DualSense Motherboard Replacement

Follow this guide to replace the motherboard on...

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INTRODUCTION

Follow this guide to replace the motherboard on a Sony PlayStation 5 DualSense controller. This will fix a drifting joystick or damaged charging port.

This guide assumes that the joysticks are soldered onto the replacement motherboard. Because the joysticks are calibrated during manufacturing, replacing them or transferring them to a new motherboard will result in uncalibrated joysticks that are likely to drift.

This guide requires desoldering and soldering the vibration motor wires.

Note: This guide is for DualSense controllers with an FCC ID ending in **1**. Check the back of your controller to verify your model. If yours ends in **A**, there will be differences in the internal design.

TOOLS:

1 x Opening Picks (1)
Spudger (1)
Phillips #00 Screwdriver (1)
Tweezers (1)
Soldering Workstation (1)

Step 1 — Unclip the right end of the middle trim

⚠ Disconnect and power down your controller before you begin.

- Insert an opening pick underneath the middle trim at the bottom-right corner of the controller to release the clips securing it to the case.

Step 2 — Unclip the lower-right edge of the middle trim

- Slide the opening pick along the lower-right edge of the middle trim to release the clips securing it to the case.

Step 3 — Unclip the left end of the middle trim

- Insert an opening pick underneath the middle trim at the bottom-left corner of the controller to release the clips securing it to the case.

Step 4 — Unclip the lower-left edge of the middle trim

- Slide the opening pick along the lower-left edge of the middle trim to release the clips securing it to the case.

Step 5 — Remove the middle trim

- Use your fingers to lift up the bottom edge of the middle trim to release the remaining clips.
- Lift the middle trim over the joysticks to remove it.

Step 6 — Remove the L1 button

- With one hand, grip the controller and use your thumb to hold down the left trigger.
- With your free hand, insert the flat end of a spudger between the **L1** and **L2** buttons.
- Use the spudger to gently pry the **L1** button away from the controller and remove it, holding your finger over the button so it doesn't eject.

Step 7 — Remove the R1 button



- Repeat the previous step to remove the **R1** button.

Step 8 — Remove the rear case screws


- Use a Phillips screwdriver to remove the two 6.4 mm screws securing the bottom corners of the lower case.

Step 9

- Use a Phillips screwdriver to remove the two 6.4 mm screws behind the **L1** and **R1** buttons.

Step 10 — Separate the rear case

⚠ Be gentle when releasing the rear cover clips—they're delicate and can easily break.

- Use the point of a spudger to release the two clips on either side of the headset jack.

Step 11



ⓘ Tight plastic clips secure the left and right edges of the rear case.

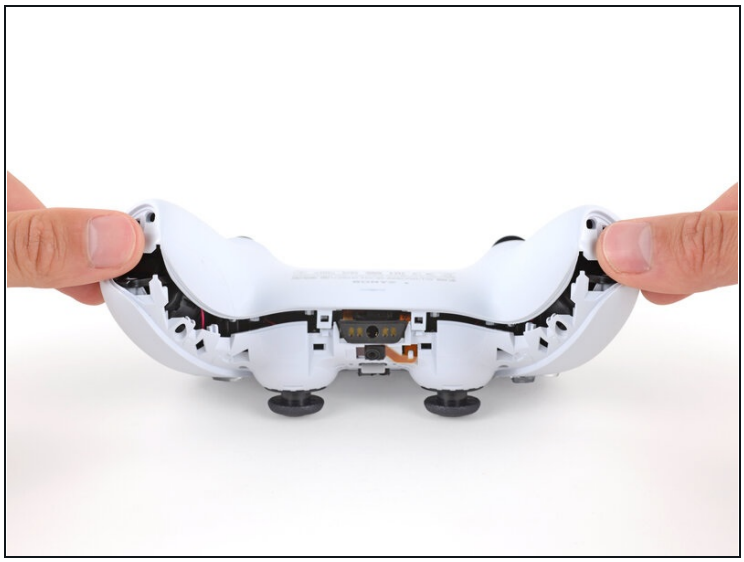
- Insert the flat end of a spudger between the front and rear shells near the bottom of the left edge.
- Slide the spudger along the left edge and gently pry the shells apart to release the clips.

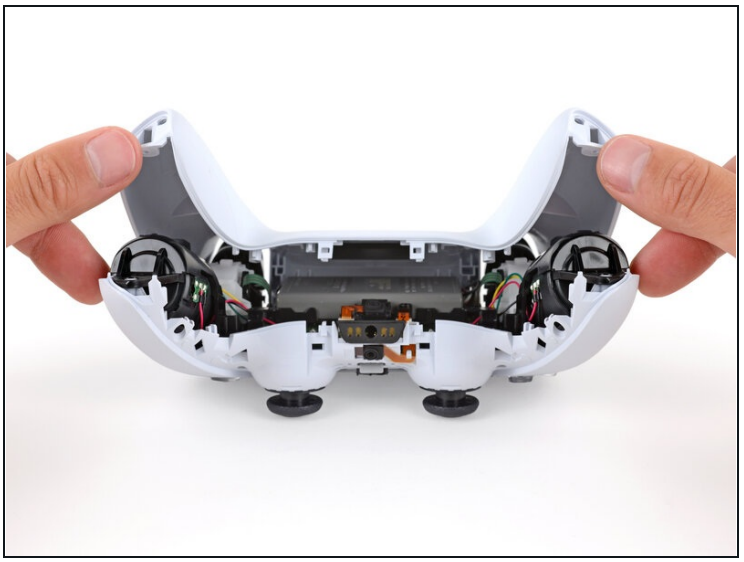
Step 12



- Repeat the previous step on the right edge to release its clips.

Step 13



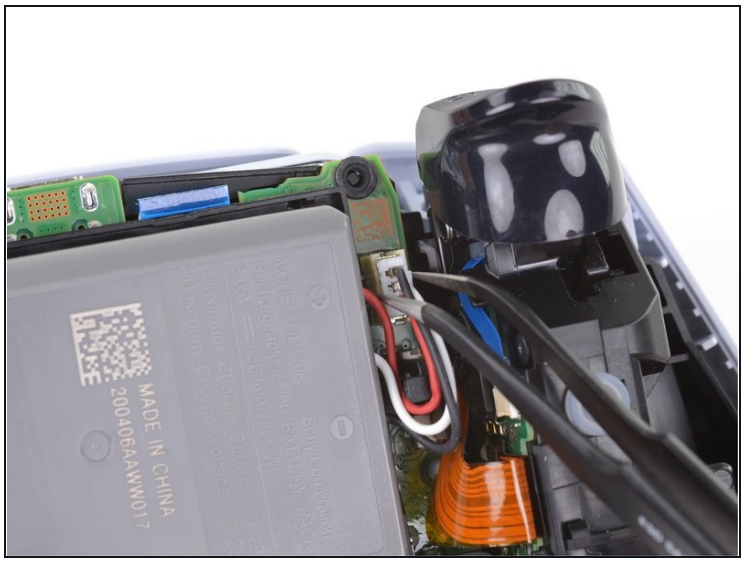


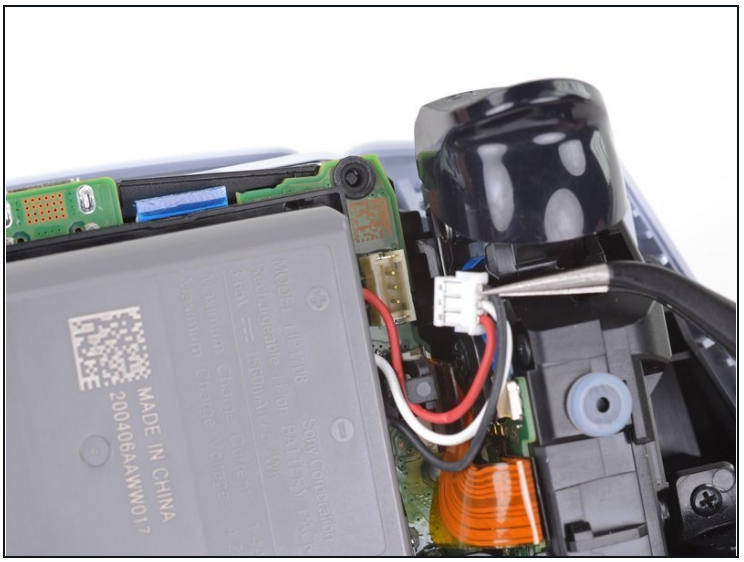
- Lay your controller upside down so the joysticks are on your work surface.
- Hold the controller down with your fingers and use your thumbs to lift the rear case away from the controller to fully separate it.

Step 14 — Remove the rear case

- Remove the rear case.

Step 15 — Disconnect the battery

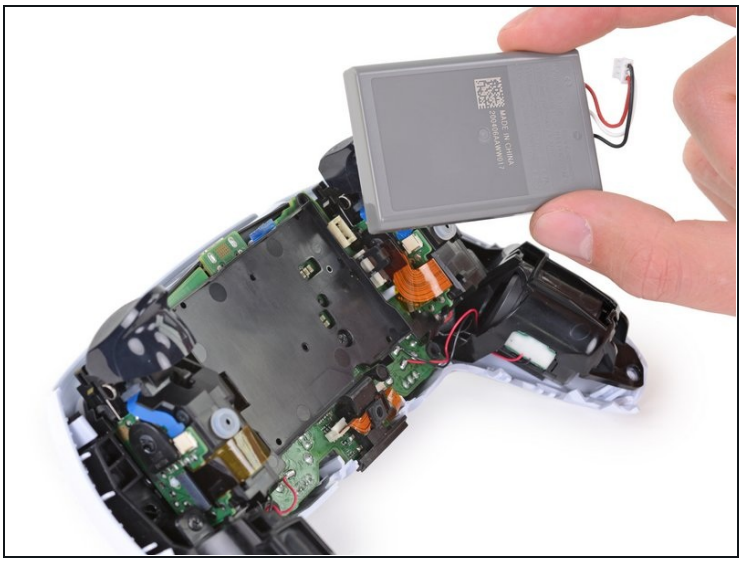




- Use a pair of tweezers or your fingers to disconnect the battery from the motherboard.

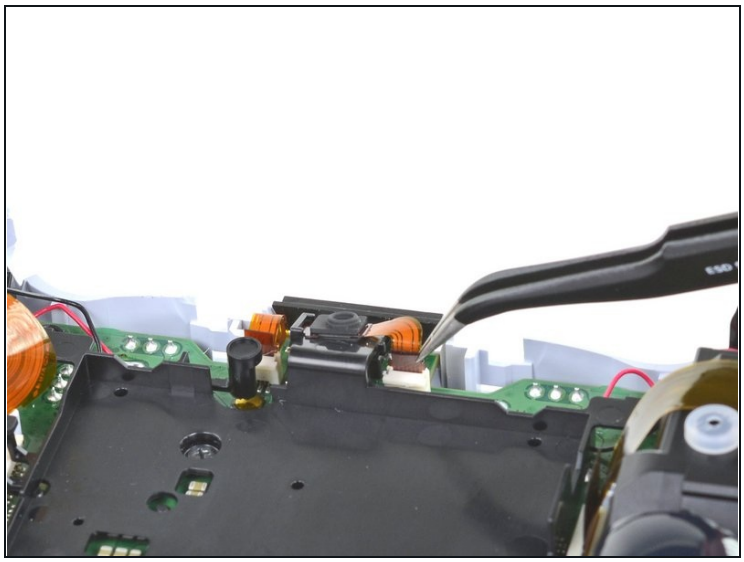
⚠ Grip the connector, not the wires, when disconnecting.

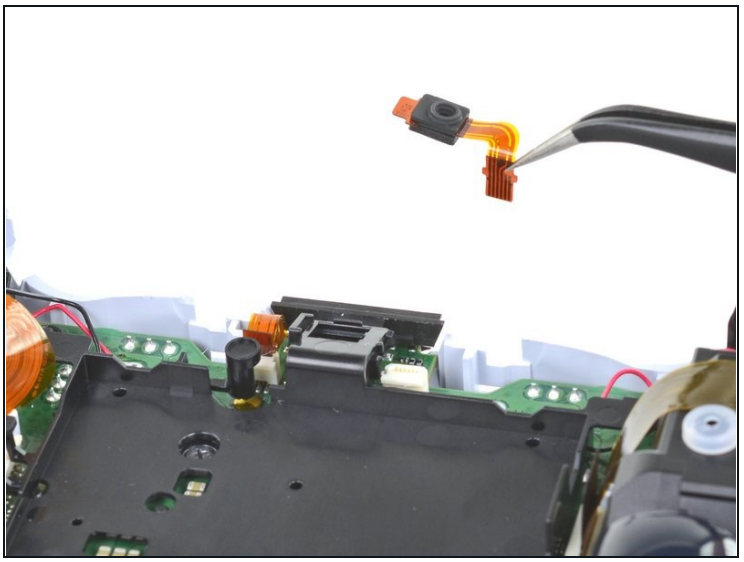
Step 16 — Remove the battery



- Lift the battery straight out of the battery bracket.

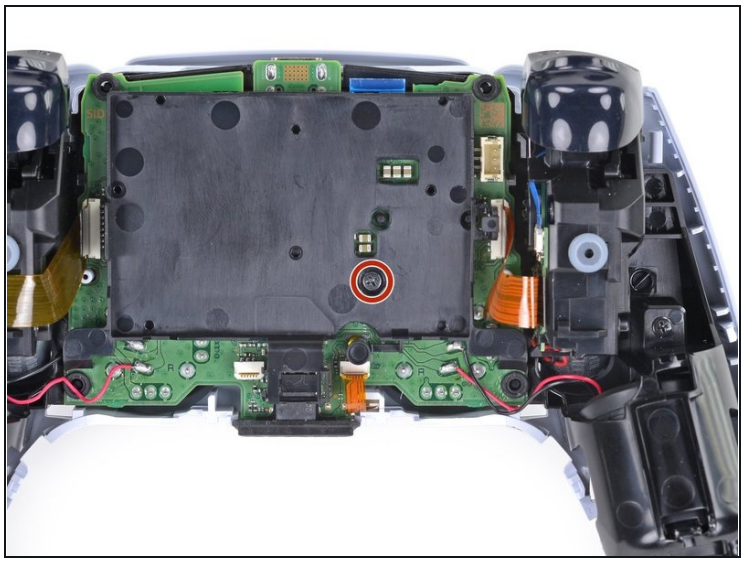
Step 17 — Remove the lower microphone

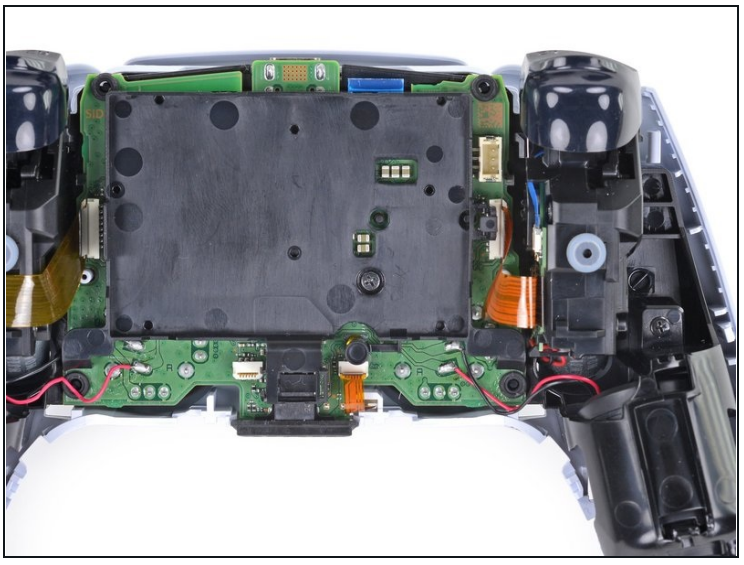




- Grab the lower microphone ribbon cable pull tab with your fingers or a pair of tweezers and disconnect it from the motherboard.

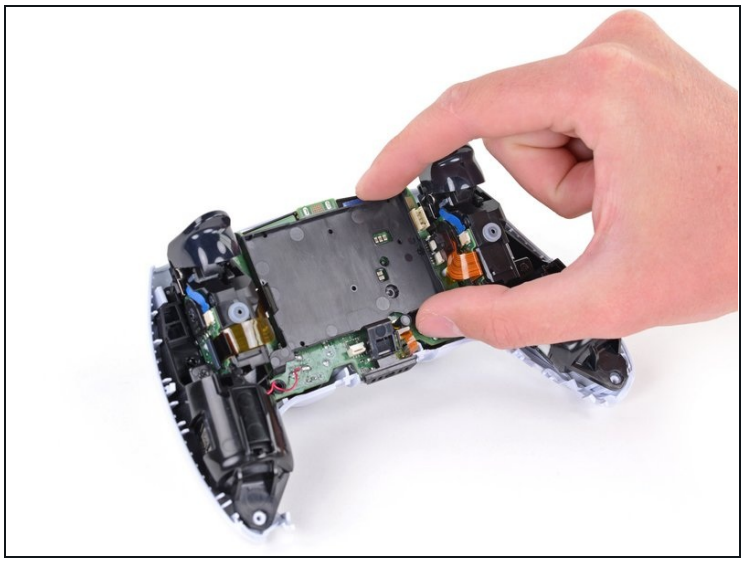
Step 18 — Remove the battery bracket

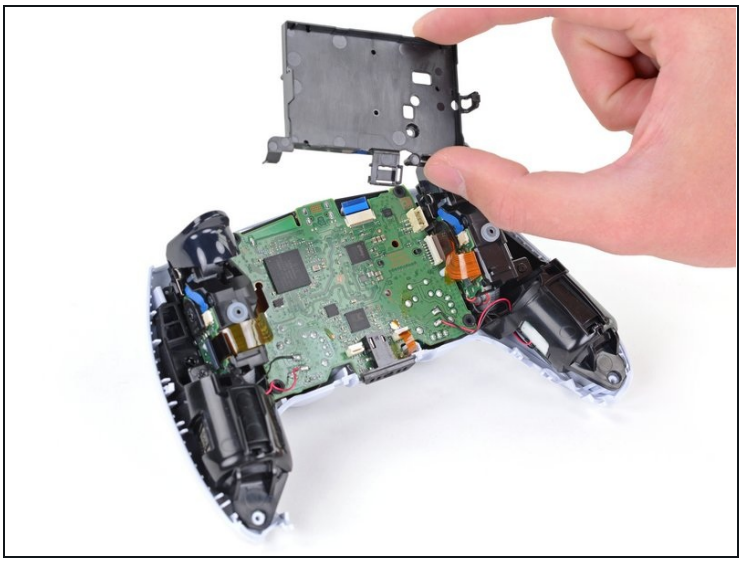




- Use a Phillips screwdriver to remove the 6.4 mm screw securing the battery bracket.

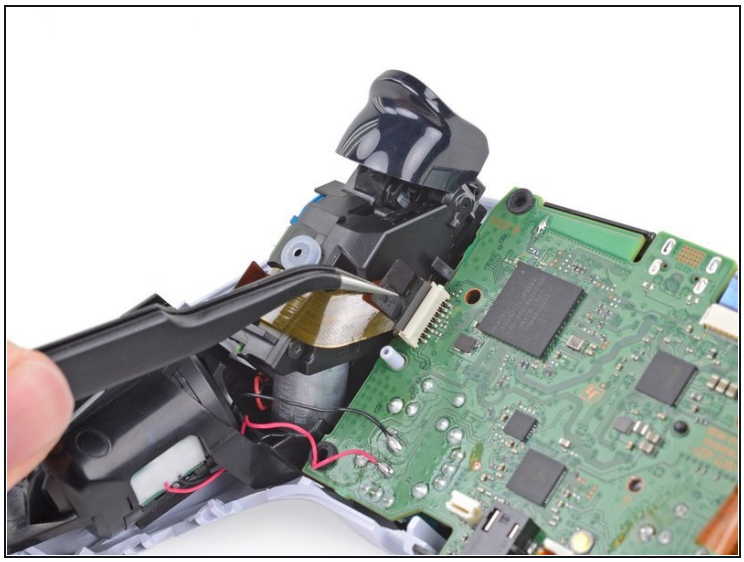
Step 19

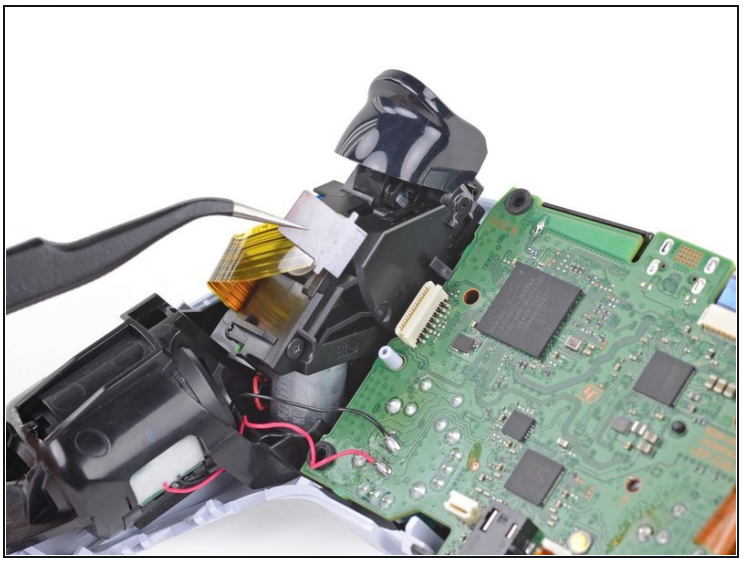




- Lift the battery bracket out of the motherboard.

Step 20 — Disconnect the right trigger assembly

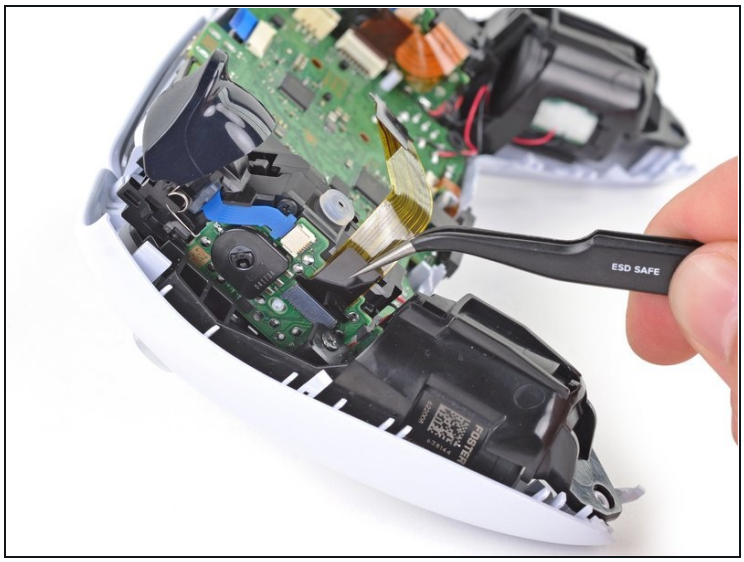


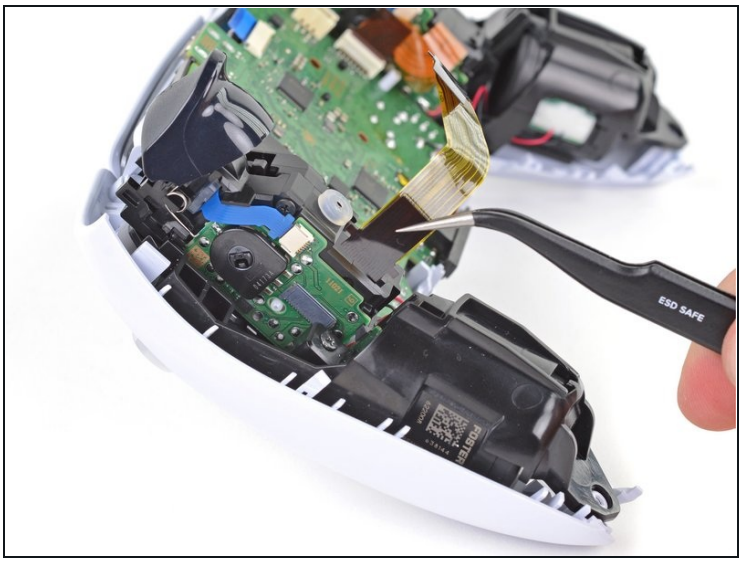


- Grip the right trigger assembly ribbon cable pull tab with a pair of tweezers or your fingers and pull up to disconnect it from the motherboard.

ⓘ Do not completely remove the ribbon cable yet.

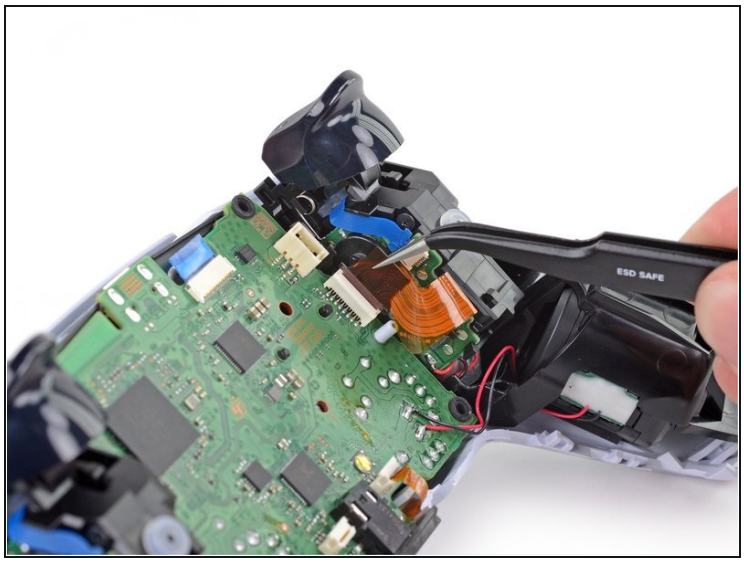
Step 21

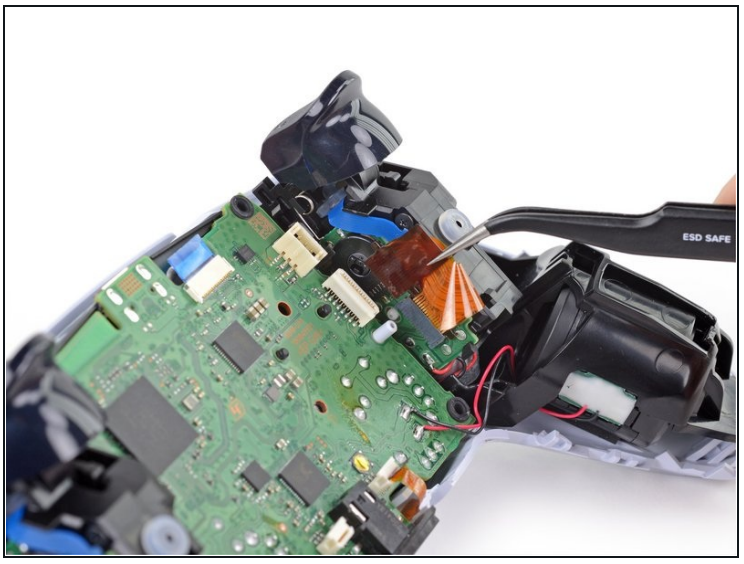




- Grip the right trigger assembly ribbon cable pull tab with a pair of tweezers or your fingers, and pull up to disconnect it from the trigger assembly.
- Remove the ribbon cable.

Step 22 — Disconnect the left trigger assembly

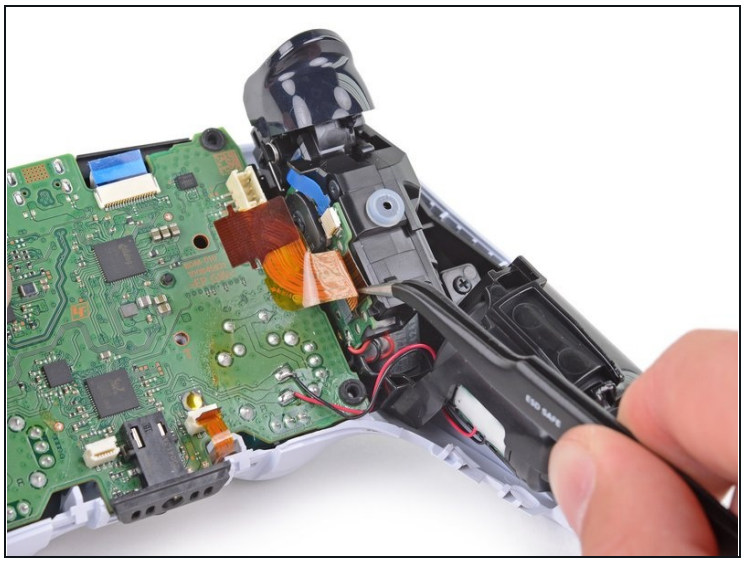


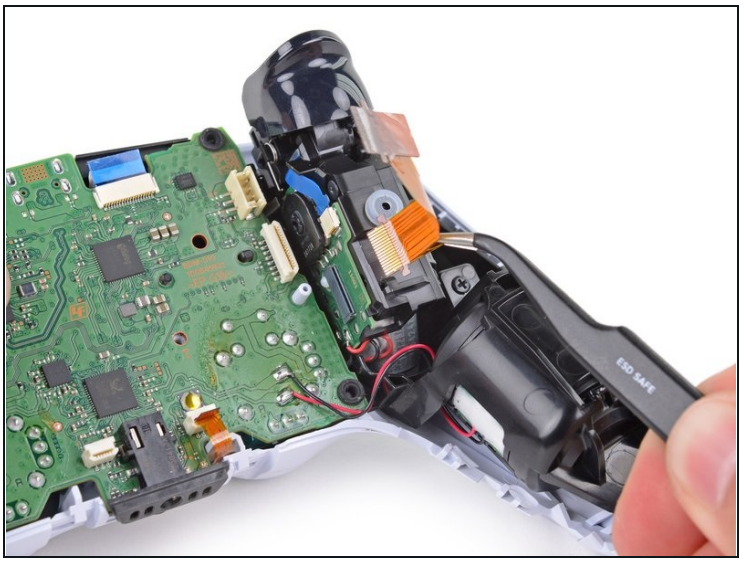


- Grip the left trigger assembly ribbon cable pull tab with a pair of tweezers or your fingers and pull up to disconnect it from the motherboard.

ⓘ Do not completely remove the ribbon cable yet.

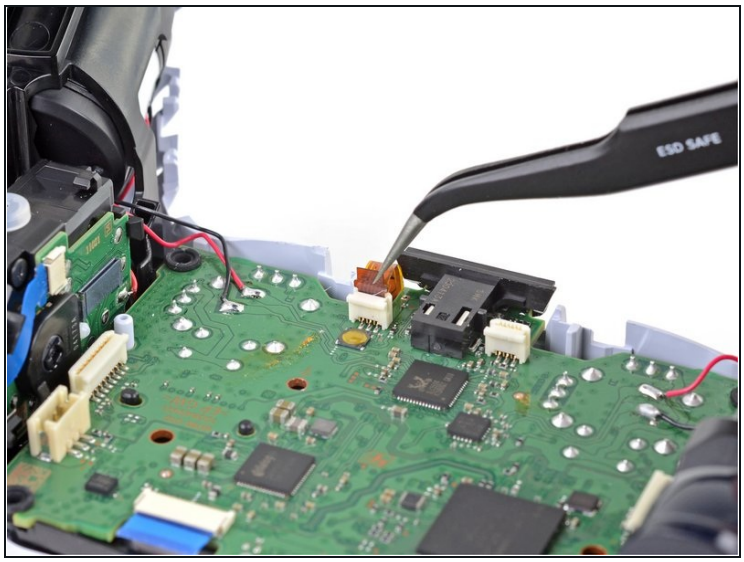
Step 23

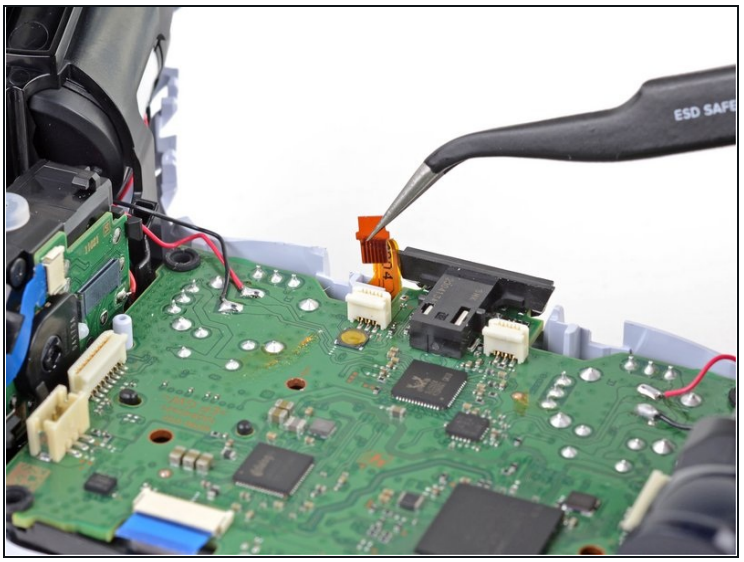




- Grip the left trigger assembly ribbon cable pull tab with a pair of tweezers or your fingers, and pull up to disconnect it from the trigger assembly.
- Remove the ribbon cable.

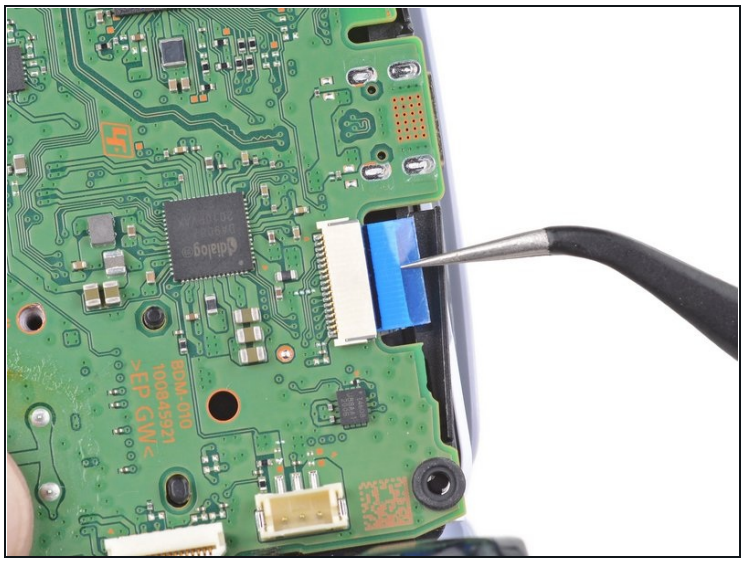
Step 24 — Disconnect the upper microphone

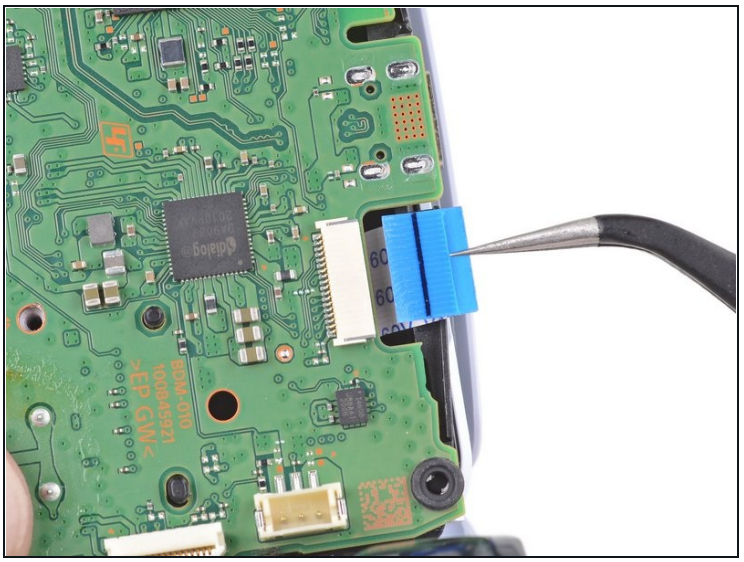




- Use a pair of tweezers or your fingers to grip the upper microphone ribbon cable pull tab, and pull up to disconnect it from the motherboard.

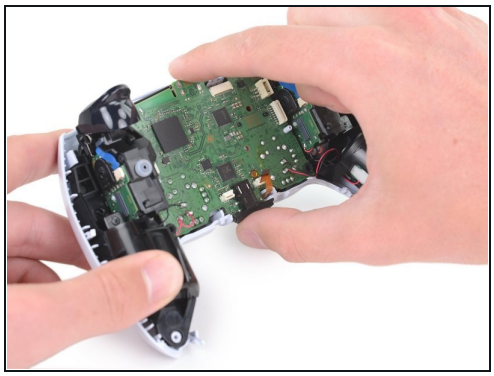
Step 25 — Disconnect the touchpad

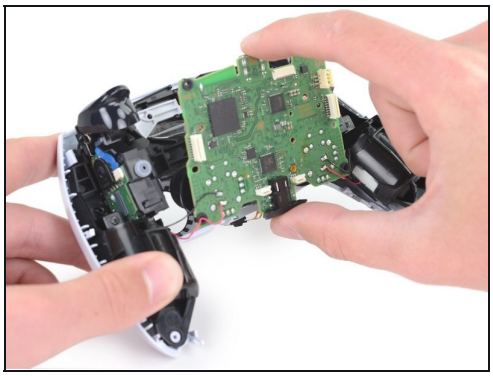




- Use a pair of tweezers or your fingers to grip the touchpad ribbon cable pull tab, and pull it straight out of the motherboard connector.

Step 26 — Lift out the motherboard



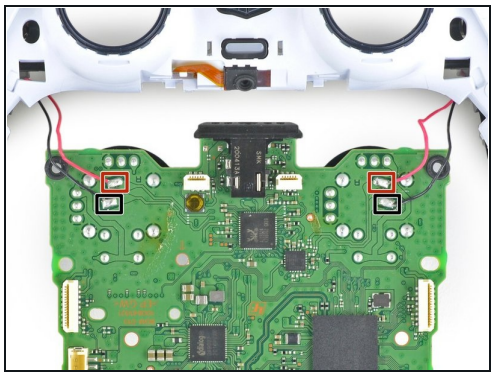
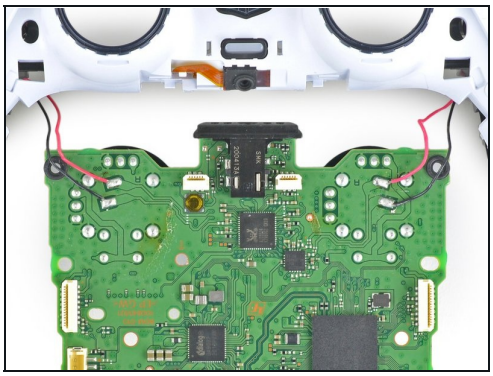
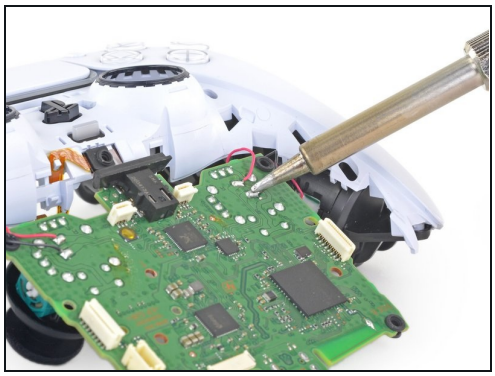


- Carefully guide the joysticks through the front case and lift the motherboard out.

- The motherboard is held down by two clips. One between the motherboard itself and the right trigger assembly, and one between the motherboard itself and the left trigger assembly. Gently push on either clip to release the motherboard from its restraints.

⚠ **Do not completely remove the motherboard.** There are four soldered wires tethering the motherboard to the vibrator motors.

Step 27 — Desolder the vibration motors

The next few steps require desoldering and soldering connections. To learn how to solder, check out our soldering guide—if you've already soldered, you can still find some helpful tips and tricks in this guide!

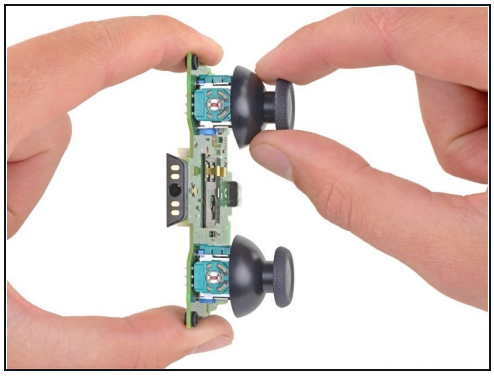
- Flip over the controller and motherboard.
- Use a soldering iron to desolder the vibration motor wires from the motherboard:
  - Two red wires
  - Two black wires

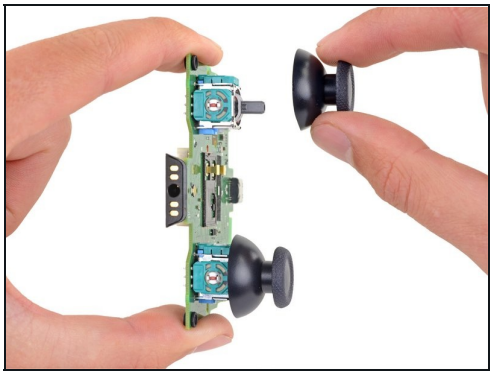
During reassembly, remember to solder the wires back into the same position. The red wires belong closest to the edge and next to the **R**s on the motherboard.

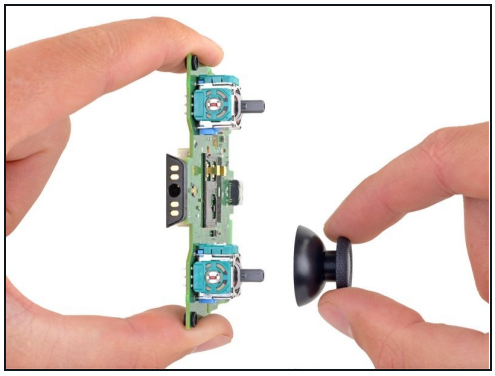
Step 28

- Separate the controller from the motherboard.

Step 29 — Remove the joystick covers







- Pull the joystick covers straight off the joystick assemblies.
- Only the motherboard remains.

To reassemble your device, follow the above steps in reverse order.

Take your e-waste to an R2 or e-Stewards certified recycler.

Repair didn't go as planned? Try some basic troubleshooting, or ask our Answers community for help.