



Samsung Galaxy S4 Motherboard Replacement

Use this guide to replace the motherboard in...

Written By: Sam Goldheart



INTRODUCTION

Use this guide to replace the motherboard in your Samsung Galaxy S4.

TOOLS:

iFixit Opening Tool (1)
Phillips #00 Screwdriver (1)
Spudger (1)
Tweezers (1)

PARTS:

Galaxy S4 Motherboard (Sprint) (1)
Galaxy S4 Motherboard (ATT) (1)
Galaxy S4 (Verizon) Motherboard (1)
Galaxy S4 Motherboard (T-Mobile) (1)
Galaxy S4 Motherboard (Sprint Triband) (1)
Galaxy S4 SIM and SD Card Slot/Reader (AT&T) (1)

Step 1 — Rear Case



- Pry with a plastic opening tool, or your fingernail, in the divot to the left of the rear-facing camera, near the power button.

Step 2



- Lift the rear case by the corner nearest the divot and remove it from the phone.

Step 3 — MicroSD Card



- Use the flat end of a spudger, or your fingernail, to press the microSD card slightly deeper into its slot until you hear a click.
 - After the click, release the card and it will pop out of its slot.
 - Remove the microSD card.
- ☒ For reassembly, push the microSD card into the slot until it clicks in place.

Step 4 — Battery



- Insert a plastic opening tool, or your finger, into the notch of the battery compartment and lift the battery upward.
- Remove the battery from your phone.

Step 5 — SIM Card



- Use a plastic opening tool, or your fingernail, to press the SIM card slightly deeper into its slot until you hear a click.
 - After the click, release the card and it will pop out of its slot.
 - Remove the SIM card.
- ☒ During reassembly, push the SIM card into the slot until it clicks in place.

Step 6 — Midframe



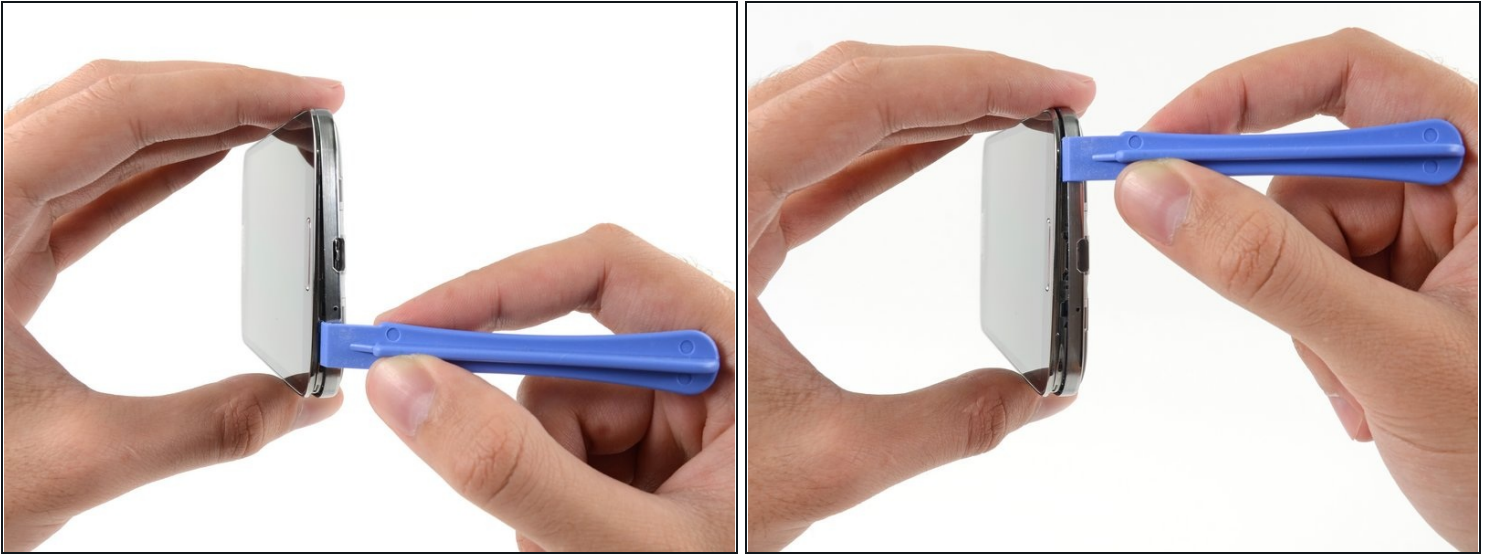
- Remove the nine 4.0 mm Phillips #00 screws securing the midframe to the display assembly.

Step 7



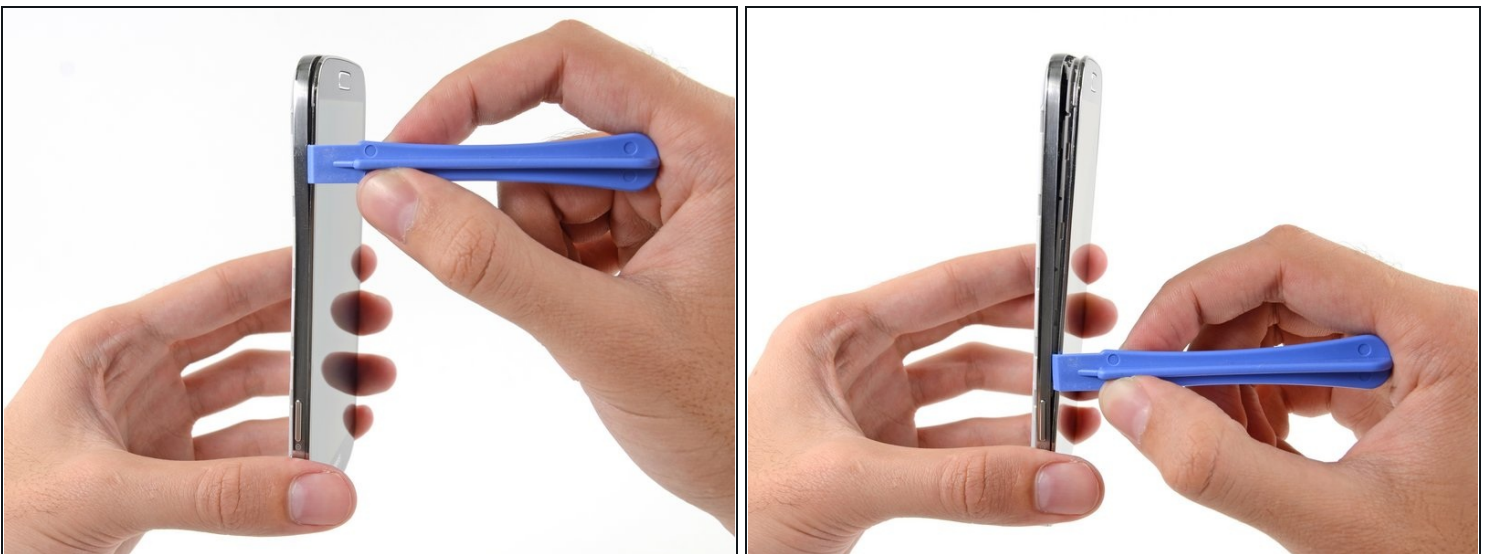
- ⓘ The midframe is secured to the display assembly by several plastic clips behind the chrome bezel of the midframe. The next few steps will guide you through separating the clips to free the midframe.
- Starting on the volume button side of the phone, insert your plastic opening tool between the chrome bezel around the display glass and the larger chrome border piece. Look for the seam between the two.
 - Slide the opening tool along the seam, separating the plastic clips as you go.
- ⚠ Be very gentle whilst prying, and pry only enough to separate the plastic clips—there are several thin points in the midframe bezel that may crack if you bend them too much.

Step 8



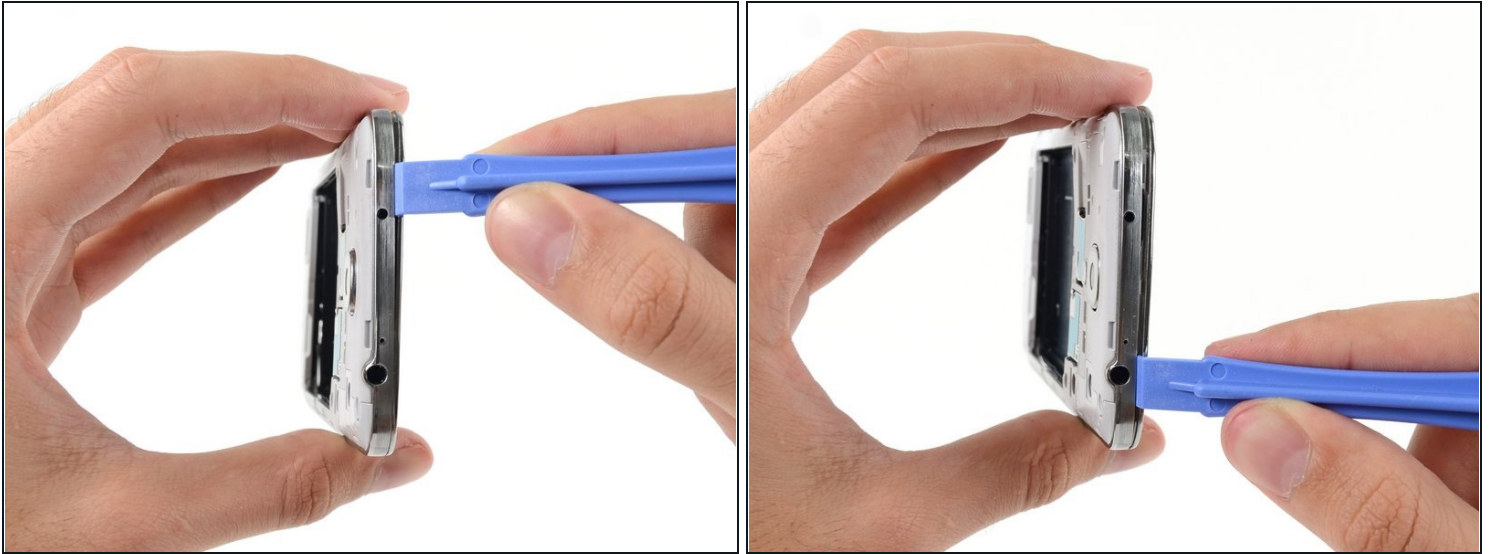
- Continue prying around the corner of the phone.
- Slide your opening tool along the seam between the midframe and display along the bottom of the device, releasing more of the plastic clips.

Step 9



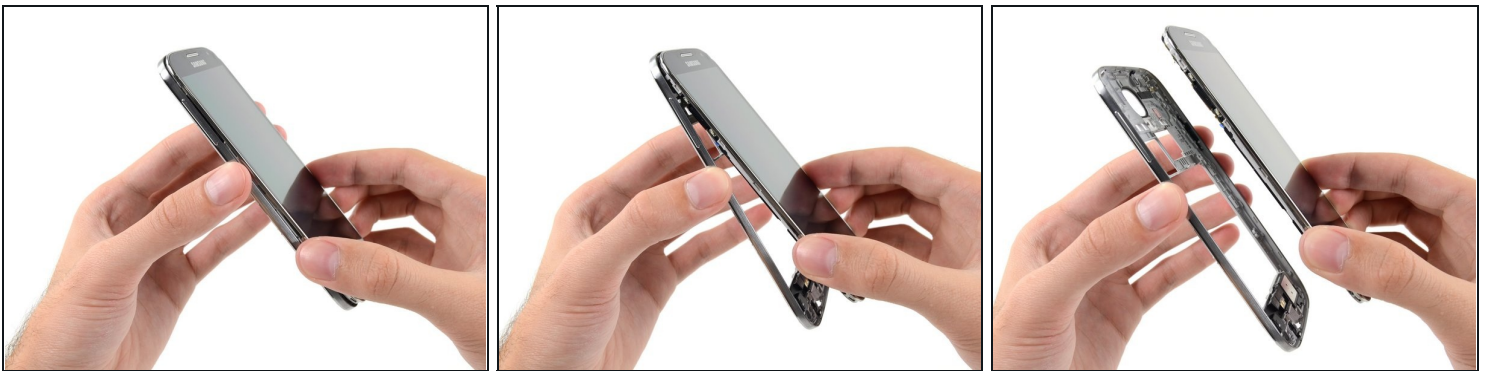
- Again, pry around the corner, to the power button side.
- Slide the opening tool along the seam.

Step 10



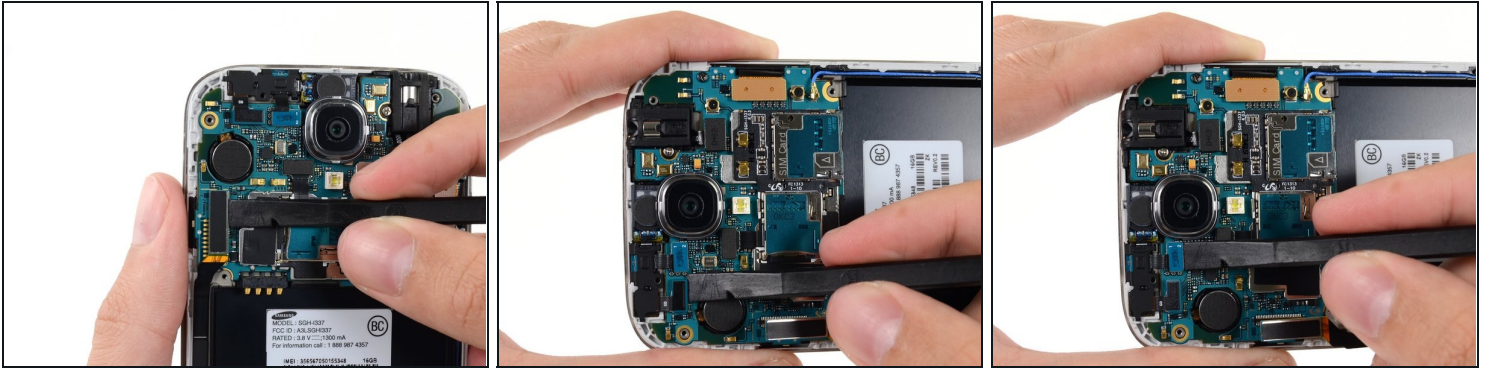
- Continue sliding the opening tool around the top of the phone, releasing the last of the clips and freeing the midframe from the display assembly.
- ① At this point, you may want to run your plastic opening tool along the entire perimeter of the device again, to make sure you've released all of the plastic clips.

Step 11



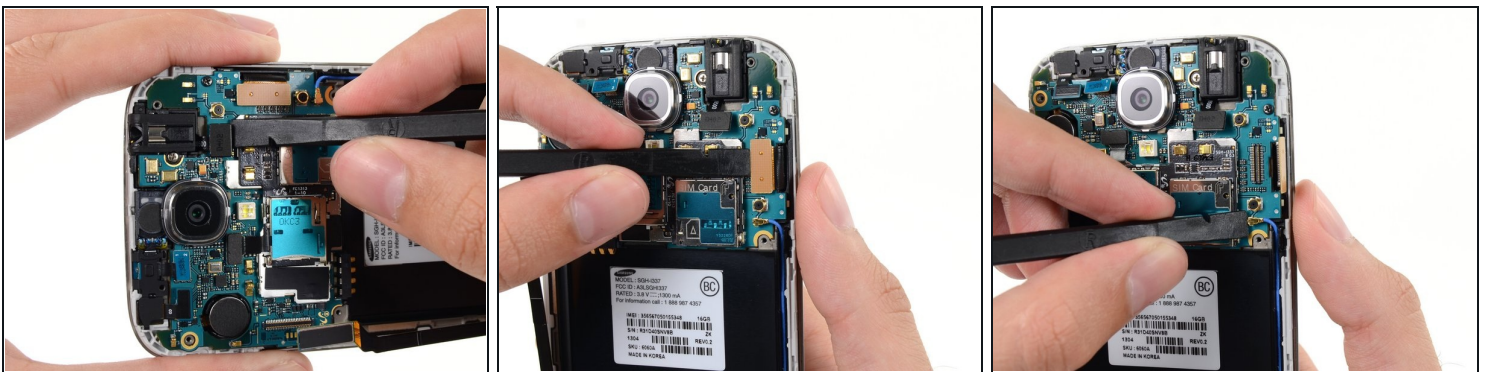
- Remove the midframe from the display assembly.

Step 12 — Motherboard Assembly



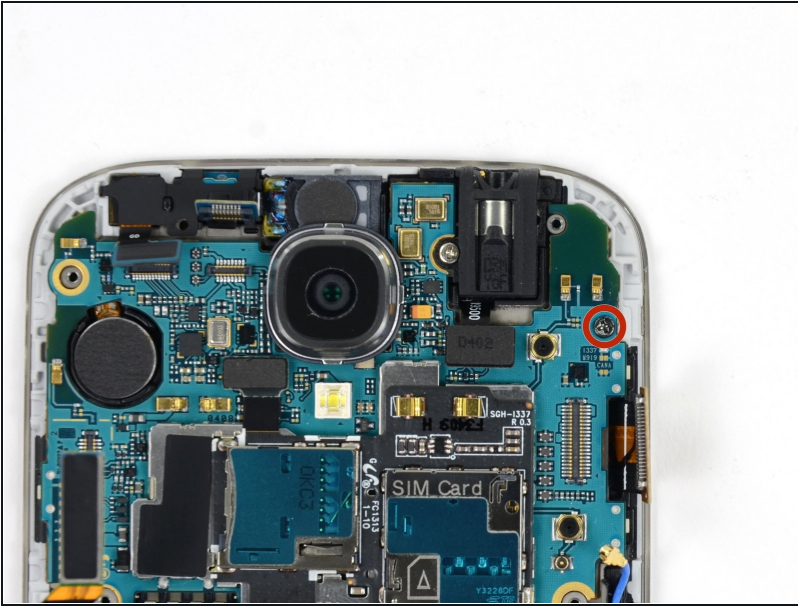
- Use the flat end of a spudger to disconnect the USB board connector.
- Disconnect the front-facing camera cable connector.
- Disconnect the earpiece speaker assembly cable connector.

Step 13



- Disconnect the headphone jack assembly cable connector.
- Disconnect the display/digitizer cable connector.
- Disconnect the antenna cable connector.

Step 14



- Remove the single 2.4 mm Phillips #00 screw from the motherboard assembly.

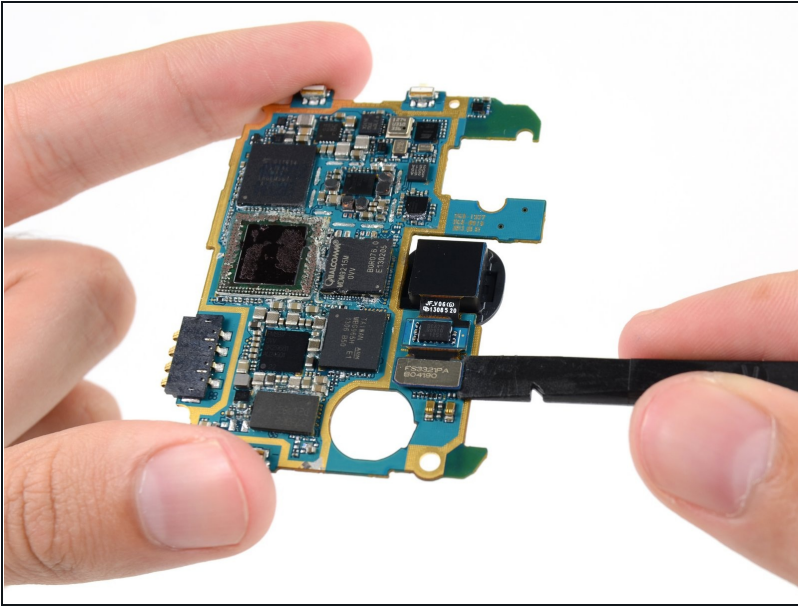
Step 15



- Gently remove the motherboard.

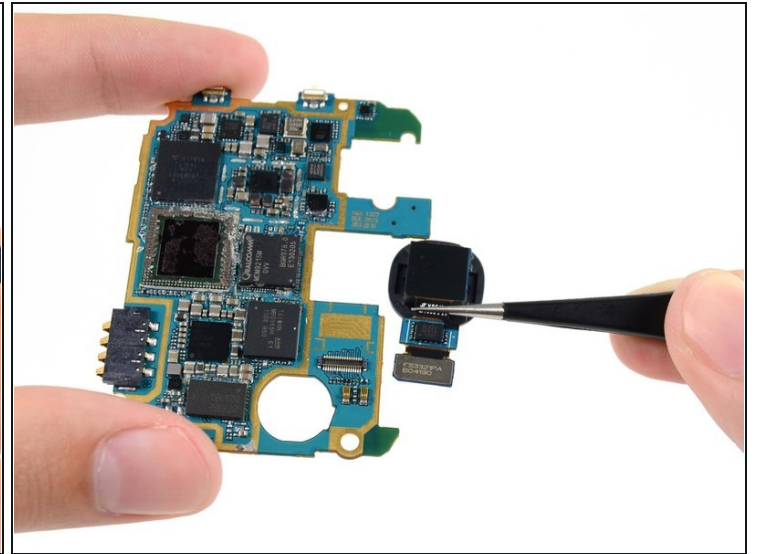
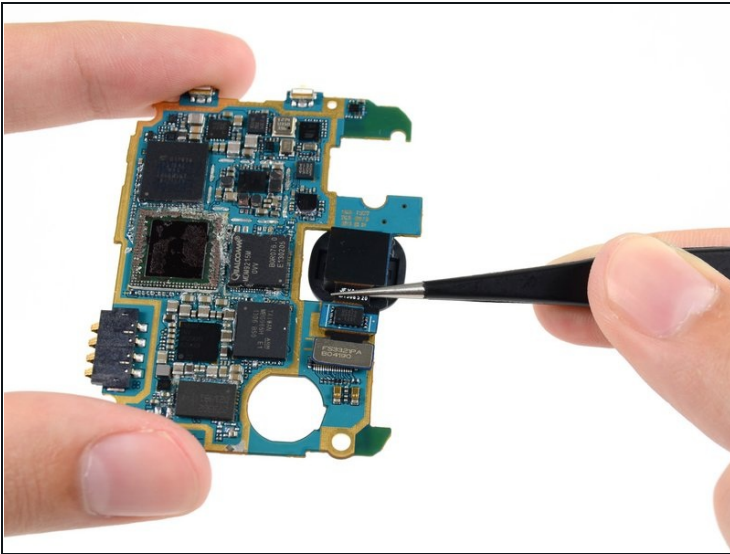
⚠ Hold the motherboard by its edges to prevent ESD damage. Be careful not to snag it on any cables as you extract it from the display assembly.

Step 16 — Motherboard



- Use the flat end of a spudger to disconnect the rear-facing camera connector.

Step 17



- Using tweezers, or your fingers, slide the rear-facing camera out of its notch in the motherboard.

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