



# Dell Inspiron 1545 Motherboard Replacement

The motherboard may be responsible for your...

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# INTRODUCTION

The motherboard may be responsible for your computer not functioning as intended, it may be necessary to completely replace the motherboard.

## TOOLS:

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

## PARTS:

Dell Inspiron 1545 (PP41L)  
Motherboard (1)

## Step 1 — Battery



- ☒ Before attempting to remove the battery ensure that the laptop is disconnected from all power sources and turned off.
- Turn the laptop over to its back.

## Step 2



- Slide the release latch while simultaneously pulling backwards on the battery.

## Step 3



- Slide the battery out of the battery bay.



## Step 4 — Center Control Cover



- After removing the battery, remove the two screws (3mm Phillips #1) beneath it. These screws hold the Center Control Cover in place.

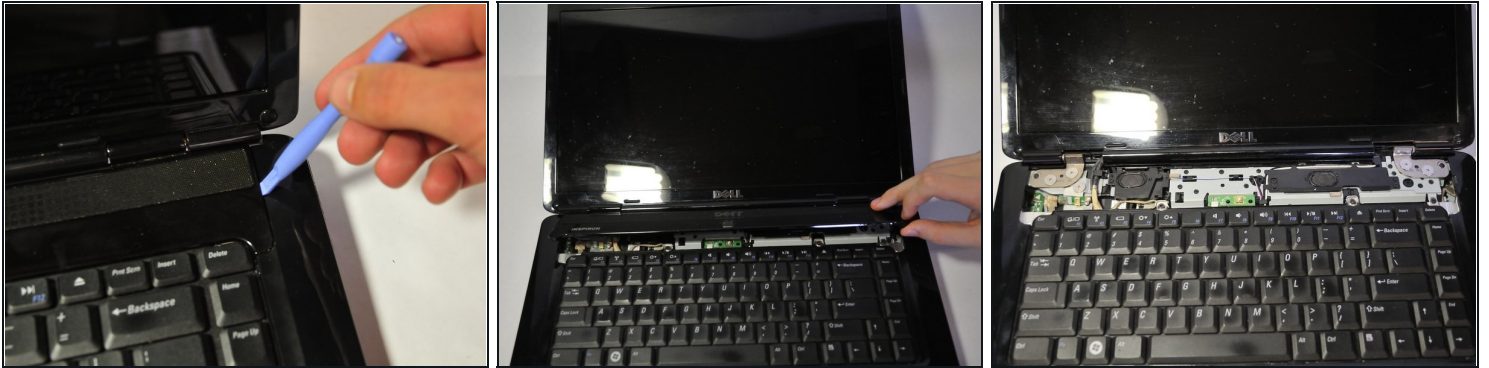
## Step 5



- Flip the laptop over to the front and open the display as far as possible.



## Step 6



⚠ The Center Control Cover is VERY fragile, be careful when using prying tools.

- Pry the Center Control Cover from the laptop. On the right there is a small divot, it is advised that you start removing the panel from here.
- Carefully lift the Center Control Cover away from the laptop.

## Step 7 — Base Cover



- Unscrew the four screws (3mm Phillips #1) that hold the base cover in place.
- ⓘ The top 3 screws are "captive" (held in by a retaining ring) and will not come out.

## Step 8



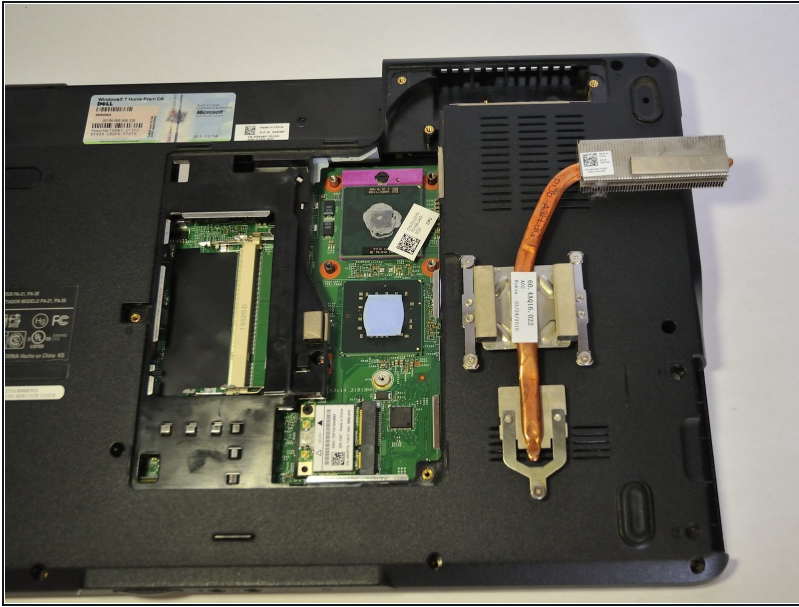
- Carefully lift the base cover vertically away from the laptop.

## Step 9 — CPU Heat Sink



- Loosen the 5 screws (4mm, Phillips #1) that secure the CPU Heat Sink to the motherboard.
- ⓘ These screws are held in place by a washer so you should not be able to completely remove the screws.

## Step 10



- Pull up on the Heat Sink unit to remove it.

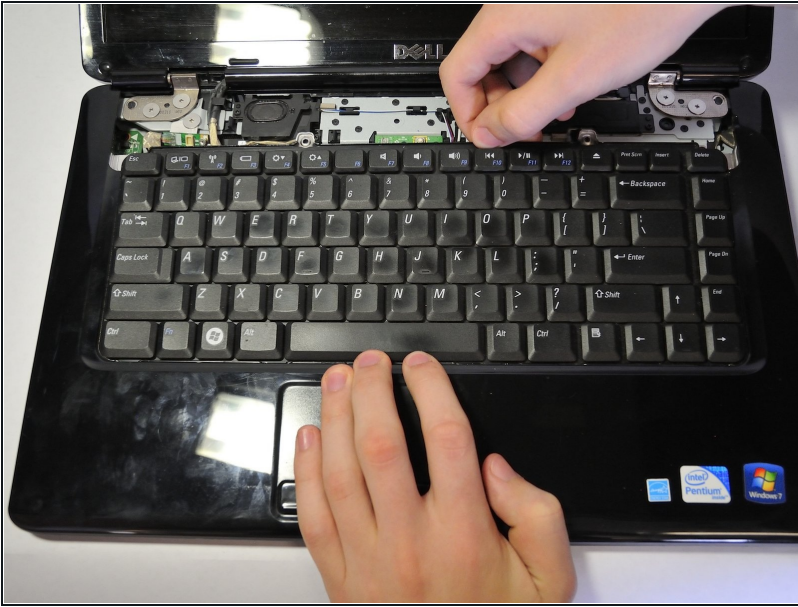
## Step 11 — Keyboard



- Remove the two screws (5mm Phillips #1) at the top of the keyboard.



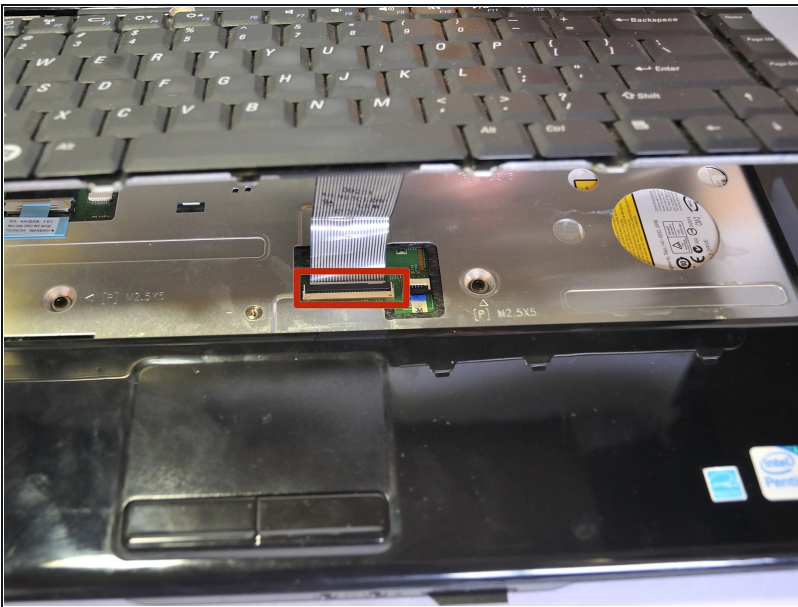
## Step 12



- Slide the keyboard out and away from the laptop and lift it up to access the keyboard connector.

⚠ Do not pull hard on the keyboard while removing it, you may damage the keyboard or the keyboard connector.

## Step 13



- Lift the connector latch that secures the keyboard cable to the connector on the motherboard and remove the cable.

## Step 14



- Lift the keyboard up and away from the laptop.

## Step 15 — Palm Rest



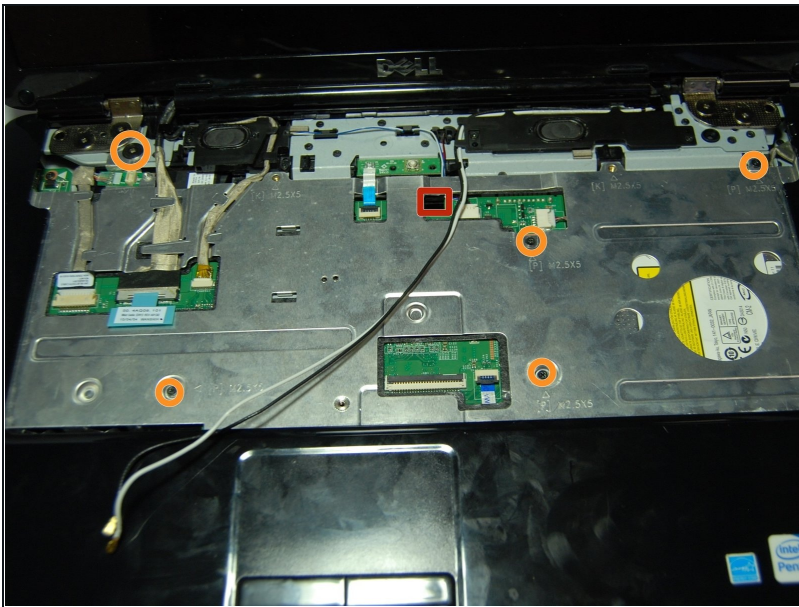
- Remove the 11 screws (5mm Phillips #1) from the back of the laptop as marked. One screw is in the middle, by the RAM.

## Step 16



- Remove black and white wires from the WLAN that lead to the display by pulling straight up.
- Unwind the wires from the routing guides.

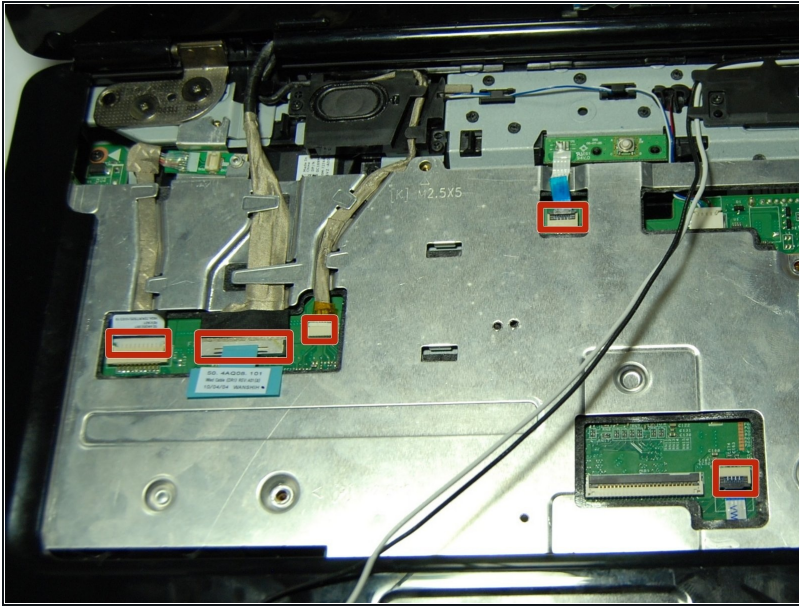
## Step 17



- Turn the laptop back over to its normal resting position and pull the black and white wires previously connected to the WLAN through the hole.
- Remove the 4 smaller screws (5mm Phillips #1) and one screw on the top left (3mm Phillips #1) from the palm rest.



## Step 18

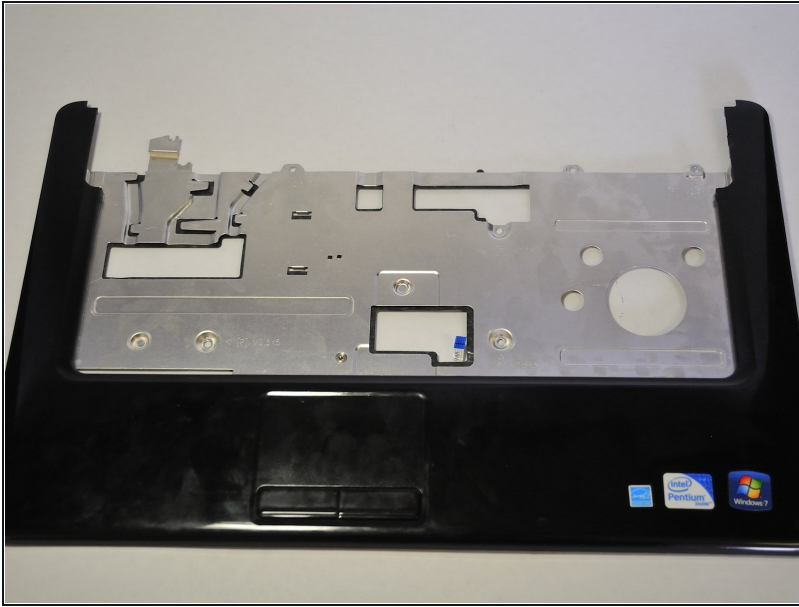


- Disconnect the Bluetooth card cable, Wed cable, Camera1 cable, power cable, and touchpad cable from the respective Motherboard connectors as marked. For the Bluetooth cable and Camera1 cable, pull the plugs towards the screen. For the touchpad and power cable, lift the black tab and then pull them out. For the Wed cable, pull the blue tab up.

- Unsecure the wires from the routing guides so they are loose.

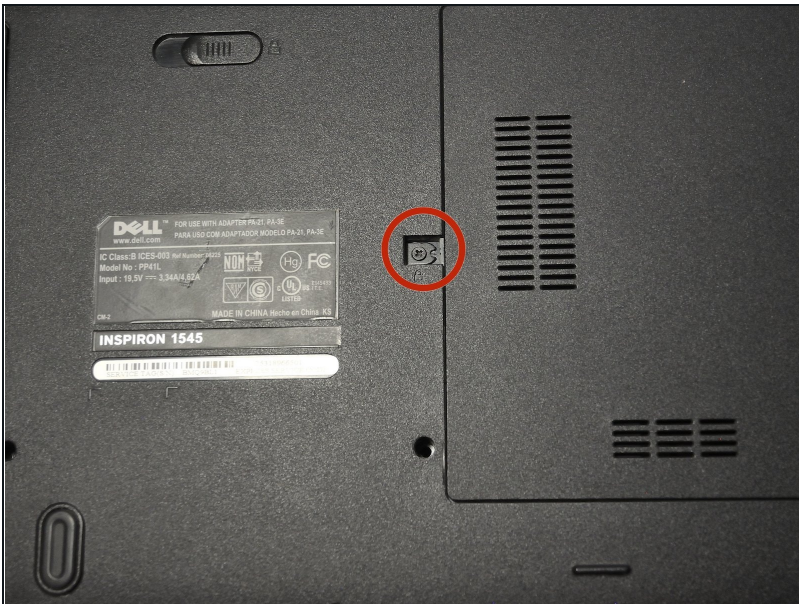
**⚠ Pull on the plastic tabs for each connector to help prevent causing damage to the connectors.**

## Step 19



- To separate the palm rest from the rest of the computer, use a plastic opening tool to lift up the plastic. It is best to start at one point and work your way around.

## Step 20 — Optical Disk Drive



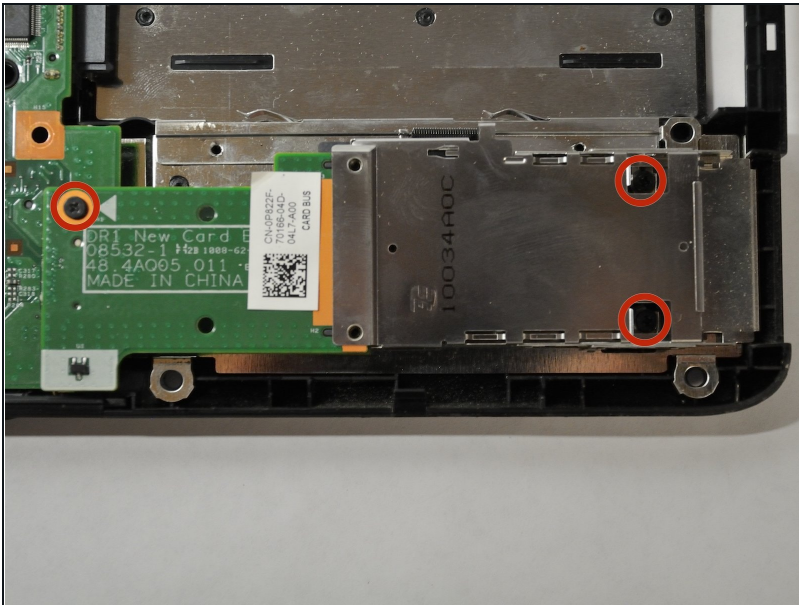
- Flip the laptop to its back side.
- Remove the screw (5mm Phillips #1) that secures the Optical Disk Drive on the back of the laptop.

## Step 21



- Push the Optical Disk Drive out using a spudger tool as shown and pull from the front cover of the Optical Disk Drive.

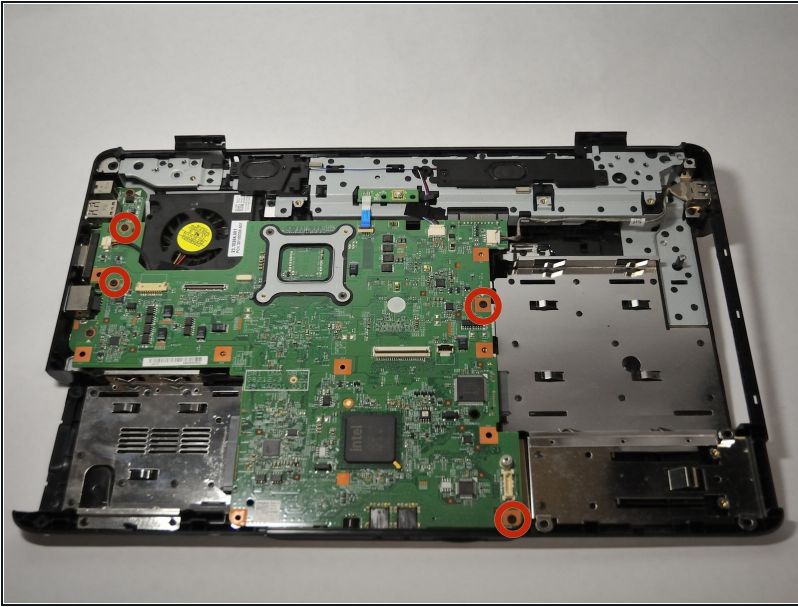
## Step 22 — Daughter Board



- Remove the 3 screws (3mm Phillips #1) that secure the daughter board to the motherboard.
- Lift the daughter board away from the laptop.

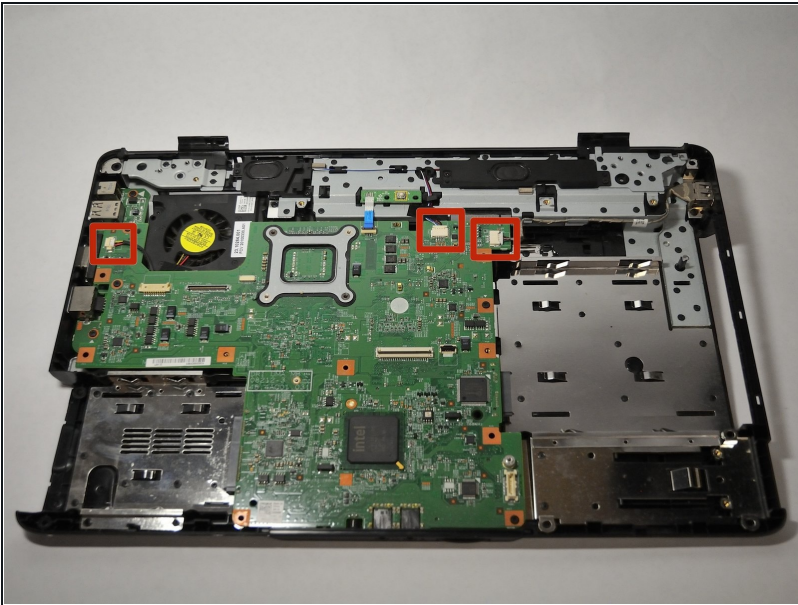


## Step 23 — Motherboard



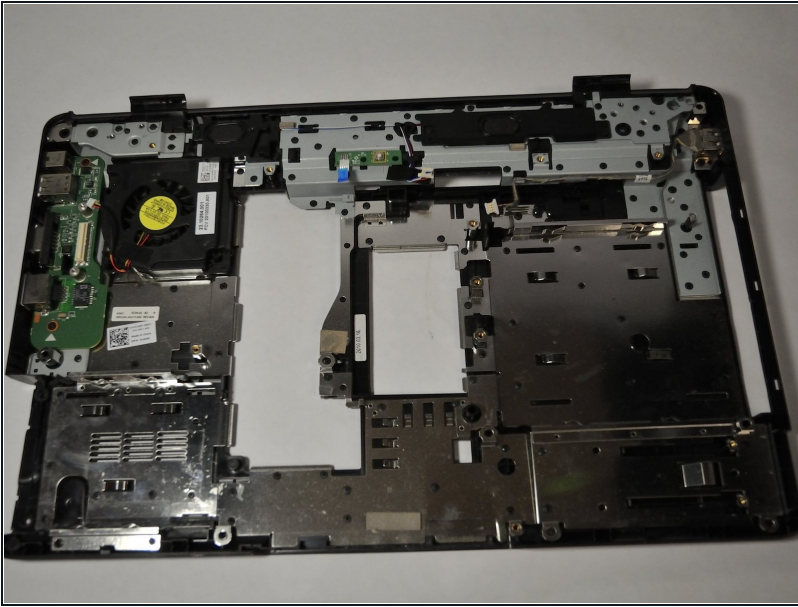
- Remove the two screws (3mm, Phillips #1) on the left and the two screws (5mm, Phillips #1) on the right that secure the Motherboard to the laptop.

## Step 24



- Disconnect the Thermal Fan cable, Speaker cable, and USB Board cable from their connectors.

## Step 25



- To remove the Motherboard, pull away and up from the base of the laptop.
- ⓘ Along with removing the Motherboard if you haven't already done so, the auxiliary port cover on the front will come off with it as well.

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