



Dell Latitude D820 Motherboard Replacement

If you have had your computer for 10-20 years...

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INTRODUCTION

If you have had your computer for 10-20 years or if your laptop has been having issues with blue crash screens, slower processing speeds, or not recognizing hardware. Then you need to replace your motherboard. Follow this guide will show how to replace the motherboard step by step.

Before beginning make sure you backup all important data files on the system onto an external memory device (A Hard Drive or USB)

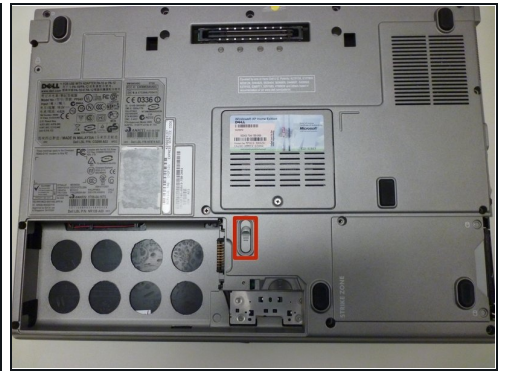
TOOLS:

[iFixit Opening Tool](#) (1)
[Phillips #0 Screwdriver](#) (1)
[Phillips #00 Screwdriver](#) (1)
[Phillips #1 Screwdriver](#) (1)
[Anti-Static Wrist Strap](#) (1)

PARTS:

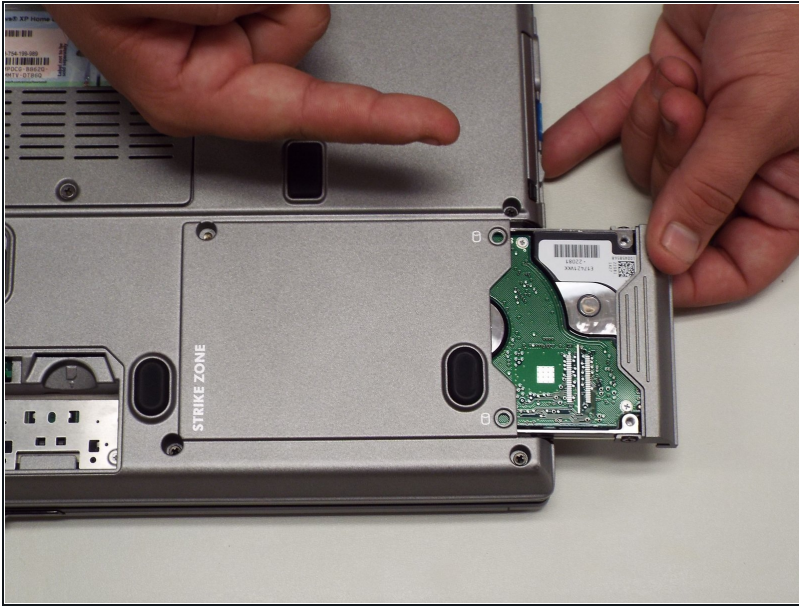
[Dell Latitude D820 Replacement Motherboard](#) (1)

Step 1 — Motherboard



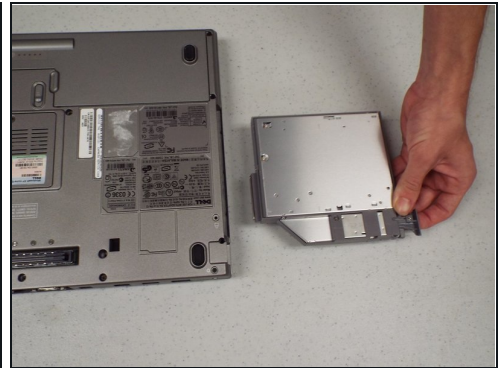
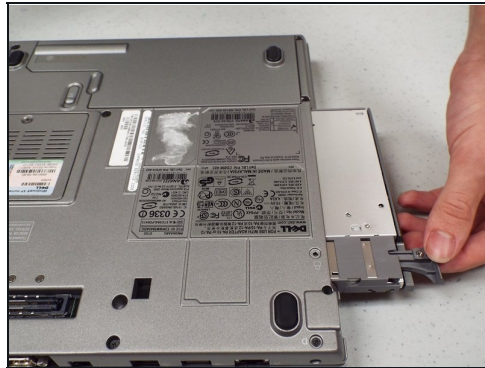
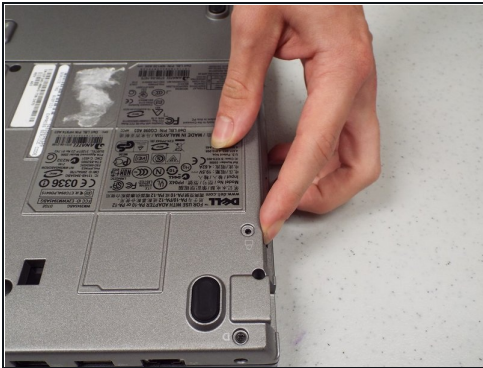
- Perform a complete system backup and shutdown the computer.
- Unplug the charger and remove the battery.
- Remove the battery by sliding the lock tab and use your other hand to remove the battery.

Step 2



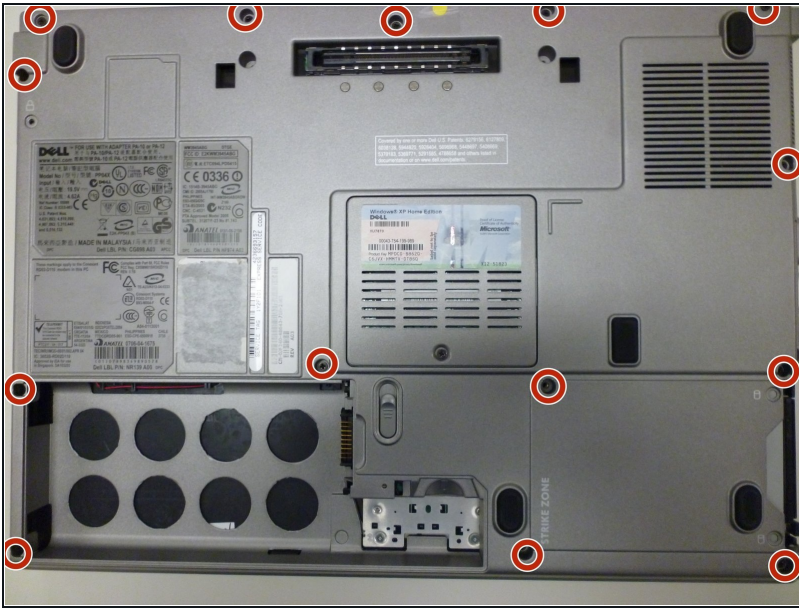
- Remove the hard drive.
- Remove three 3.6 mm Phillips screws.
- Remove the hard drive and set it aside, trying not to touch anything but the grey plastic grip pad. Doing so may cause damage to your hard drive.

Step 3



- Remove the CD/DVD drive by pushing on the button under the drive.
- ⓘ There may be a little resistance pulling it out.

Step 4



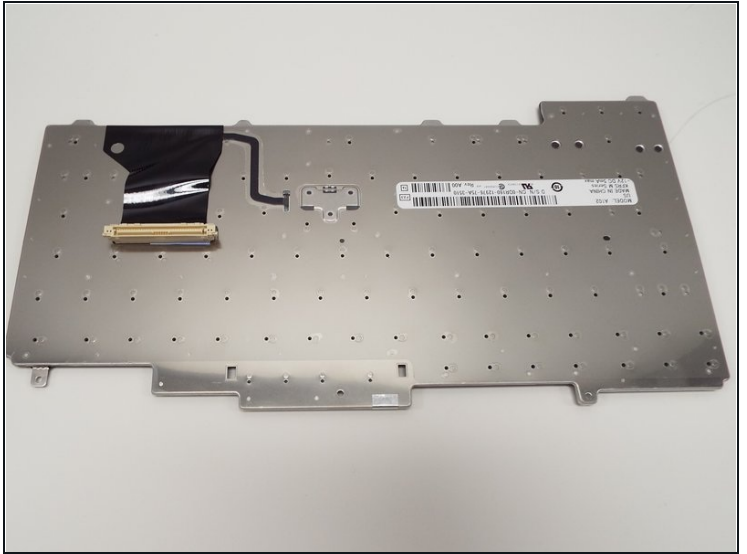
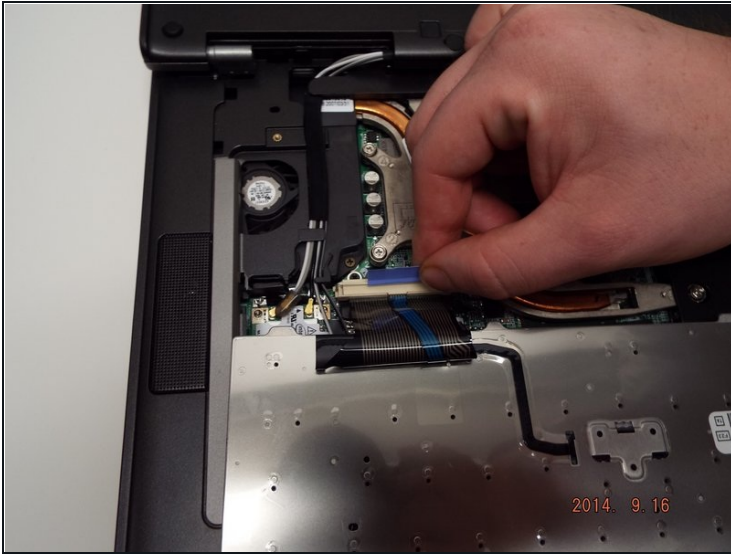
- Remove the 14 Phillips screws from the bottom of the laptop.

Step 5



- Flip the laptop face up, making sure the screen is opened all the way and is flat.
- Using an opening tool, carefully pry off the keyboard bezel keeping in mind wires are attached so do not pull too far or hard.

Step 6

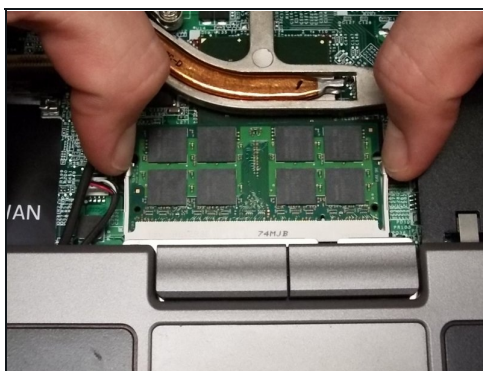
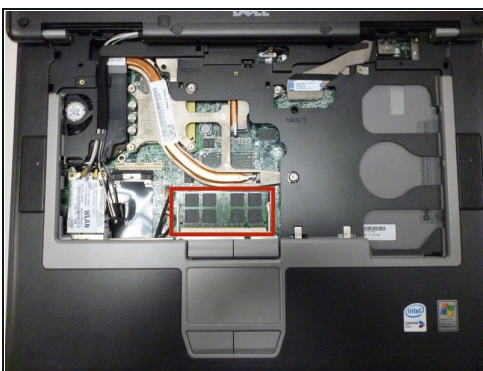


- Remove the keyboard screws.
- Flip the keyboard over.

⚠ There is a ribbon cable (wires) attached to the bottom of the keyboard, so be careful not to tear it.

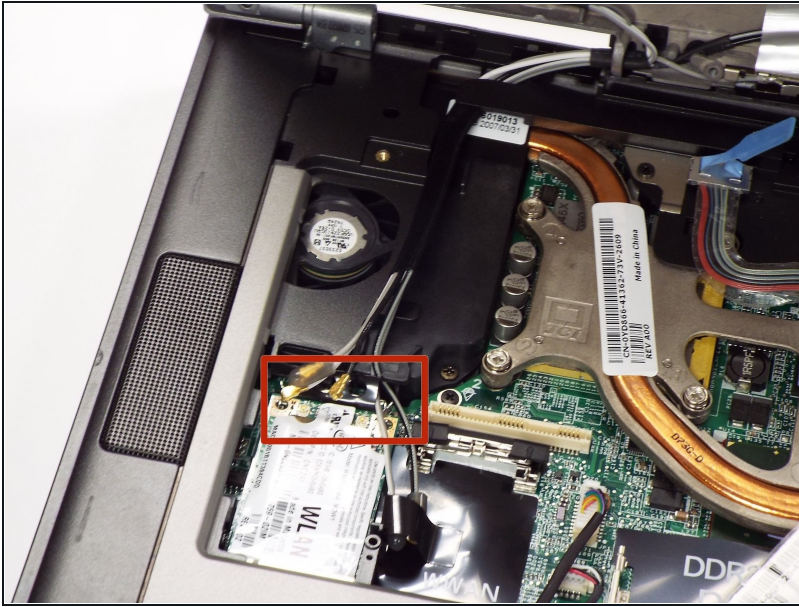
- Remove the keyboard.

Step 7



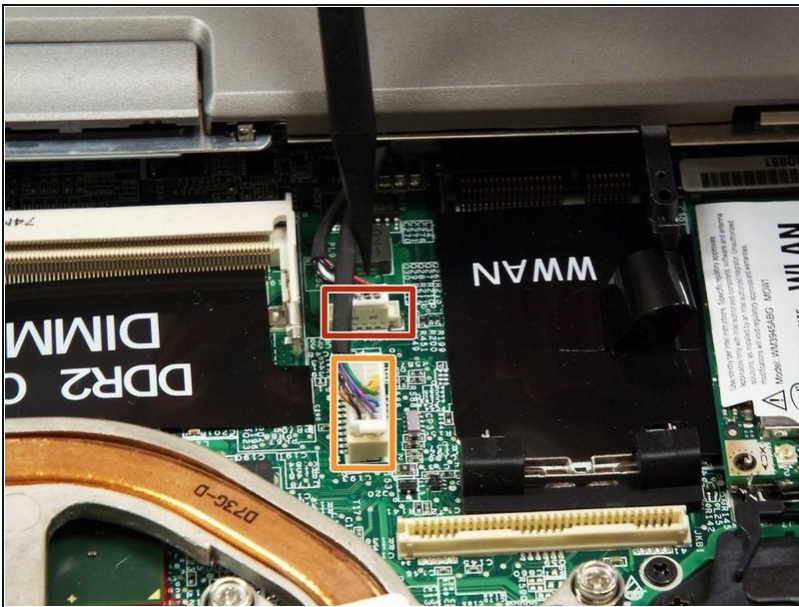
- Remove the RAM stick under the keyboard by pulling the two tabs away from each other as shown in second picture.
- Repeat for the second stick of RAM.

Step 8



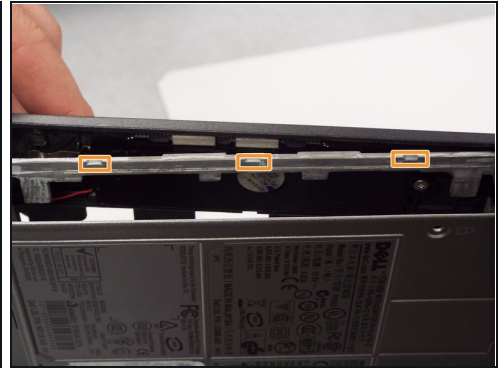
- Disconnect the wireless card from the bottom corner.
- Push the retaining tab and lift the card out.
- Do this for the ethernet card which is in the same spot.

Step 9



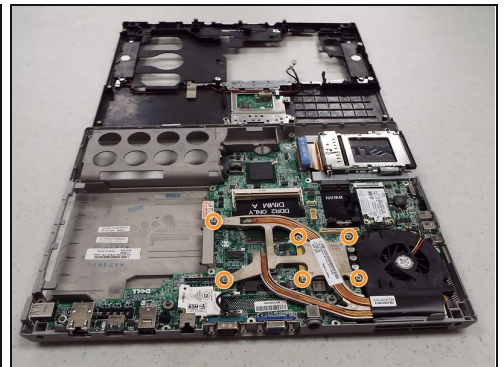
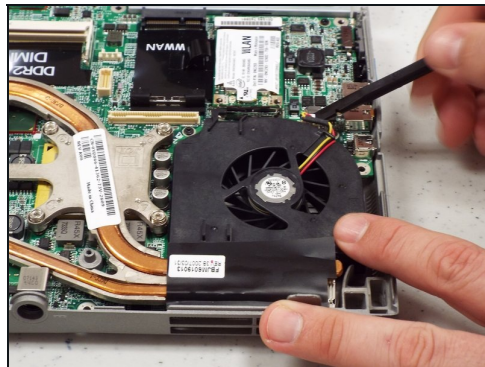
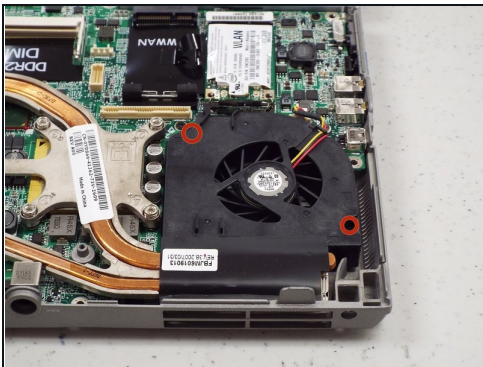
- Remove the cable that connects the speaker to the frame by pulling straight out.
- ① The cable is located to the left of DDR2 DIMM A.
- Remove the cable that connects the track pad to the frame by pulling straight out.
- ① The cable is also located to the left of DDR2 DIMM A.

Step 10



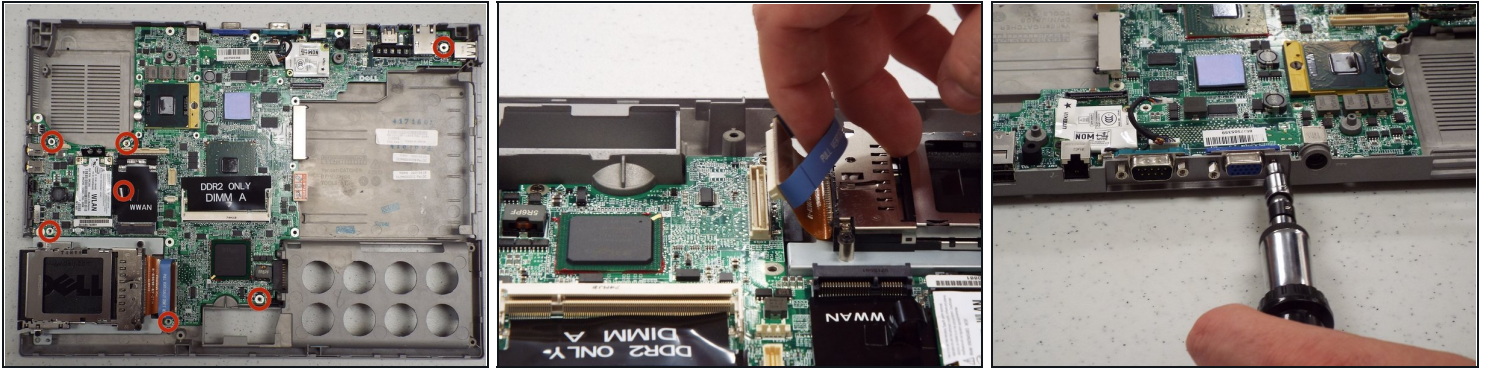
- Remove three screws that hold the upper case to the motherboard.
- Use a spudger to pry the three tabs by the CD-ROM to separate the upper and bottom casing.

Step 11



- Remove two 5.6 mm screws from the fan.
- Remove the fan power cable.
- Loosen six captive spring loaded screws from the heat sink.

Step 12



- Remove four 3.7 mm screws from around edge of the motherboard.
- ① Remove three 3.8 mm screws. One of these is near top left of Dell MCIA. The other is near top left of WWAN. There is one underneath the Black WWAN label.
- Remove the PCMCIA connector from the motherboard.
- Turn the laptop on the side and remove two female hex screws from the video card and two posts from the serial port using socket driver (3/16 socket).
- ① All hex screws are 10.23mm x 2.66mm size.

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