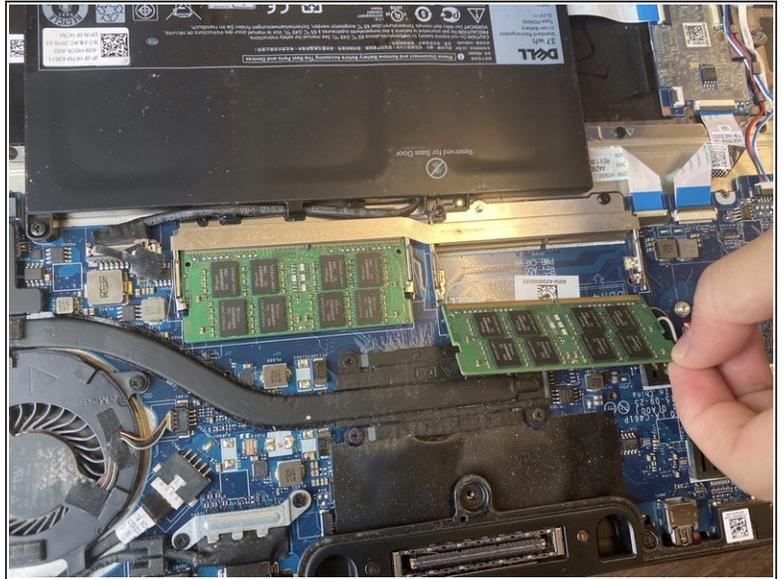
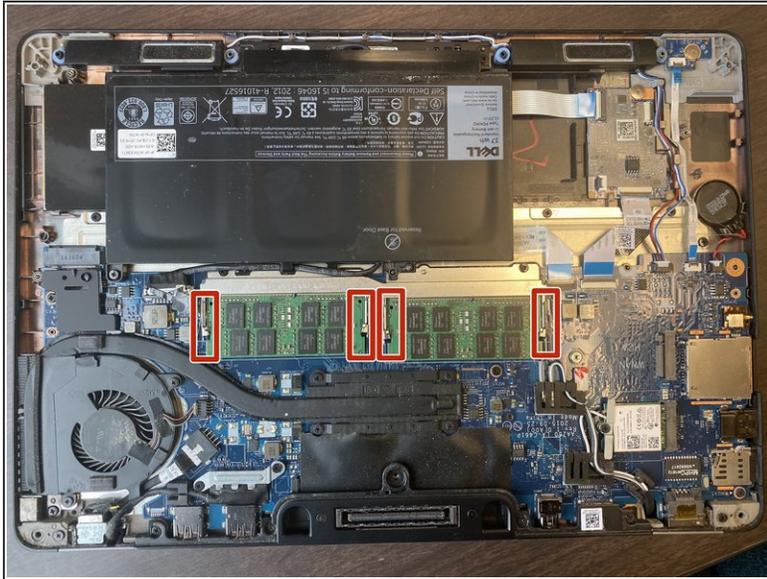

INTRODUCTION

The motherboard is the central hub for communication between all of the components in a device. When one or more components are failing, the motherboard may need to be replaced. Use this guide to replace the motherboard in your laptop.

TOOLS:

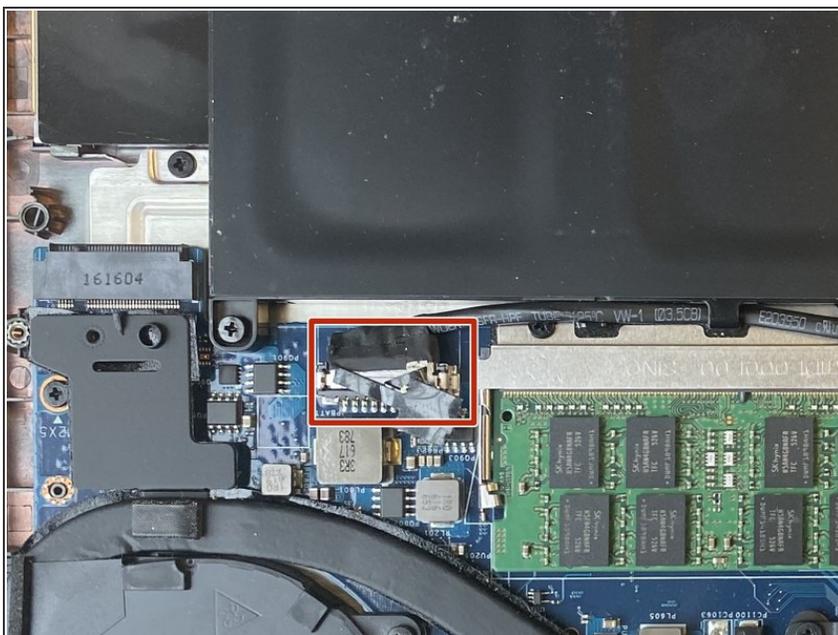
- [Phillips #0 Screwdriver](#) (1)
 - [iFixit Opening Tool](#) (1)
-

Step 1 — RAM



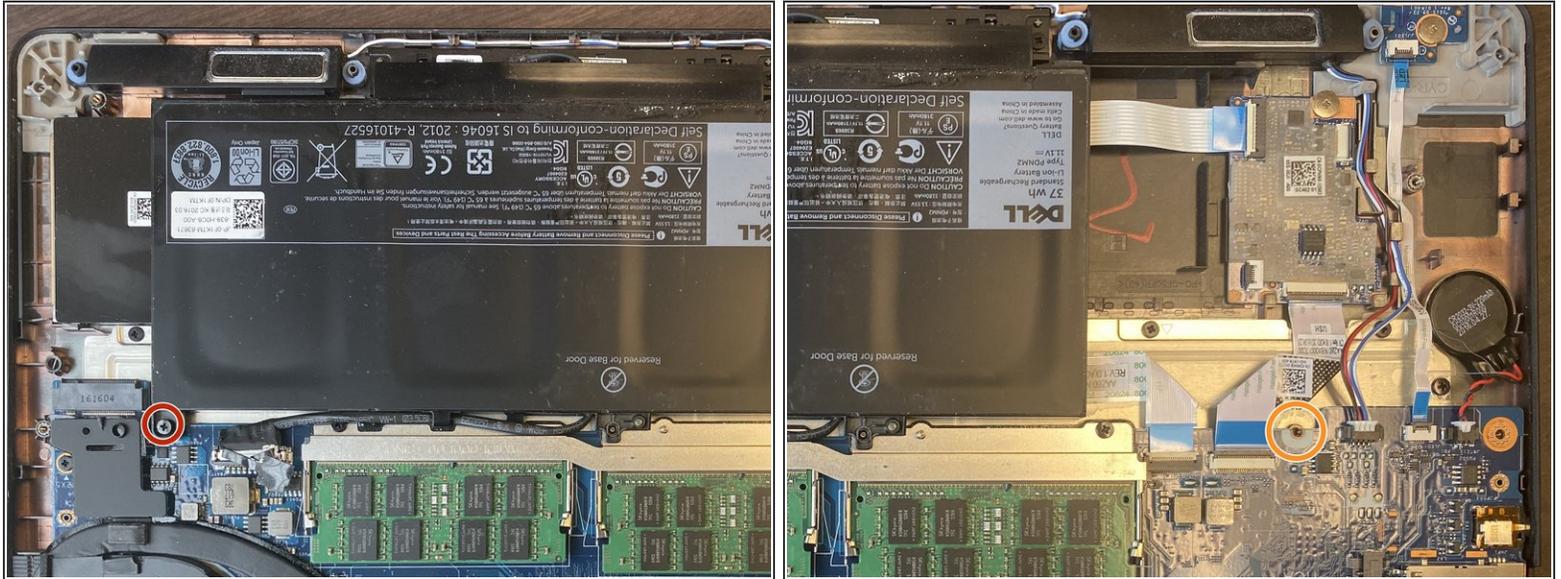
- Grab the two clips beside the RAM stick and pull them outward. The RAM stick should release.
- Remove the RAM from the device.
- Repeat this for second RAM stick

Step 2 — Battery



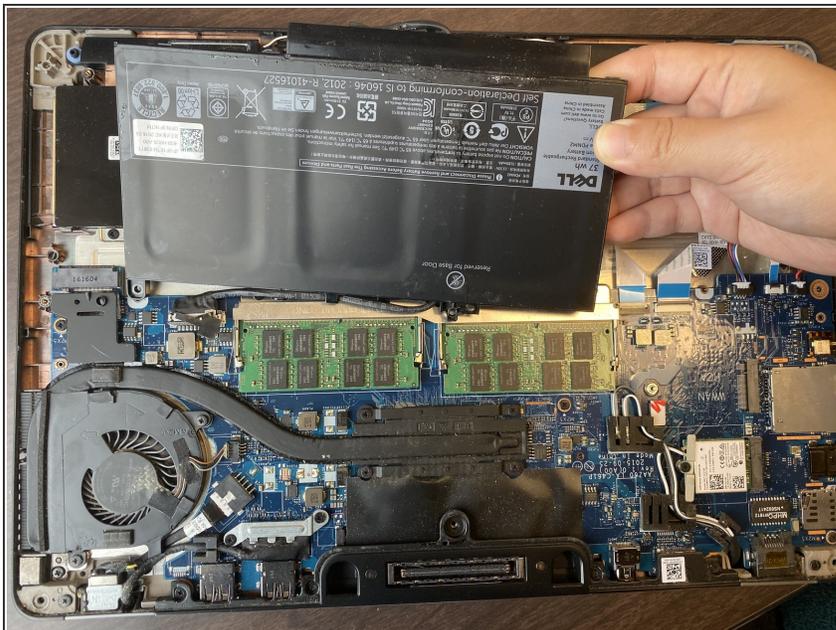
- Use the pull tab on the battery connector to lift the connector straight up off its socket on the motherboard, disconnecting it.

Step 3



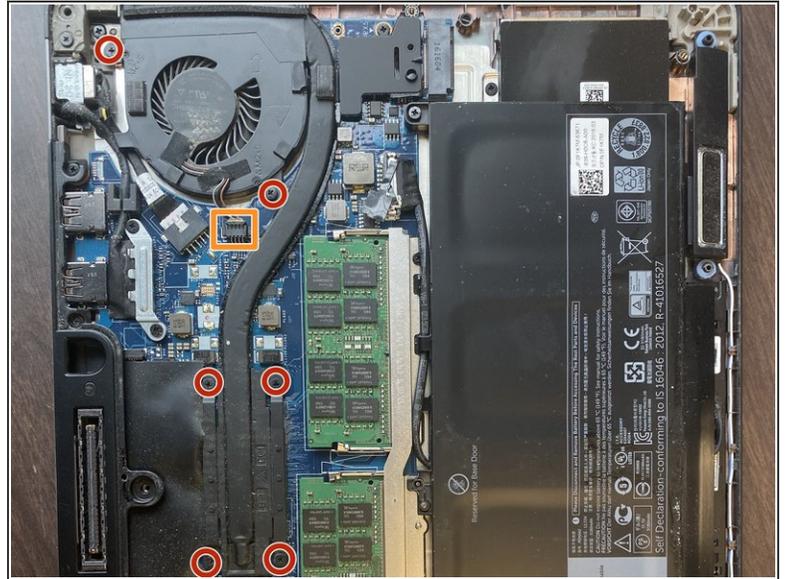
- Remove the single 4 mm Phillips screw securing the bottom left corner of the battery.
- If you are removing an extended capacity battery, remove the Phillips screw securing the bottom right corner of the battery.

Step 4



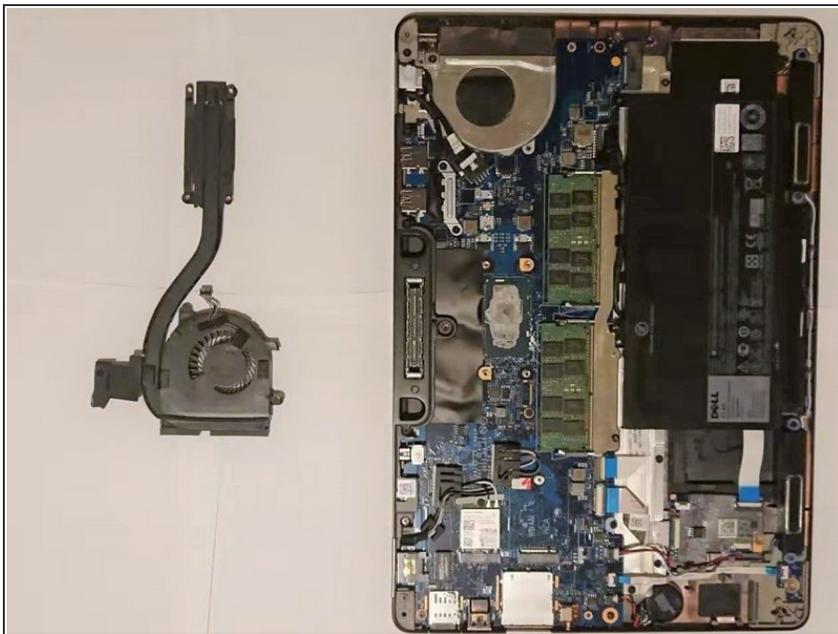
- Remove the battery from the laptop.

Step 5 — Fan and Heatsink



- After opening the backcase of the computer, remove the screws using the Phillips #0 screwdriver.
- Unplug and remove the wire from the socket.

Step 6



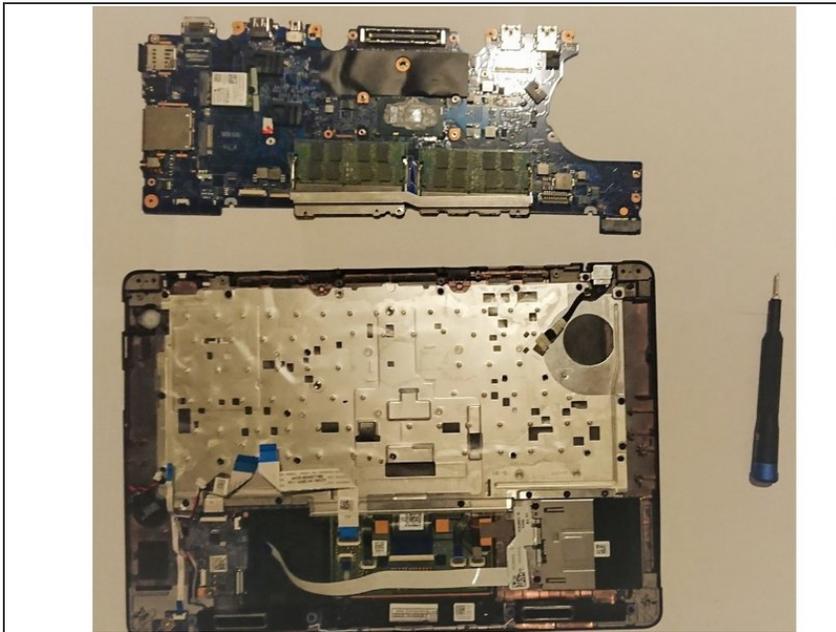
- Remove the fan and heatsink from the laptop.
- ☞ Make sure to wipe off the existing thermal paste from the CPU and heatsink with an alcohol-soaked pad and apply a new layer.

Step 7 — Motherboard



- Remove all the screws using a Phillips #0 screwdriver.
- Disconnect all of the cables from the motherboard.

Step 8



- Remove the motherboard from the laptop.

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