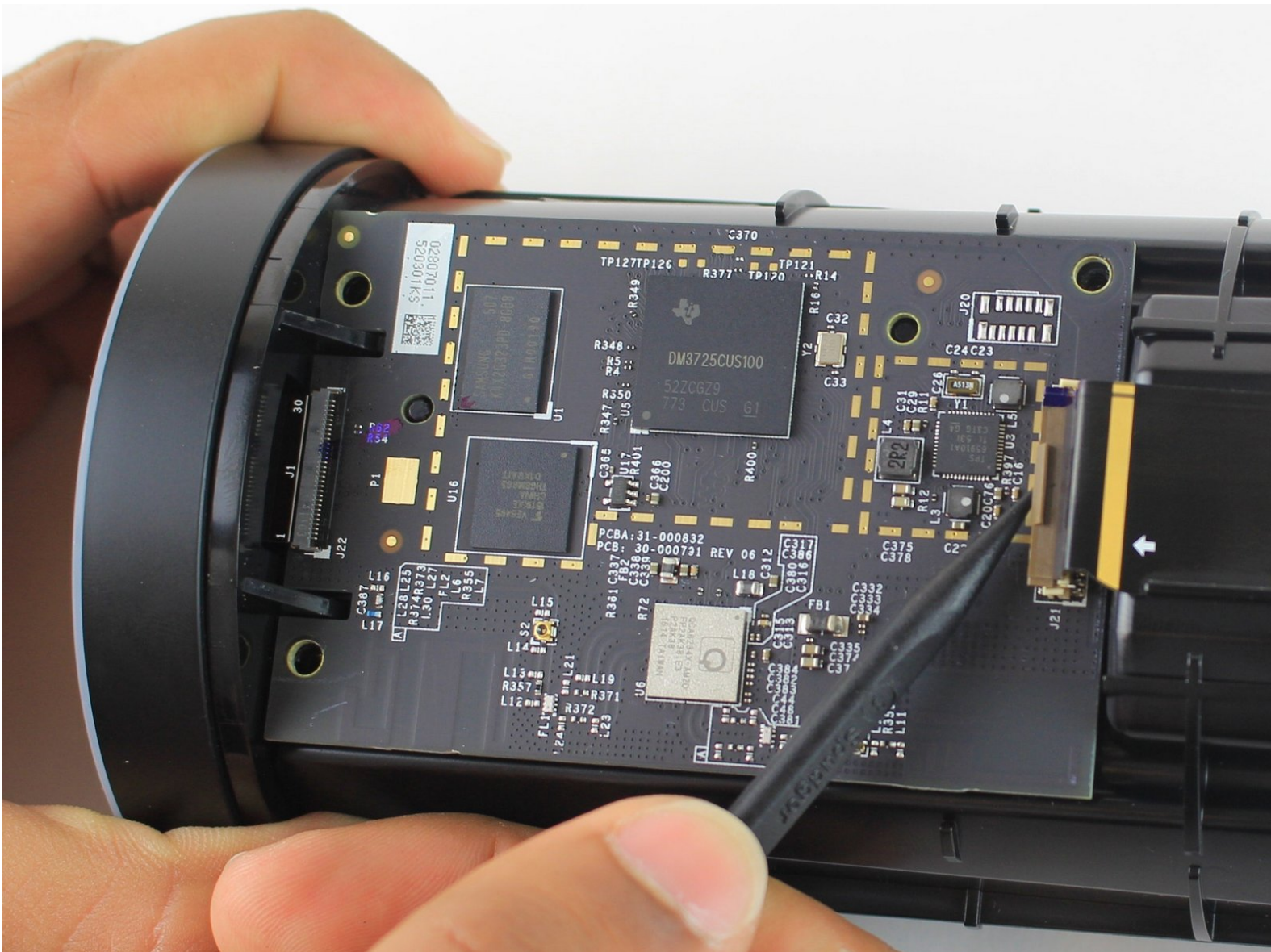




Written By: Alexander Albert



Page 1 of 8

INTRODUCTION

This guide demonstrates how to replace the motherboard in the Amazon Echo. The motherboard is responsible for all major functions of the Echo. It contains the Digital Media Processor, 256 MB LPDDR1 RAM, 4 GB flash memory, and the Wi-Fi and Bluetooth module.



TOOLS:

- [Heavy-Duty Spudger](#) (1)
 - [T10 Torx Screwdriver](#) (1)
-

Step 1 — Power and Speaker Driver Board

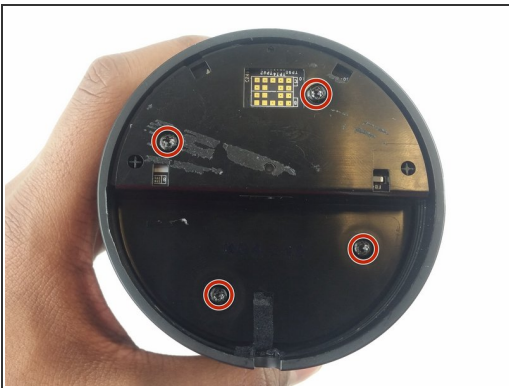


⚠ Power off and unplug your Echo before disassembly. Failure to do so could result in injury or damage to the device.

- Peel off the rubber footing from the bottom of the Echo.

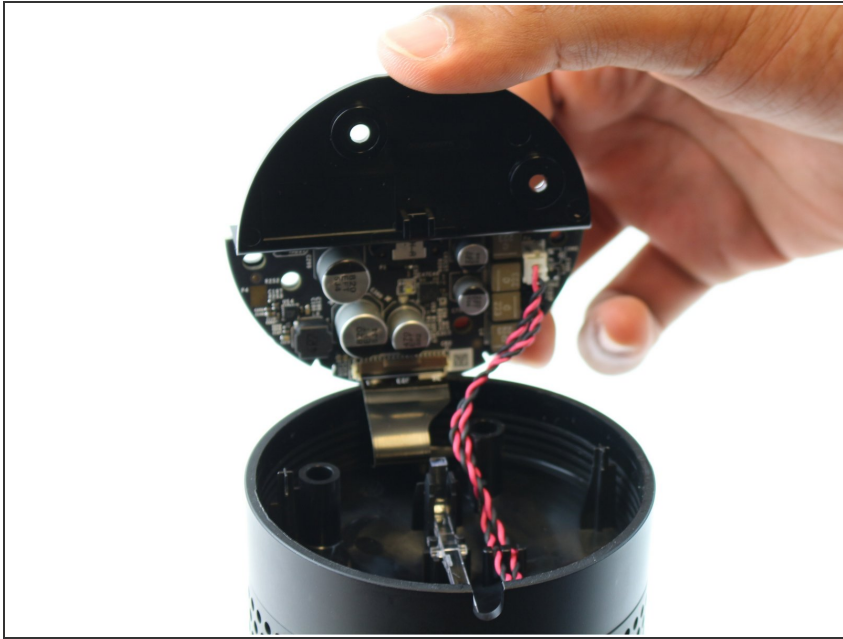
⚠ Do not pull the rubber footing too hard, as it could stretch out of shape. Use a spudger to help remove the foot if you have any trouble.

Step 2



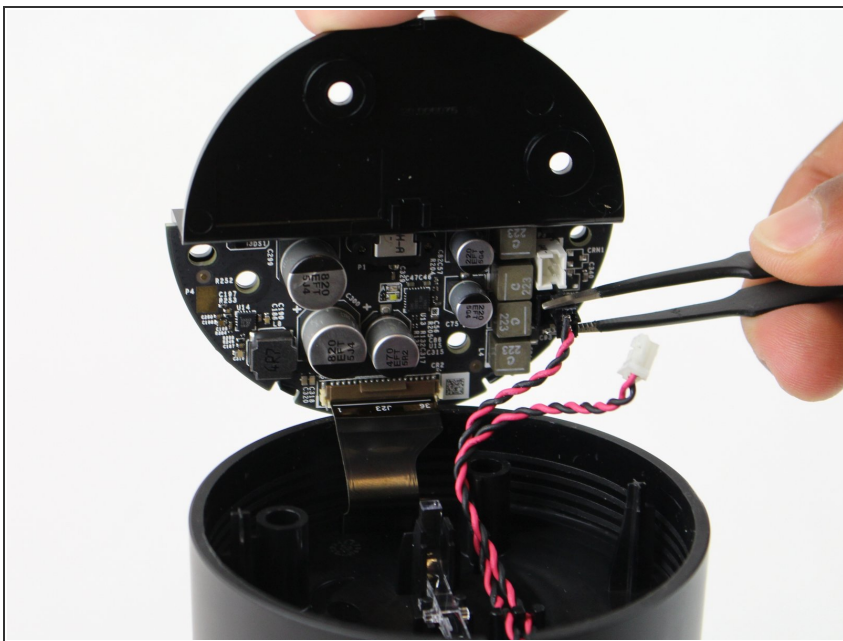
- Remove the four 42.8 mm T10 Torx screws from the bottom of the Echo.

Step 3



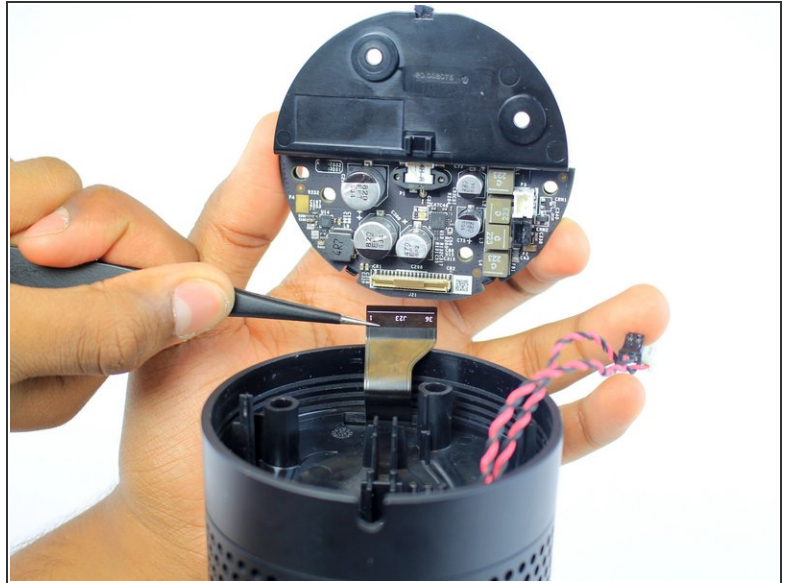
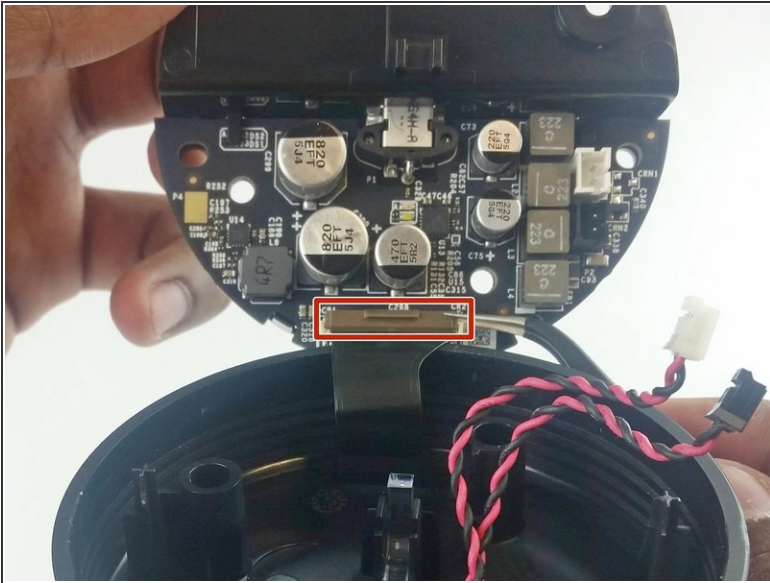
- Slowly lift the plate containing the board. Be careful not to disconnect any of the wires.

Step 4



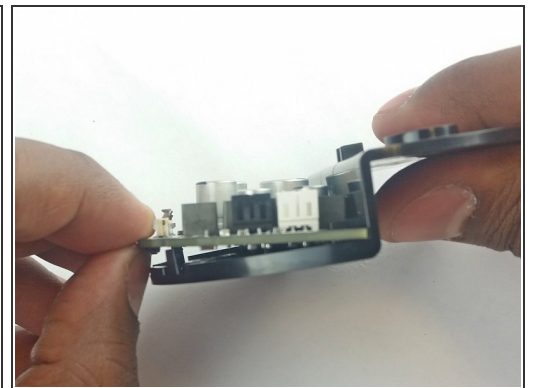
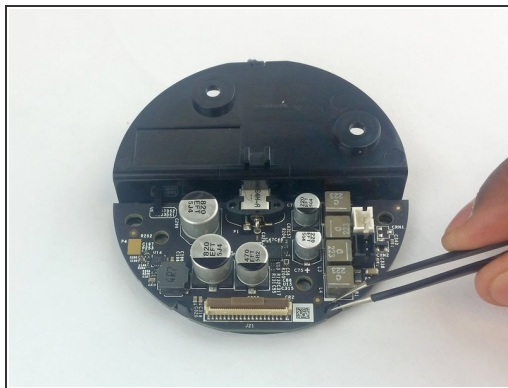
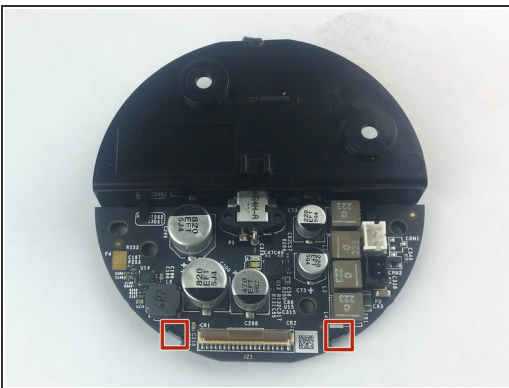
- Using tweezers, carefully disconnect the two red and black cables from their sockets on the board.
- ⚠ Tugging on the wires may damage the device. Pull from the plastic connectors instead.

Step 5



- Lift the brown plastic latch on the ZIF connector securing the driver board ribbon cable.
- Pull the ribbon cable from its connector. The plate and board should now be free from the Echo.

Step 6



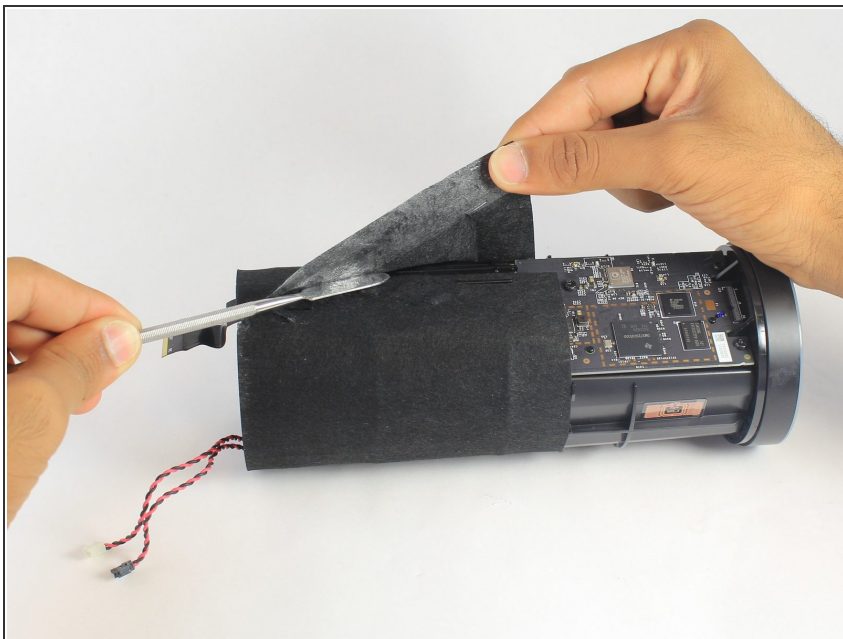
- Using the spudger, pull back the two plastic clips on the plate.
- Lift the board up and pull it away from the plate.

Step 7 — Motherboard



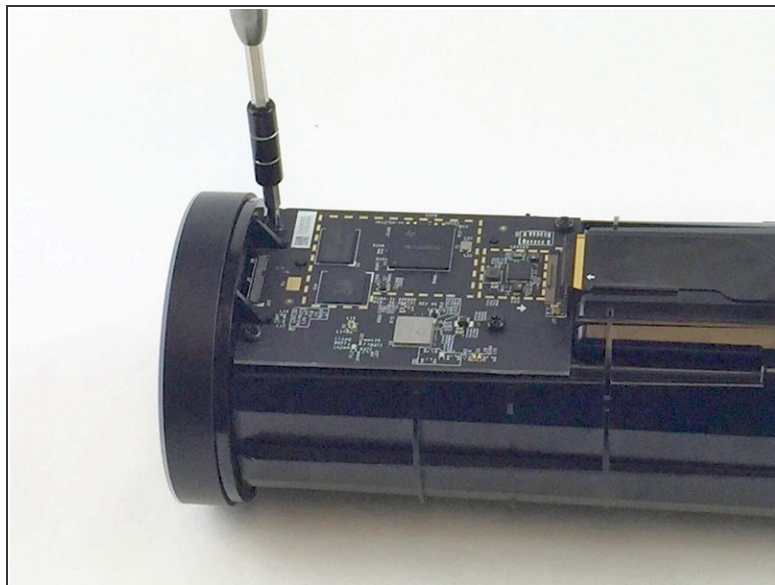
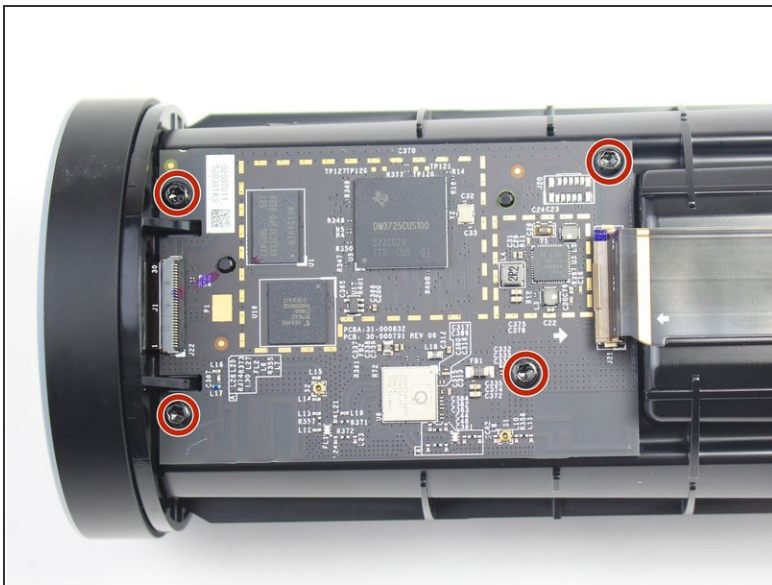
- Remove the plastic plate from the bottom of the device. Then remove the plastic shrouding.

Step 8



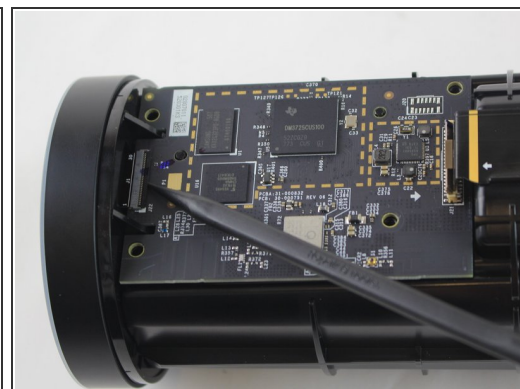
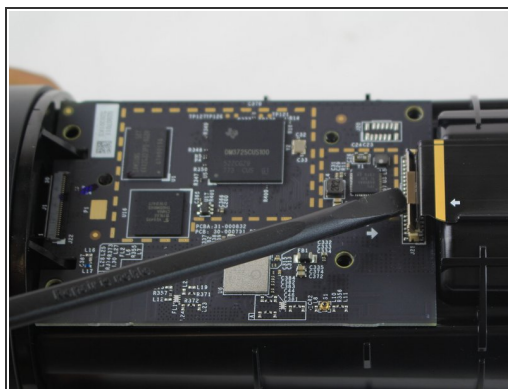
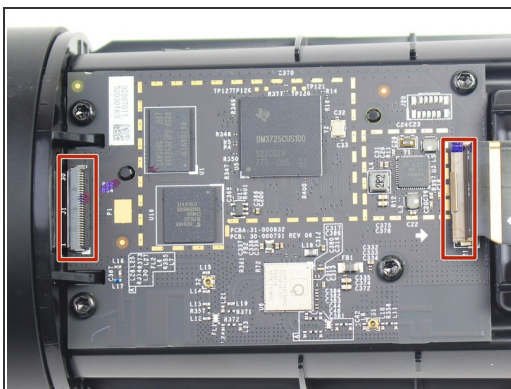
- Peel off the black fabric wrapped around the device.
 - ⚠ Be careful not to rip the fabric. Use a spudger to help remove the adhesive if you have any trouble.

Step 9



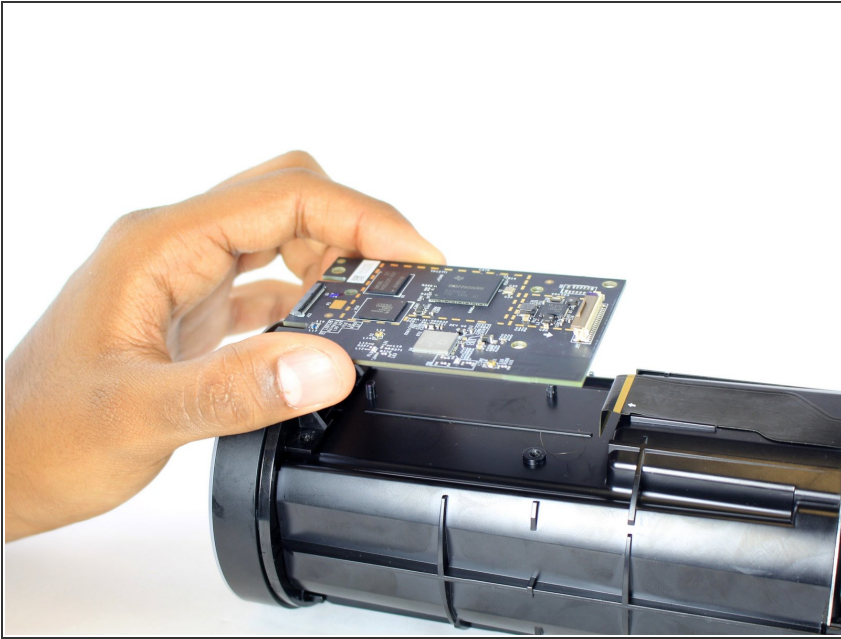
- Remove the four 9.7 mm T10 screws.

Step 10



- Lift the brown and black plastic latches securing the ZIF connectors at each end of the motherboard.
- Pull the two ribbon cables from their connectors on the motherboard.

Step 11



- Lift the motherboard up from the Echo.

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