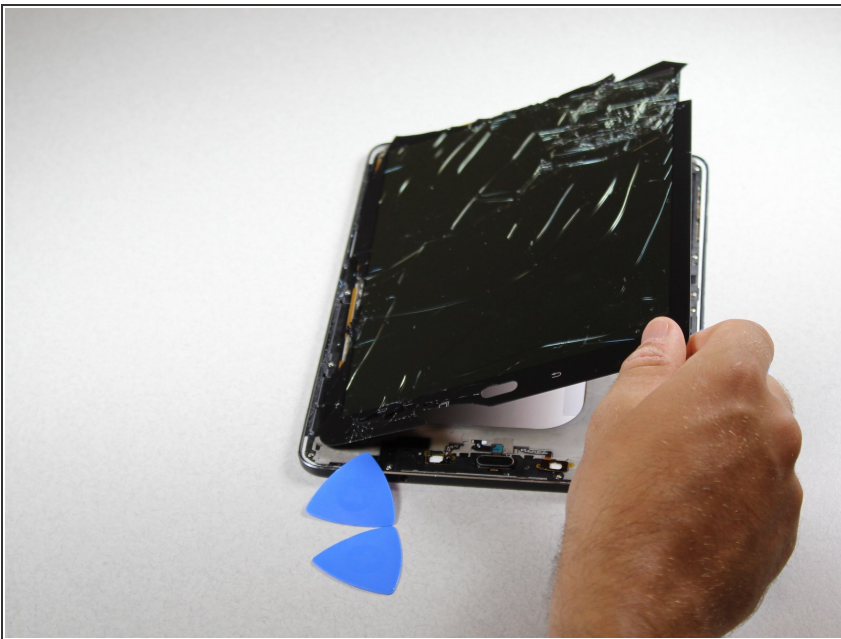
- Separate the screen assembly from the back by wedging the picks between the two components.
- Slide the picks along the edge and leave them holding the device open all around the edges.

## Step 3



- Place suctioning device near the corner of the screen and gently lift up to create a gap between the front panel assembly and the back.
- Insert the picks to hold the two components apart once a gap is created.

## Step 4



- Once all edges have been disconnected, carefully lift the screen off by pulling one side up.
- ⚠ Be careful not to cut yourself. Any broken glass from the screen will be sharp.

## Step 5



- Using the tweezers, gently peel up on the silver tape covering the connector.

## Step 6



- Use the plastic opening tool to get under the connector piece. This will allow you to remove the front panel assembly from the rest of the device.

## Step 7



- Detach the connector from the inside of the device.
- Lift the screen to separate the front panel assembly from the rest of the device.

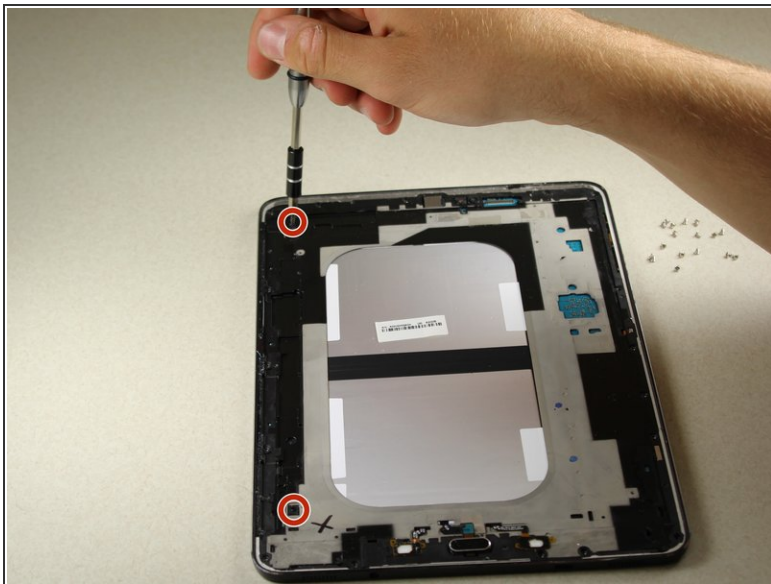
## Step 8 — Central Panel



- Remove the 17 silver 3.0 mm Phillips head screws located around the edge of the device using the screwdriver.

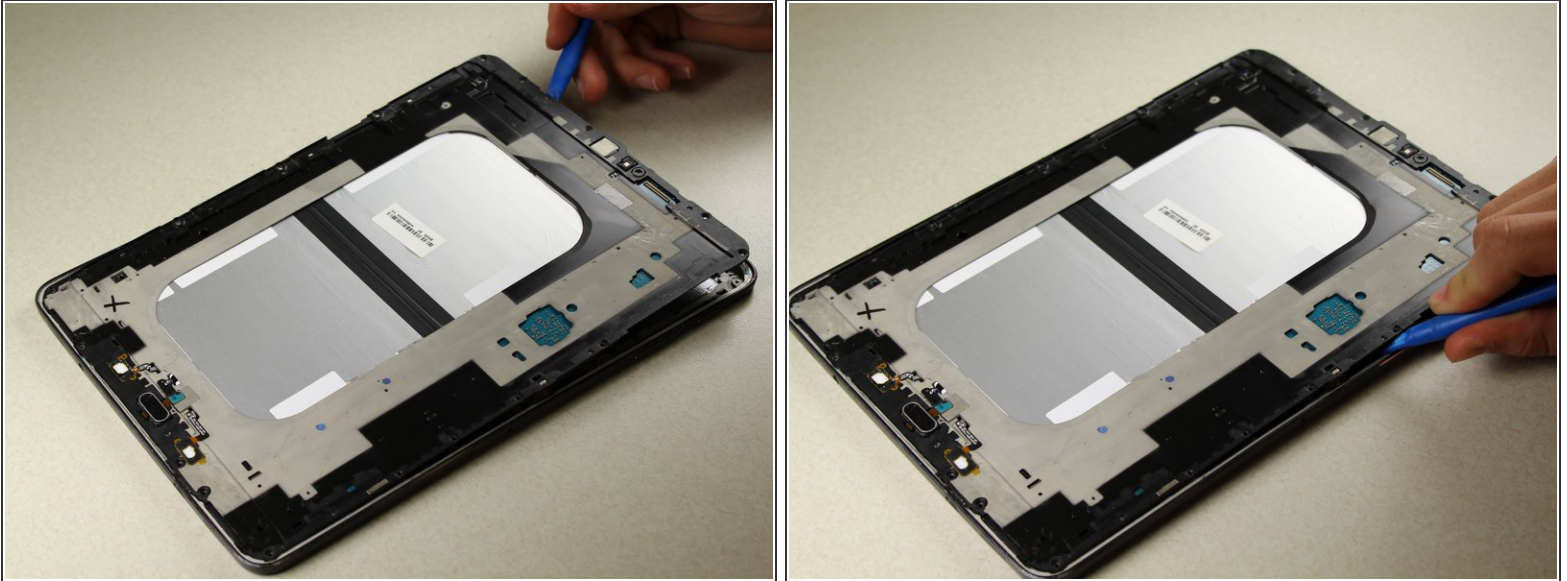
**i** For additional information on how to remove screws, please refer to [Screwdriver Best Practices](#).

## Step 9



- Remove the 2 centrally-located black 3.0 mm Phillips head screws using the screwdriver.

## Step 10



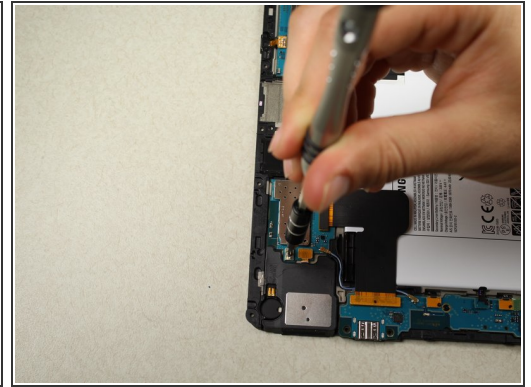
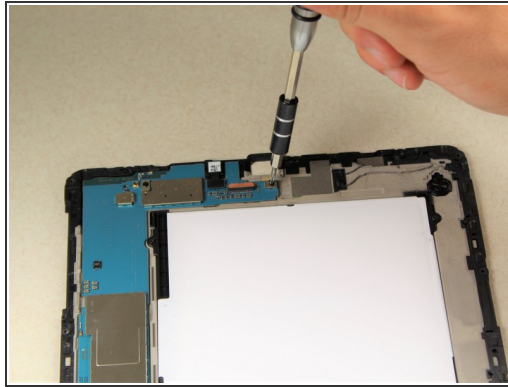
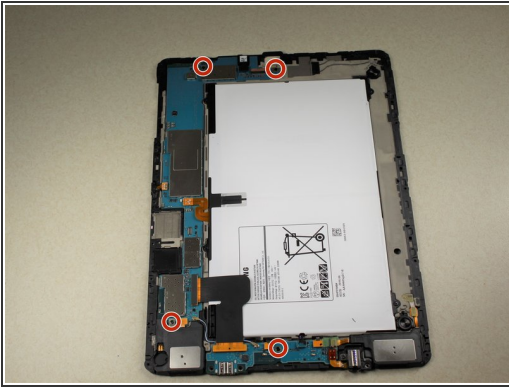
- Use the plastic opening tools to gently separate the middle panel from the rest of the device.
- Move the tool around under the edges until you can remove the panel by hand.
- ⓘ Popping/cracking noises are completely normal. These are the sounds of the panel separating from the rest of the device.

## Step 11



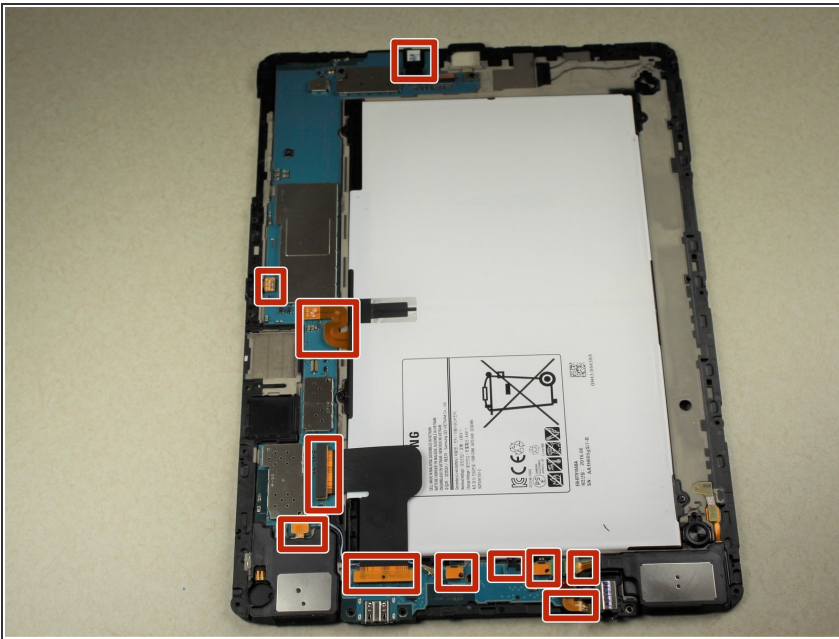
- Lift up the central panel starting from one corner to separate it from the rest of the device.
- Pull towards the top of the device as you lift out to ensure that the charging port connection is not damaged.

## Step 12 — Motherboard



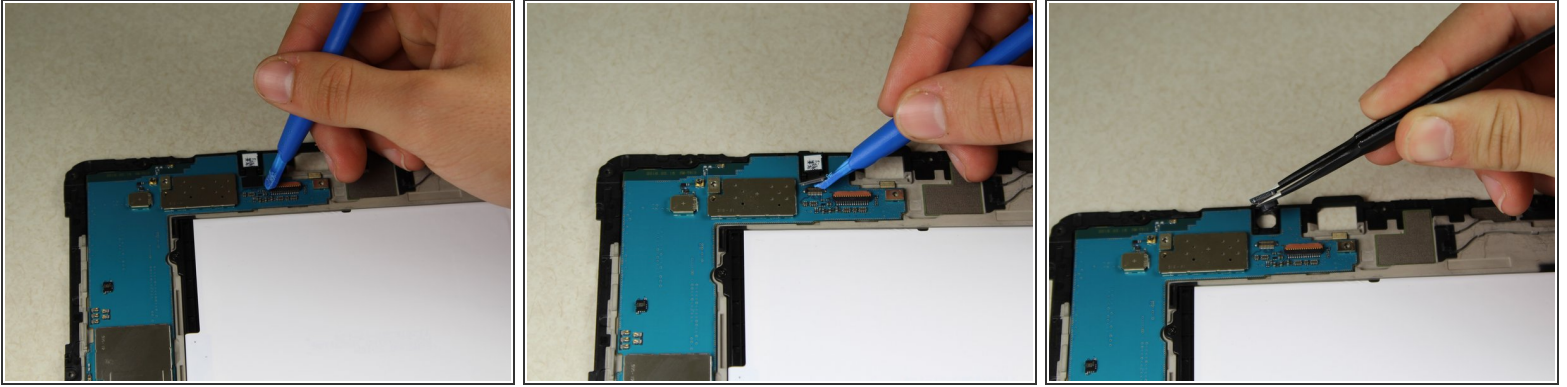
- Using the screwdriver, remove the 4 black 3.0 mm Phillips head screws located on the upper and lower motherboard.

## Step 13



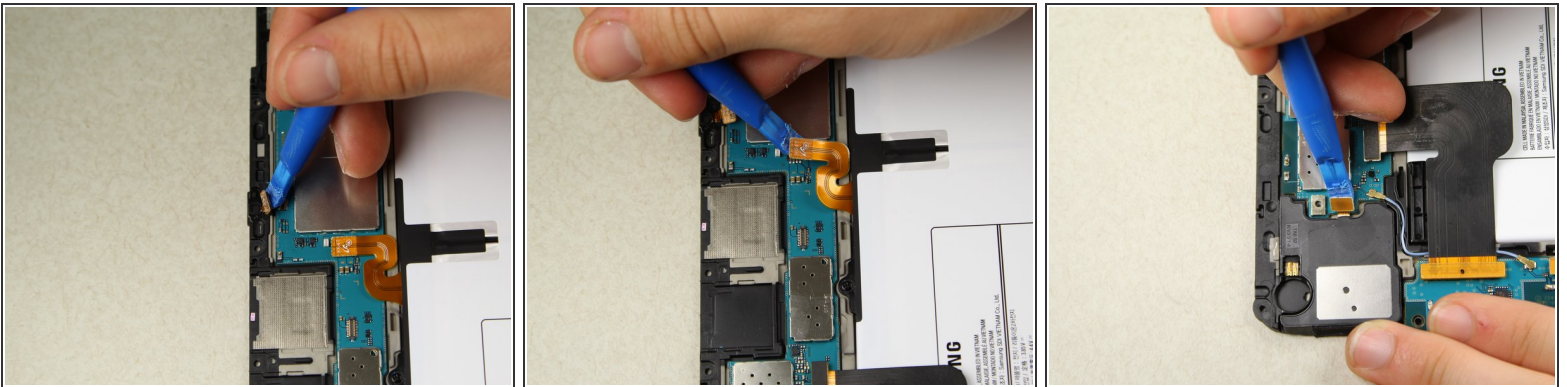
- Using the plastic opening tools unlock the 11 connectors that must be undone before the motherboard can be removed.

## Step 14



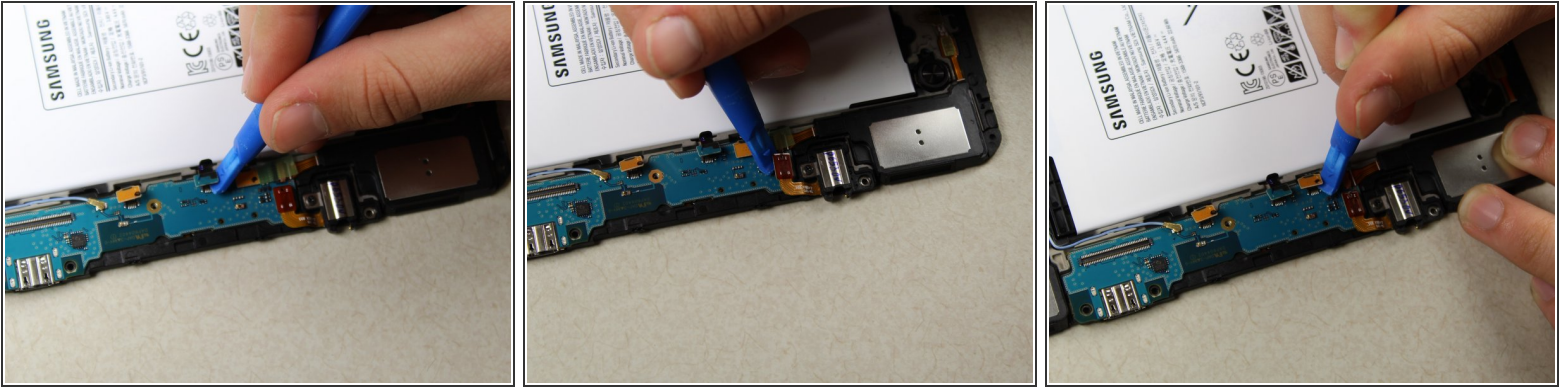
- Using the plastic opening tool, continue disconnecting cables on upper motherboard.

## Step 15



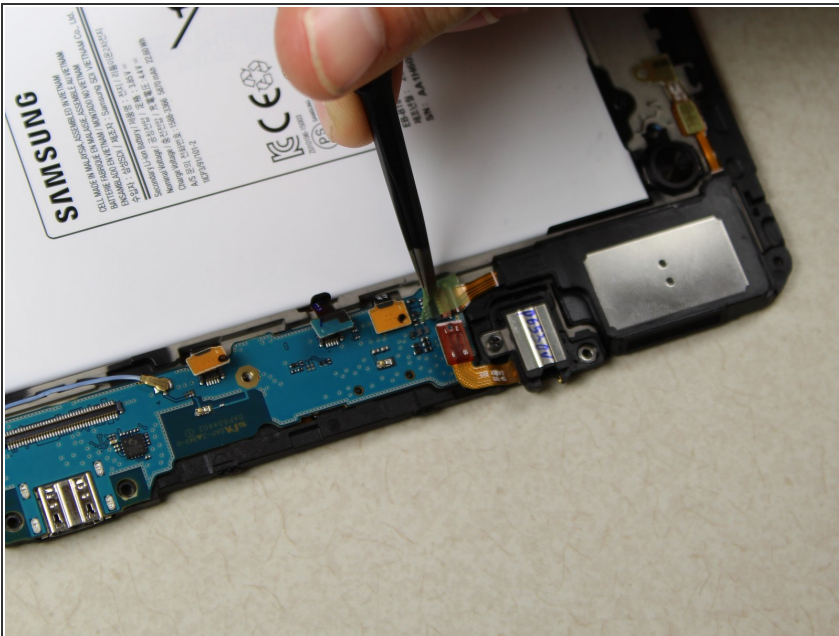
- Continue disconnecting along the left side of the device.

## Step 16



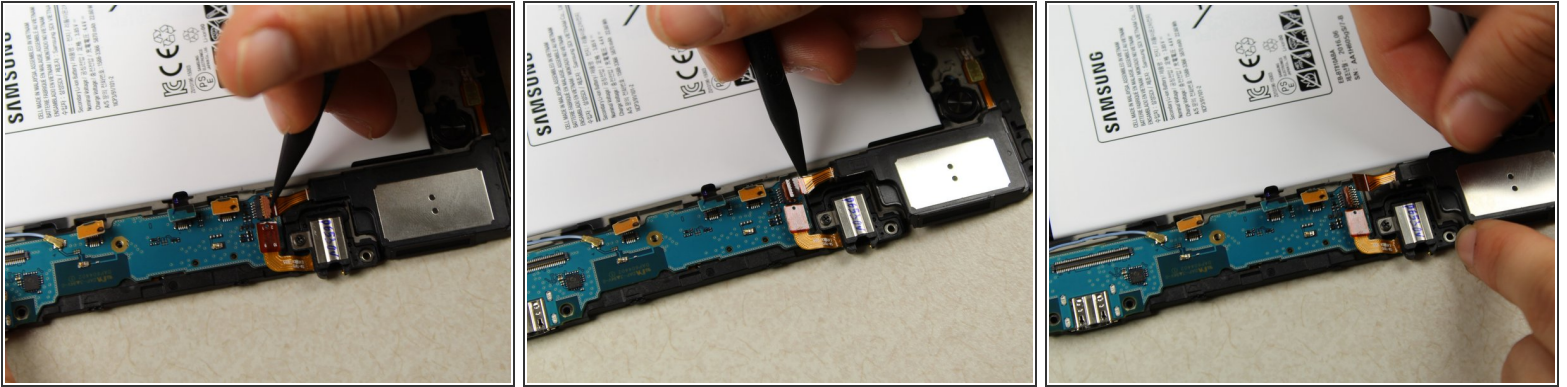
- Continue removing cables on the lower motherboard.

## Step 17



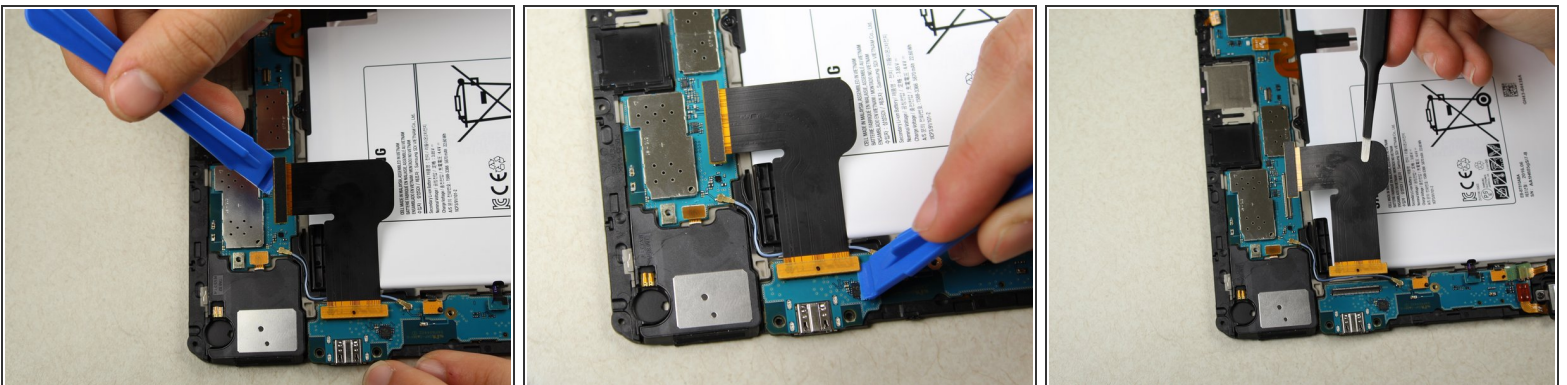
- Using tweezers, remove the green plastic film to reach the last cable.

## Step 18



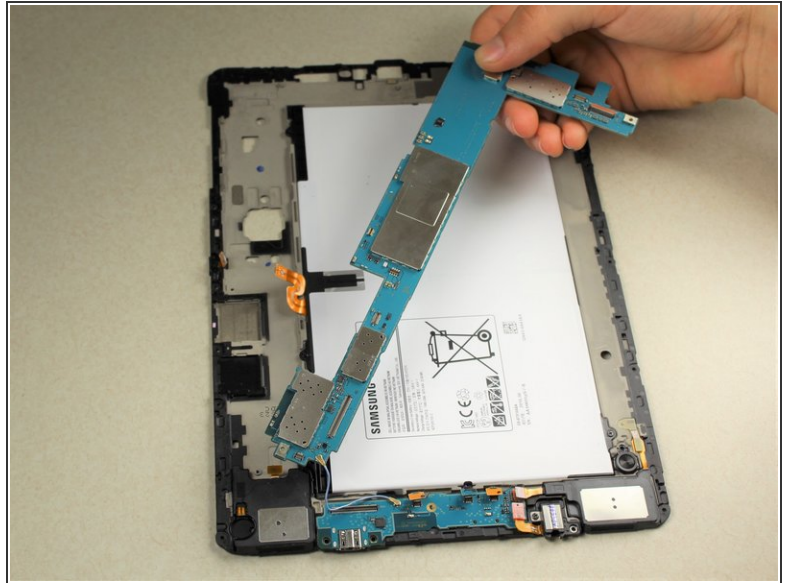
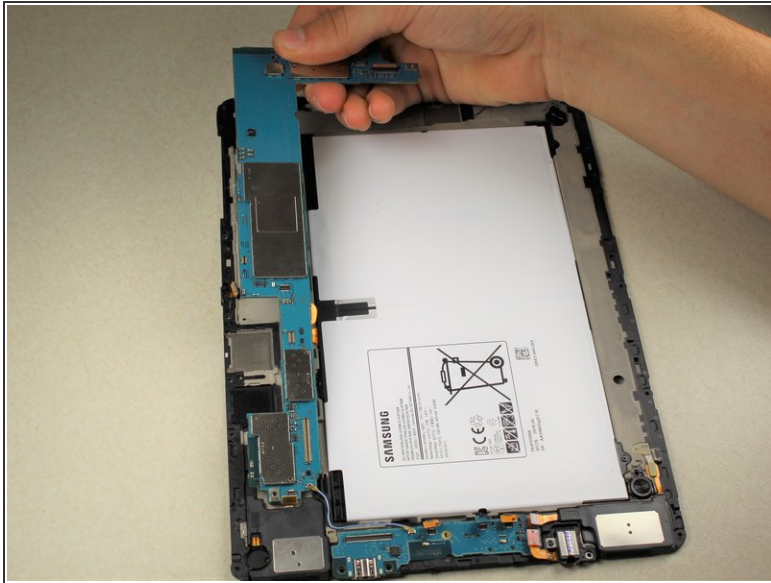
- Carefully lift the orange flap using the black spudger. Then disconnect the cable from the motherboard.

## Step 19



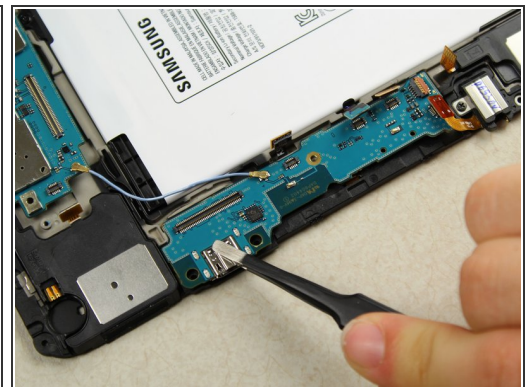
- Using the tweezers, gently pull the cable off of the motherboard.

## Step 20



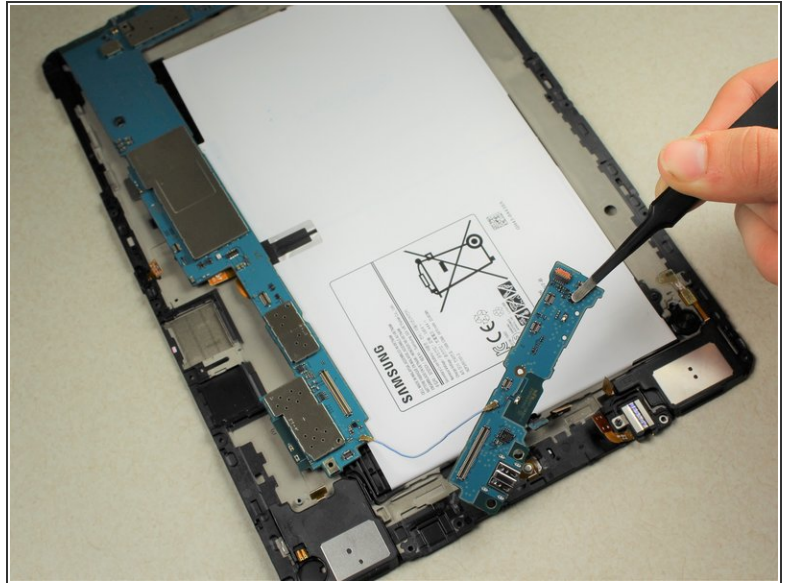
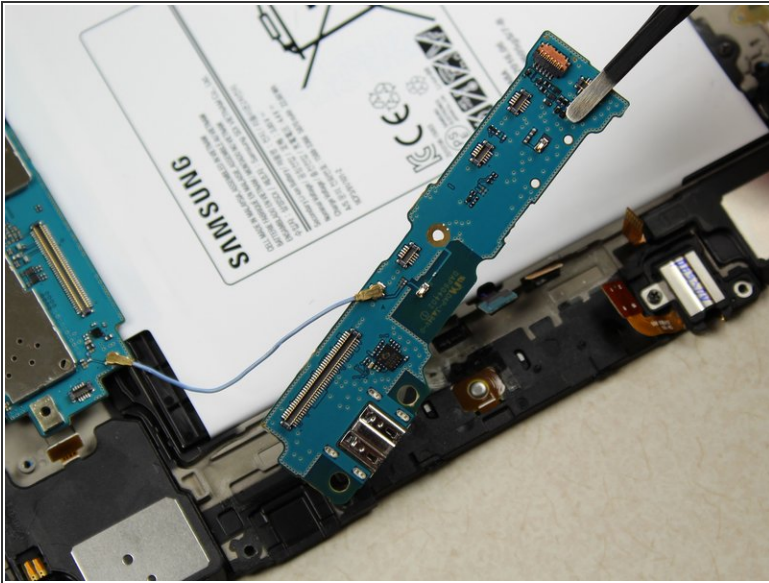
- Carefully lift the top portion of the motherboard off of the back panel with your hands.

## Step 21



- Using the tweezers, wiggle under the lower motherboard to remove adhesive.
- Carefully grab the adhesives with the tweezers and lift up.

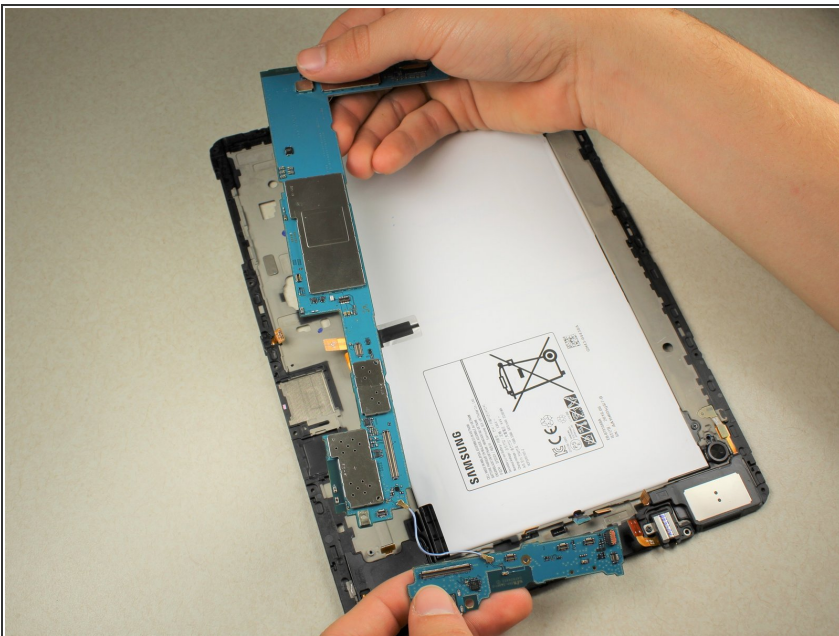
## Step 22



- Gently lift up the lower motherboard.

⚠ Keep the two portions of the motherboard together. If the connecting cable is damaged, it could further ruin the condition of the board.

## Step 23



- Remove both pieces of the motherboard carefully from the back panel.

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