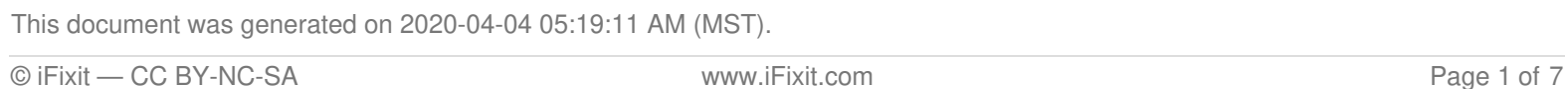


Written By: Nikolas I Steckley



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## INTRODUCTION

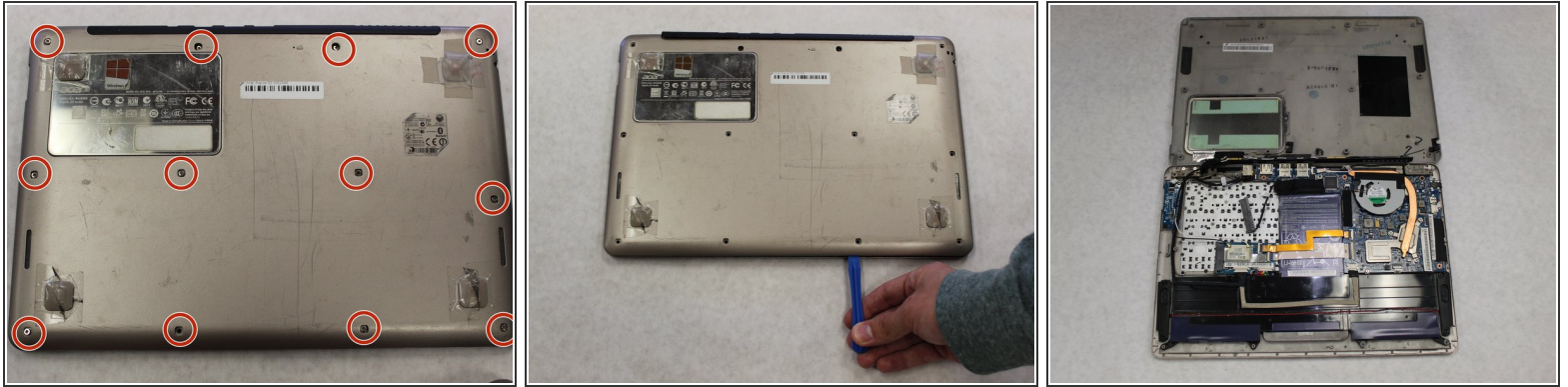
This guide will walk you through removing the keyboard. The keyboard may need to be removed if it is damaged, or simply for easy access to clean.

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### TOOLS:

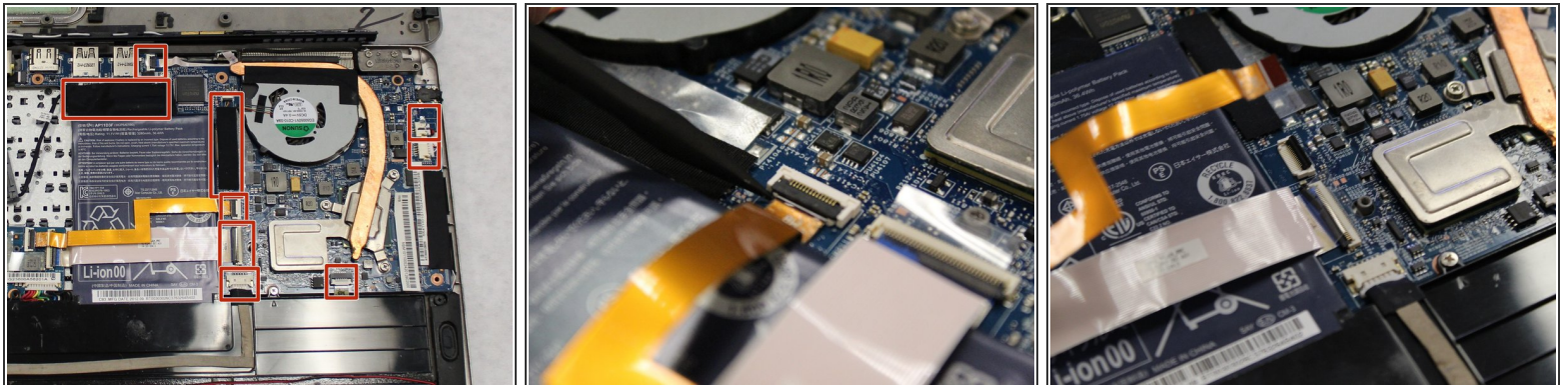
- [Spudger](#) (1)
  - [Phillips #0 Screwdriver](#) (1)
  - [Phillips #00 Screwdriver](#) (1)
  - [iFixit Opening Tools](#) (1)
  - [Phillips #000 Screwdriver](#) (1)
-

## Step 1 — Back Cover



- Remove the 12 5mm Phillips #00 screws.
- Use a plastic opening tool to gently pry open the back panel.
- Gently lift up the back panel, exposing the internals of the laptop.

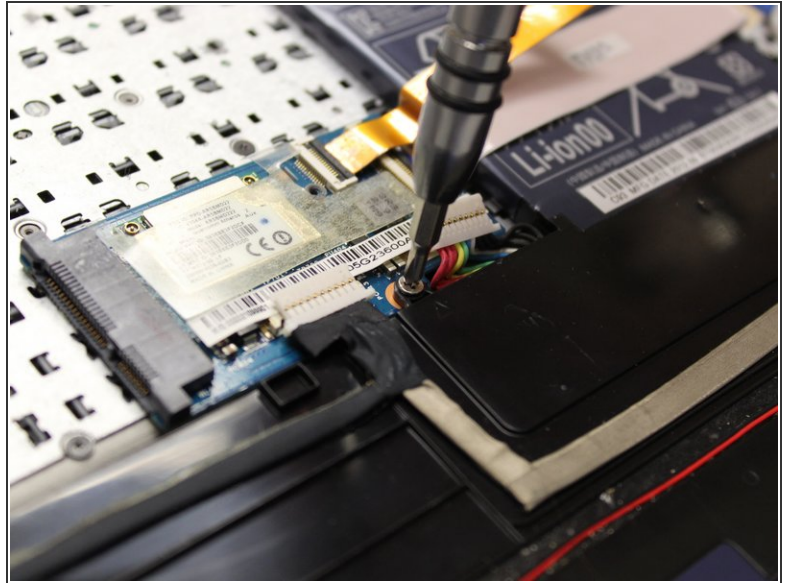
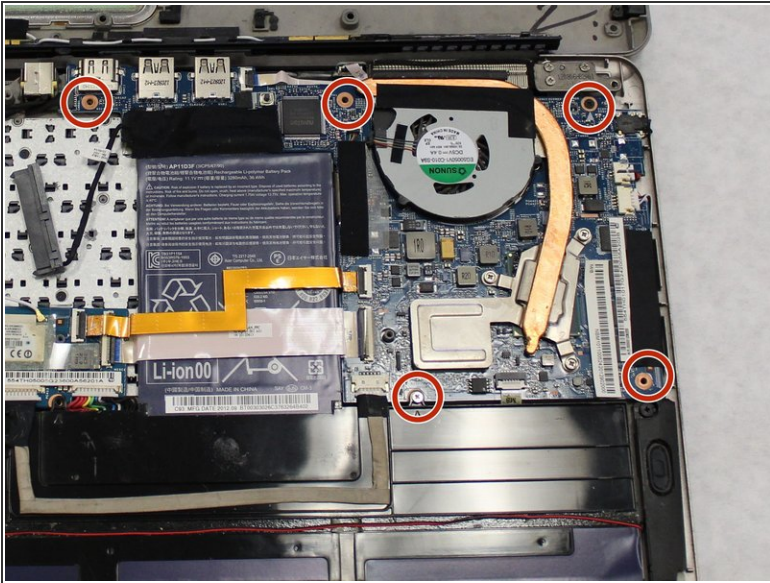
## Step 2 — Motherboard



- Remove the motherboard connector cables by gently lifting the black latch that clamps them in place with a spudger or simply pull the connector from the port.

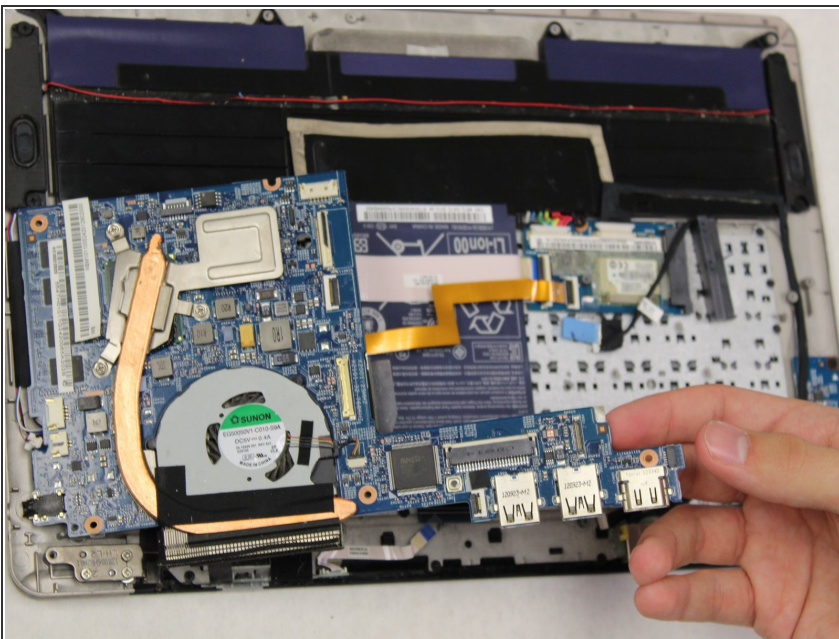


### Step 3



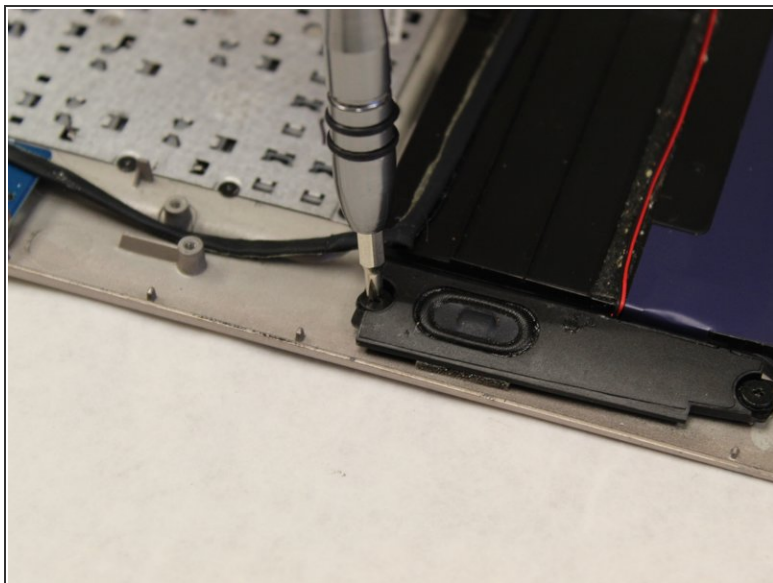
- Remove the 5 5mm PH0 screws holding the motherboard in place.
- Gently remove the motherboard from the chassis.

### Step 4



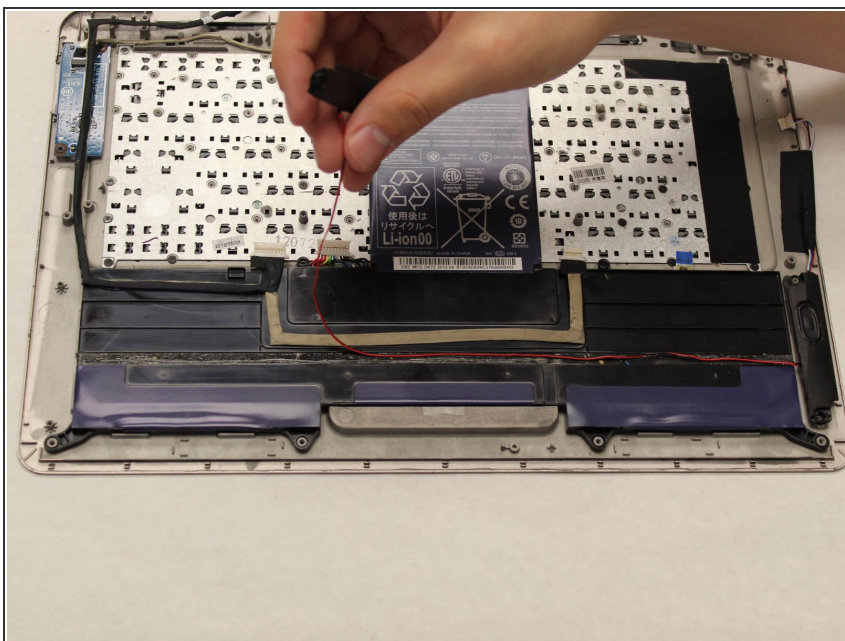
- Gently remove the motherboard.

## Step 5 — Speakers



- Unscrew the 4 1mm PH00 screws attaching the speakers to the frame.

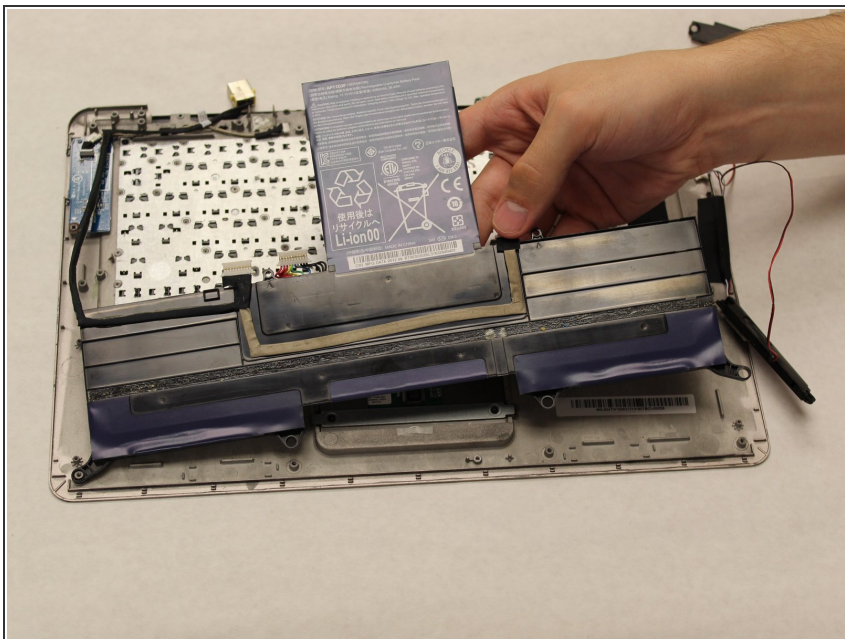
## Step 6



- Gently remove the speakers. Note that the wire connecting them may be lightly glued down. If so, gently pry up.

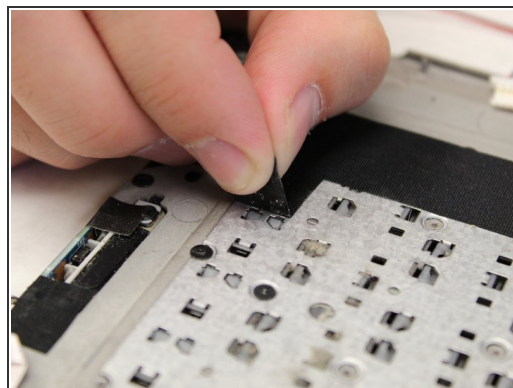
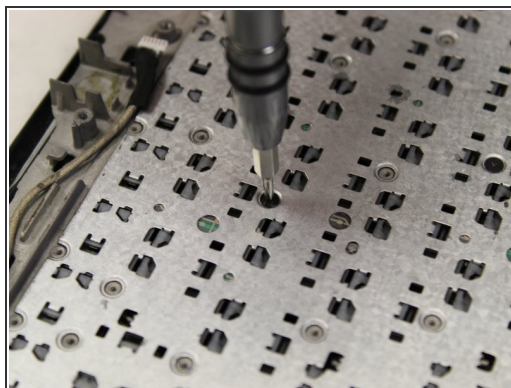
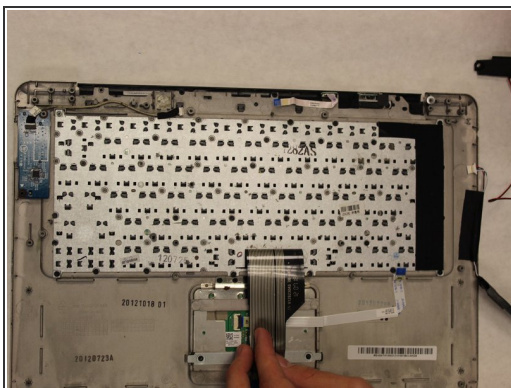


## Step 7 — Battery



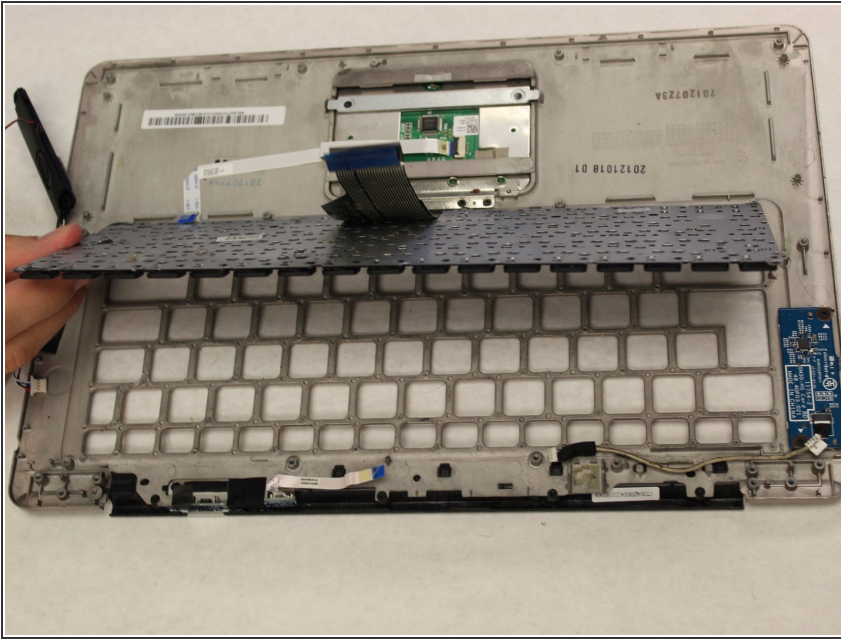
- Gently lift the battery from the frame.

## Step 8 — Keyboard



- The 30 1mm PH000 screws holding the keyboard in place will be distributed all over the back.
- You will need to gently pry up the black tape to expose the remaining screws.

## Step 9



- Gently lift the board exposing the keyboard assembly.

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