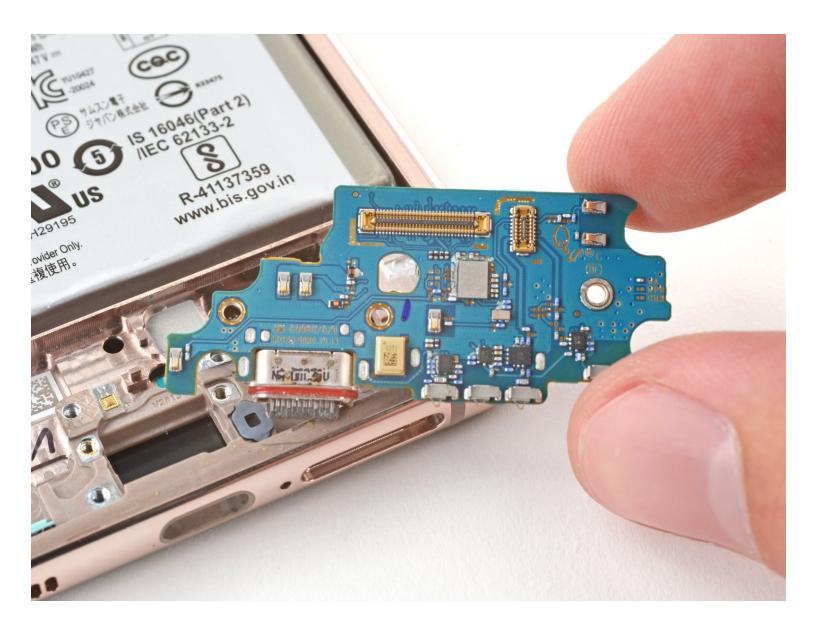


# Samsung Galaxy S21+ USB-C Charging Port and Daughterboard Replacement

Use this guide to replace the USB-C charging...

Written By: Alex Diaz-Kokaisl

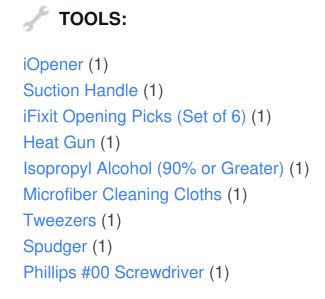


#### INTRODUCTION

Use this guide to replace the USB-C charging port and daughterboard in your Samsung Galaxy S21+.

Before you begin, refer to the <u>Samsung Self-Repair document</u> for safety information.

Note: Retaining water resistance after the repair will depend on how well you reapply the adhesive, but your device will lose its IP (Ingress Protection) rating.





Samsung Galaxy S21+ (USA) USB-C Charge Port - Genuine (1)

#### Step 1 — Remove the SIM card tray



- Insert a SIM eject tool, bit, or straightened paper clip into the SIM card tray hole on the top edge of the phone.
- Press the SIM eject tool into the SIM card tray hole to eject the SIM card tray.
- Remove the SIM card tray.
- if you accidentally inserted the SIM eject tool into a microphone hole, don't worry! You most likely didn't damage the microphone.

#### Step 2 — Heat the bottom edge



- A Be sure to power off your device before you begin your repair.
- Heat an iOpener and apply it to the bottom edge of the back cover for two minutes.
  - A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the phone —the display and internal battery are both susceptible to heat damage.

#### Step 3 — Insert an opening pick

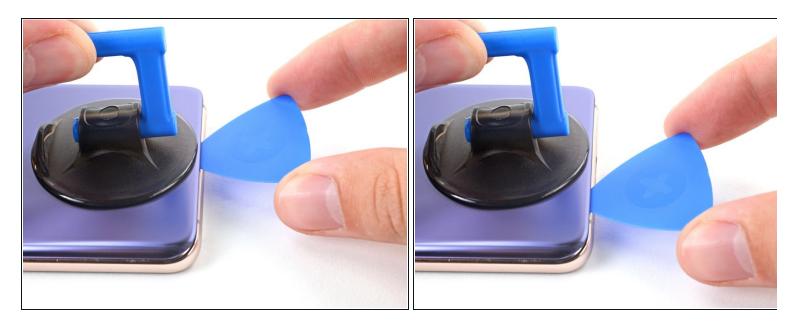




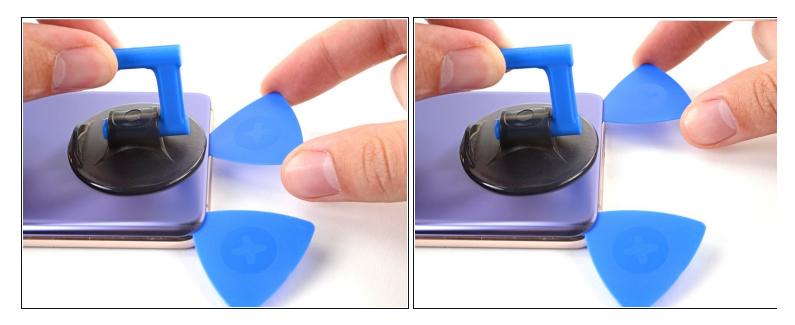


- Secure a suction handle to the bottom edge of the back cover, as close to the edge as possible.
  - if the back cover is cracked, the suction handle may not stick. Try <u>lifting it with strong tape</u>, or superglue the suction handle in place and allow it to cure so you can proceed.
- Lift the back cover with the suction handle to create a small gap between the back cover and the frame.
  - *i* If you have trouble creating a gap, apply more heat to further soften the adhesive. Follow the <u>iOpener</u> instructions to avoid overheating.
- Insert an opening pick into the gap you created.

# Step 4 — Separate the adhesive



- Slide the opening pick to the bottom left corner to slice the adhesive.
- Leave the opening pick in place to prevent the adhesive from resealing.



- Insert a second opening pick at the bottom edge of your phone.
- Slide the opening pick to the bottom right corner to slice the adhesive.
- Leave the opening picks in place to prevent the adhesive from resealing.

## Step 6 — Heat the right edge



 Heat an iOpener and apply it to the right edge of the back cover for two minutes.



- (i) If the adhesive becomes hard to cut, it has most likely cooled down. Apply a heated iOpener to the edge to reheat it.
  - Insert a third opening pick at the bottom right corner of your phone.
- Slide the opening pick along the right edge of your phone to slice the adhesive.
- Leave the opening pick in the top right corner to prevent the adhesive from resealing.

## Step 8 — Heat the top edge



 Heat an iOpener and apply it to the top edge of the back cover for two minutes.



- ⚠ When you slice near the camera assembly, insert only the tip of the opening pick (~4-5 mm) to avoid damaging or smearing the camera.
- Insert a fourth opening pick underneath the top right corner of your phone.
- Slide the opening pick along the top edge to slice the adhesive.
- Leave the opening pick in the top left corner to prevent the adhesive from resealing.

## Step 10 — Heat the left edge



 Heat an iOpener and apply it to the left edge of the back cover for two minutes.



- Insert a fifth opening pick underneath the bottom left corner.
- Slide the opening pick along the left edge of the back cover to slice the remaining adhesive.
  - ⚠ When you slice near the power button, insert only the tip of the opening pick (~3-4 mm) to avoid damaging the power and volume button flex cable.

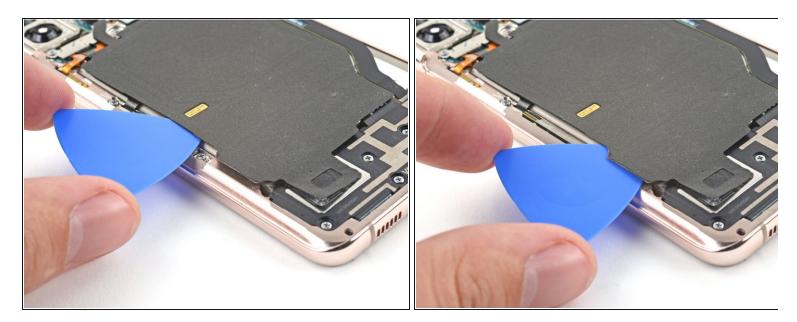
#### Step 12 — Remove the back cover





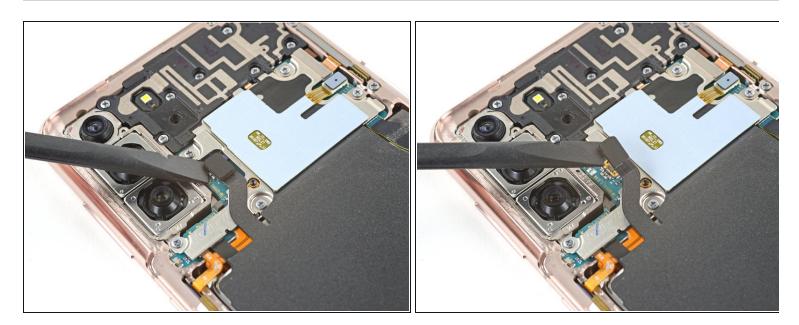
- Remove the back cover.
- ✓ During reassembly:
  - This is a good point to power on your phone and test all functions before sealing it up. Be sure to power your phone back down completely before you continue working.
  - Remove any adhesive chunks with a pair of tweezers or your fingers. Use some high concentration (over 90%) isopropyl alcohol to wipe away any adhesive residue.
  - If you're using custom-cut adhesives, <u>follow this guide</u>.
  - If you're using double-sided tape, follow this guide.

#### Step 13 — Slice the adhesive



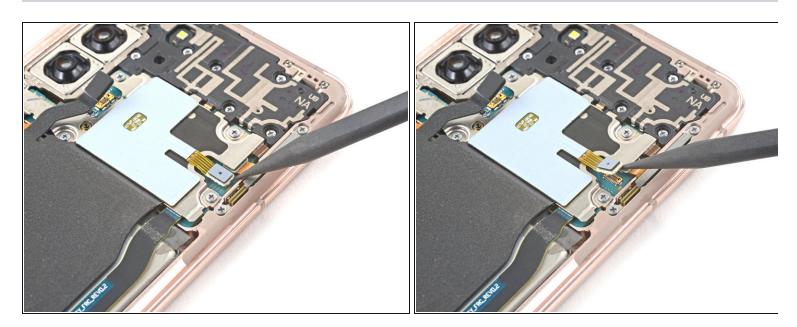
- ↑ Take care not to puncture or bend the battery with your tool—a punctured or bent battery may leak dangerous chemicals or cause a thermal event.
  - Insert an opening pick underneath the left bottom end of the NFC antenna and charging coil assembly.
- Carefully slide the opening pick along the bottom left edge of the assembly to separate it from the battery.

# Step 14 — Disconnect the charging coil



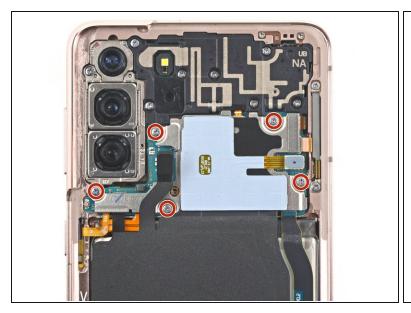
• Use a spudger to disconnect the charging coil by prying the connector straight up from its socket.

#### Step 15 — Disconnect the NFC antenna



 Use a spudger to disconnect the NFC antenna by prying the connector straight up from its socket.

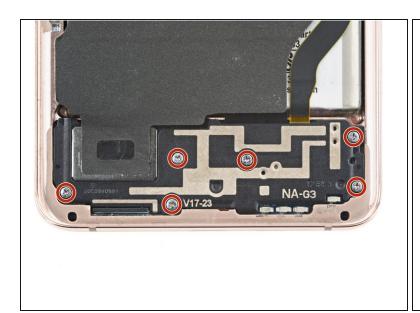
# Step 16 — Unfasten the NFC antenna & charging coil assembly screws

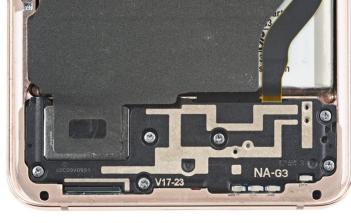




- Use a Phillips screwdriver to remove the five 3.9 mm-long screws securing the NFC antenna and charging coil assembly.
- If you're reassembling with the Samsung Self-Repair kit, be sure to replace the screws with new ones labeled #3427.

# Step 17 — Unfasten the loudspeaker

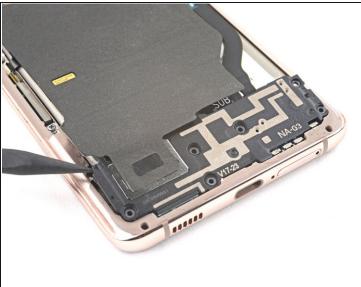




- Use a Phillips screwdriver to remove the six 3.9 mm-long screws securing the loudspeaker assembly.
- If you're reassembling with the Samsung Self-Repair kit, be sure to replace the screws with new ones labeled #3427.

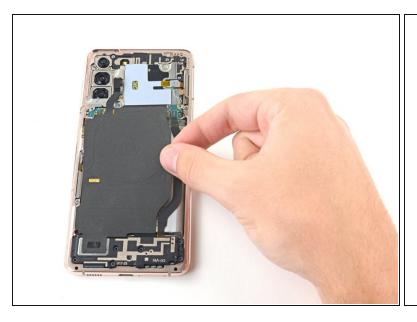
#### Step 18 — Disconnect the loudspeaker





- Insert the tip of a spudger between the frame and the upper-left notch in the loudspeaker.
- Pry up with the spudger to release the loudspeaker from its plastic clips.

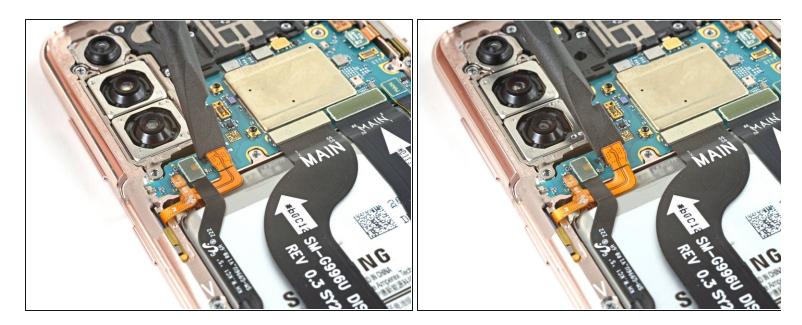
## Step 19 — Remove the NFC antenna & charging coil assembly





 Use a pair of tweezers or your fingers to carefully remove the NFC antenna and charging coil assembly.

# Step 20 — Disconnect the battery



• Use a spudger to pry up and disconnect the battery's press connector.

## Step 21 — Disconnect the interconnect cables

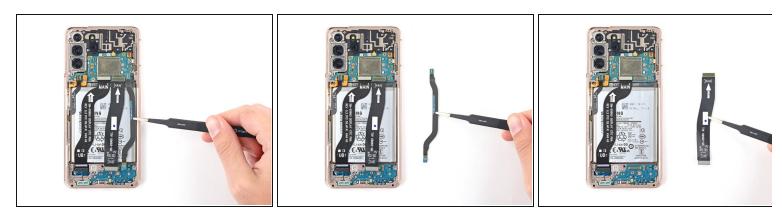


• Use a spudger to pry up and disconnect the primary and secondary interconnect cables' press connectors on the motherboard.



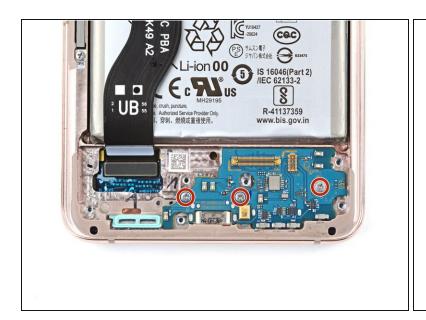
 Use a spudger to pry up and disconnect the primary and secondary interconnect cables' press connectors on the daughterboard.

# Step 23 — Remove the interconnect cables



- Use tweezers, or your fingers, to remove the interconnect cables.
- Set the cables aside. You'll reuse them during reassembly.

# Step 24 — Unfasten the daughterboard



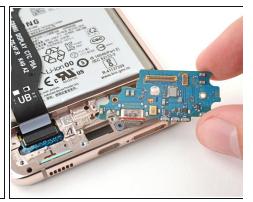


- Use a Phillips screwdriver to remove the three 3.4 mm-long screws securing the charging board.
- If you're reassembling with the Samsung Self-Repair kit, be sure to replace the screws with new ones labeled #3428.

#### Step 25 — Remove the daughterboard







- Insert the pointed end of a spudger under the upper left edge of the daughterboard and pry up to release it from its recess.
- Use tweezers, or your fingers, to pull the daughterboard up and away from the bottom of the device and remove it.

To reassemble your device, follow the instructions in reverse order and perform the opposite actions, e.g., "reattach" instead of "removing." Skip steps that use heating and prying, and pay close attention to the bullets as you work through the steps.

After you've completed the repair, download the Samsung Members App from the Galaxy Store or the Play Store, and <u>follow the Samsung Self-Repair document</u> (beginning page 10) to make sure your device is fully functional.

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

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