



HP 15-ay052nr Motherboard Replacement

How to replace an HP 15-ay052nr motherboard.

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INTRODUCTION

The replacement of the motherboard, other USB ports, HDMI port, or ethernet port. The motherboard could need to be replaced if the computer isn't booting up at all or malfunctions.

TOOLS:

- [JIS #0 Screwdriver](#) (1)
- [iFixit Opening Tools](#) (1)

Step 1 — Battery



⚠ To protect the device and yourself, make sure your device is completely powered down before disassembling. Disconnect all external devices before starting any tear down process.

- Turn the device and lay it upside-down on a flat surface so the base of the computer is facing upwards.

Step 2



- Identify the two (2) sliding lock mechanisms on either side of the battery and slide them towards the center.
- i** The sliders are located at the back of the device on the side where the display hinges are.
- i** The slider closest to the optical drive (CD reader) clicks open but the opposite slider has a spring.

Step 3



- Pull the battery slightly up and out to remove.
- ⓘ If the battery doesn't pop out, the sliders weren't pushed in far enough. Push the sliders towards the center until the battery pops out.

Step 4 — Bottom Cover



- Remove the rubber feet on the bottom of the device to access all the screws.
- ⓘ There are two rubber feet, one on each side of the battery compartment.

Step 5



- Unscrew the twelve 9 mm JIS #0 screws on the back of the device.
- Gently remove the optical drive (CD reader) to more easily separate the base.

Step 6



- Unclip the keyboard surface from the base using an iFixit opening tool around the entire border.

Step 7



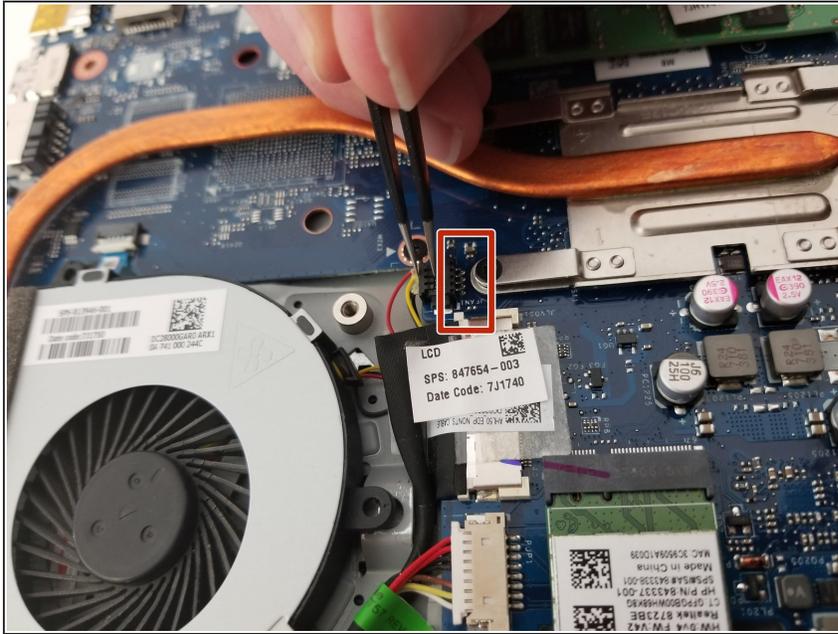
- Separate the base of the computer from the component assembly.
- ⓘ The optical drive can be placed in the base where it corresponds to prevent misplacing it.

Step 8 — Fan



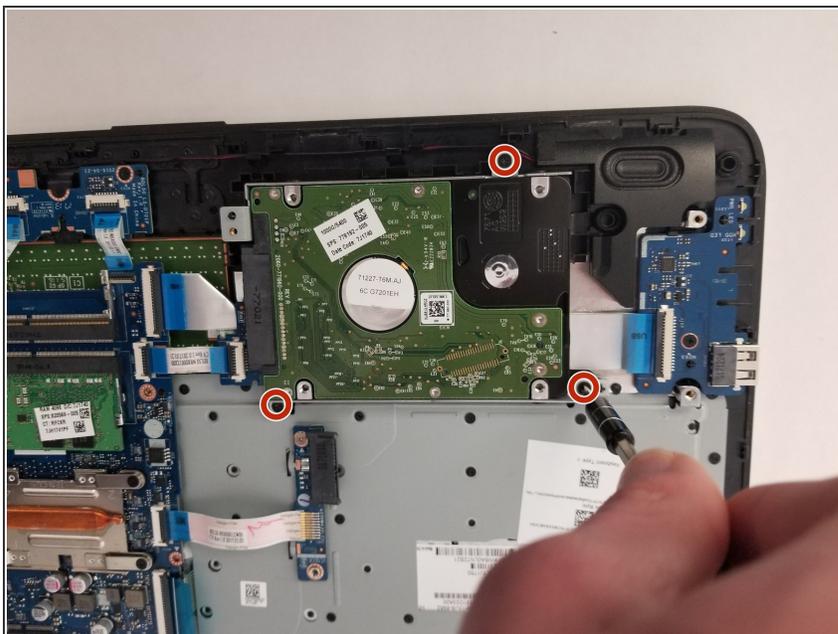
- Remove the two 6.5 mm JIS #0 screws holding the cooling fan to the base.
- ⓘ The base is the side by the heatsink, which is made of copper.

Step 9



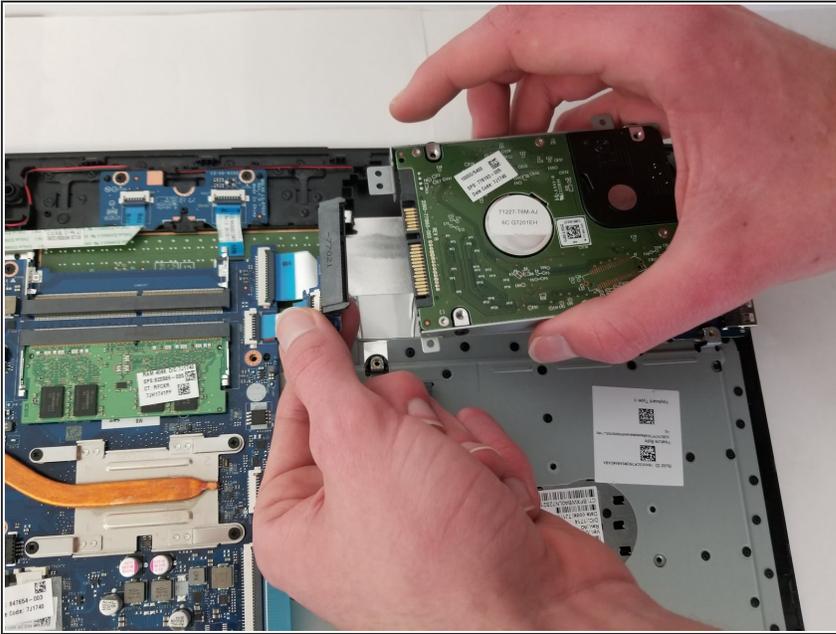
- Unplug the fan cable from the motherboard.
- ⓘ The fan can now be removed.

Step 10 — Motherboard



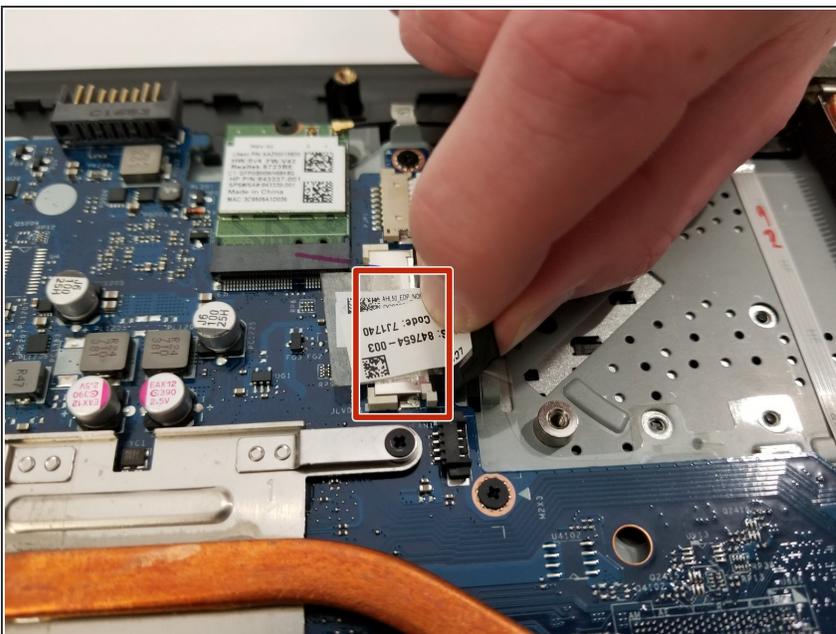
- Remove the three 3 mm JIS #0 screws from the hard drive.

Step 11



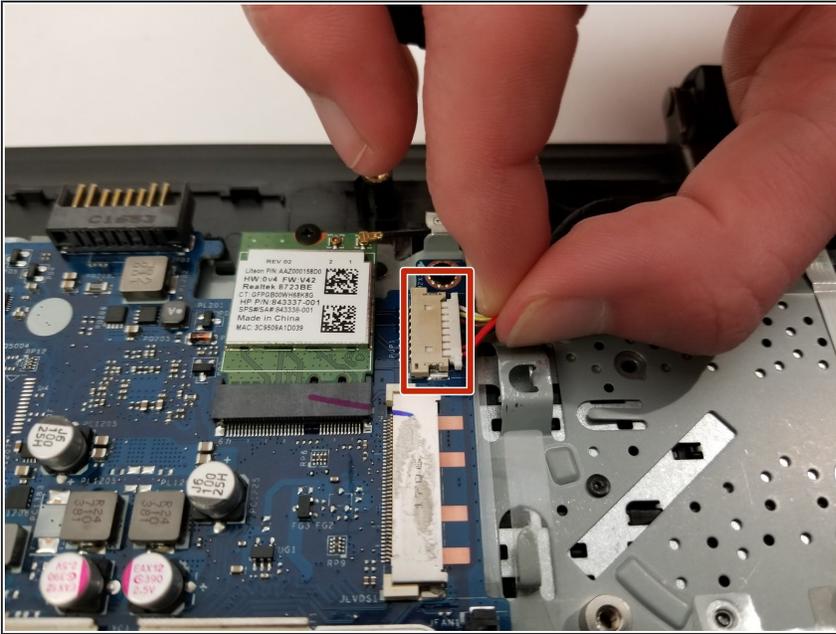
- Unplug the hard drive from the motherboard.

Step 12



- Unplug display from the motherboard.
- ⓘ The connection is under a sealing sticker; peel up the sticker to unplug the connection.

Step 13



- Unplug the power port from the motherboard.

Step 14



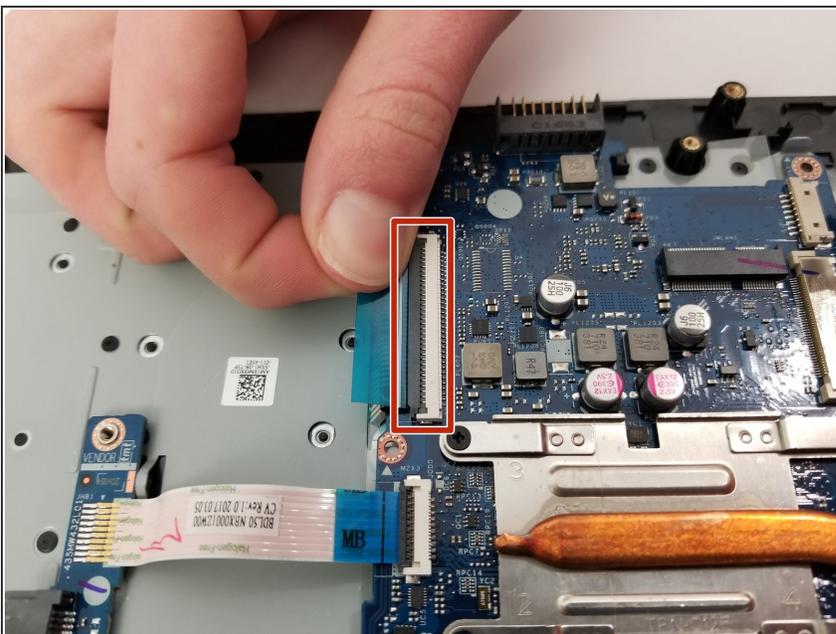
- Unplug the display wire from the wireless adapter.

Step 15



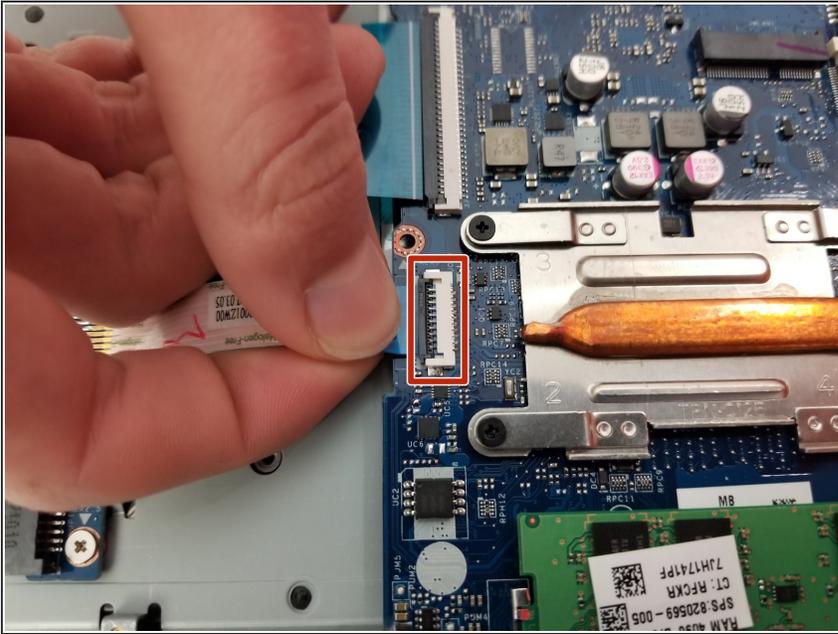
- Remove the single screw from the wireless card and gently remove the drive.

Step 16



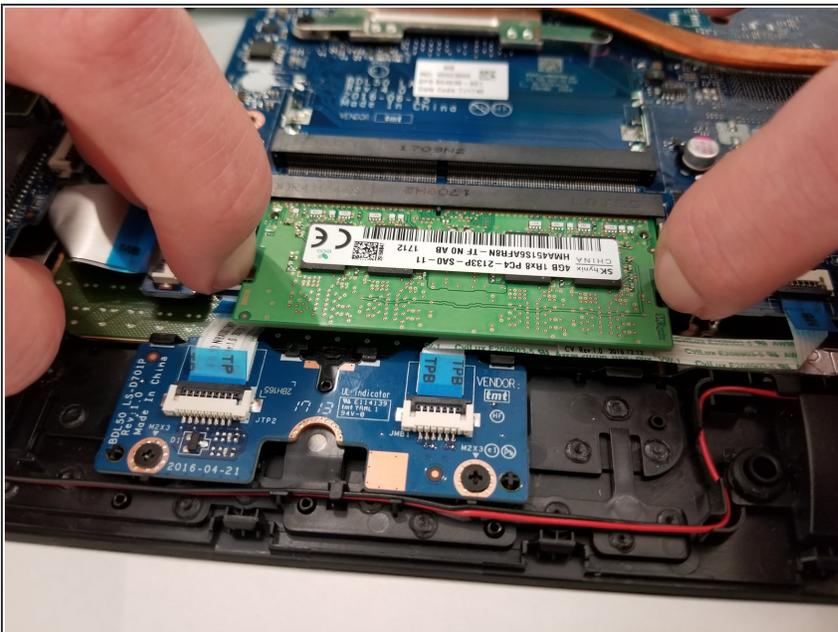
- Unplug the keyboard from the motherboard.

Step 17



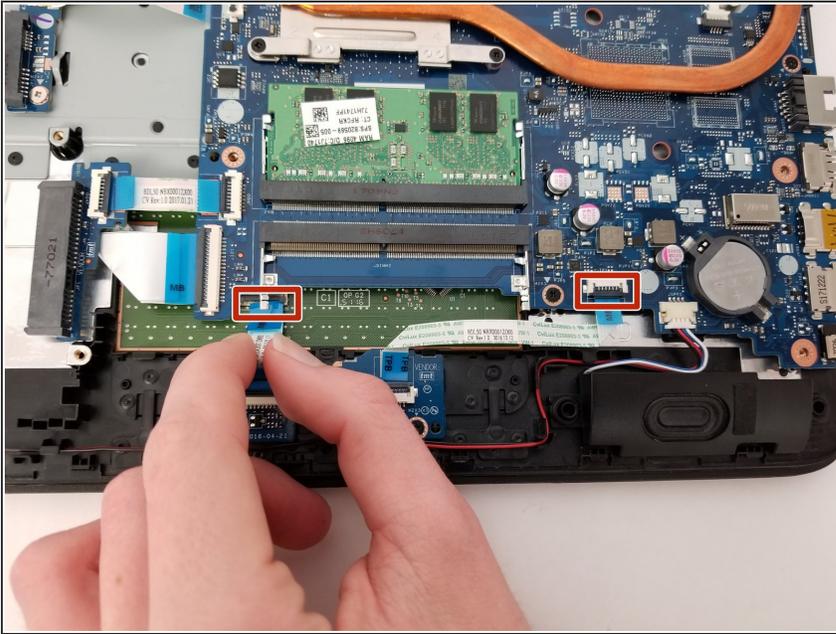
- Unplug the optical drive connection from the motherboard.

Step 18



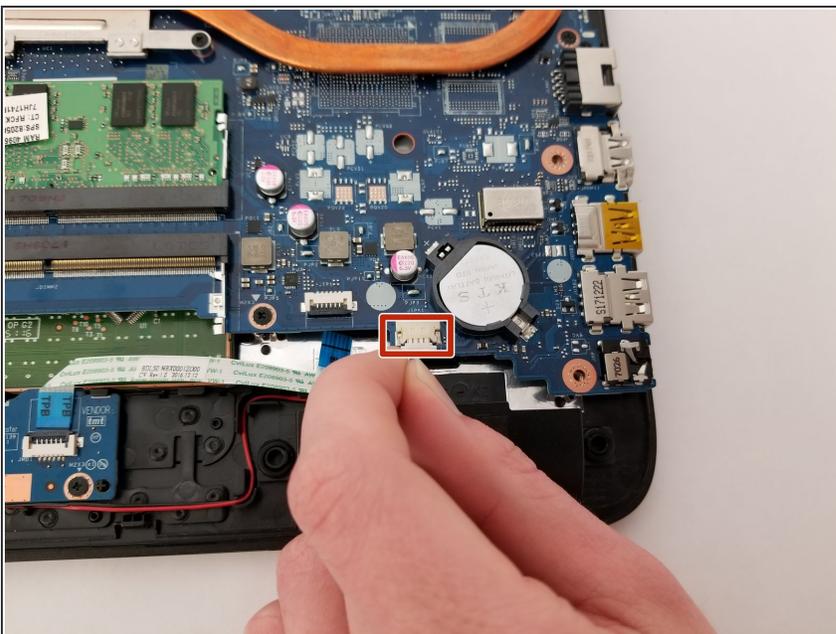
- Remove the memory chip from the motherboard by pushing the clips away from the chip.
- ⓘ The chip will pop out once the clips are pulled far enough apart.
- ⓘ This is to access the touch-pad wires.

Step 19



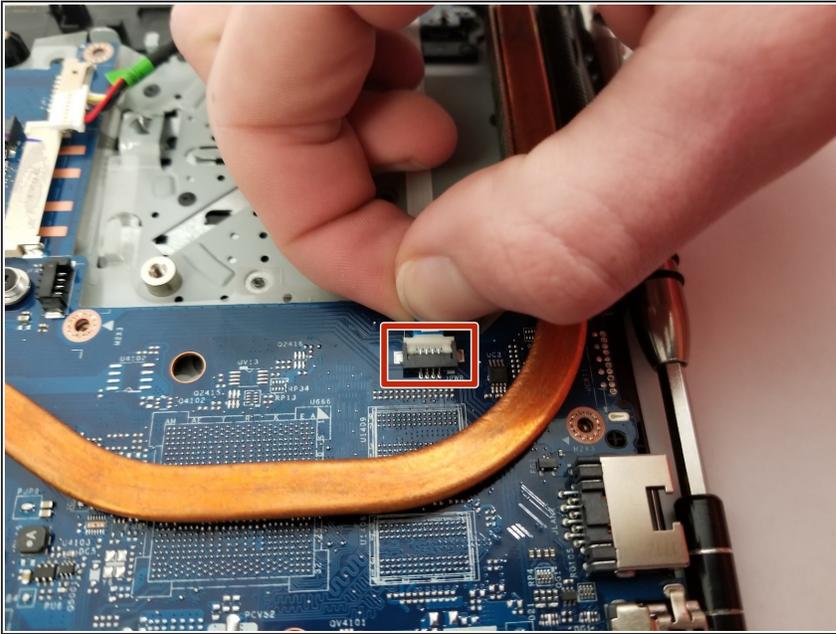
- Unplug both (2) wires for the touchpad from the motherboard.

Step 20



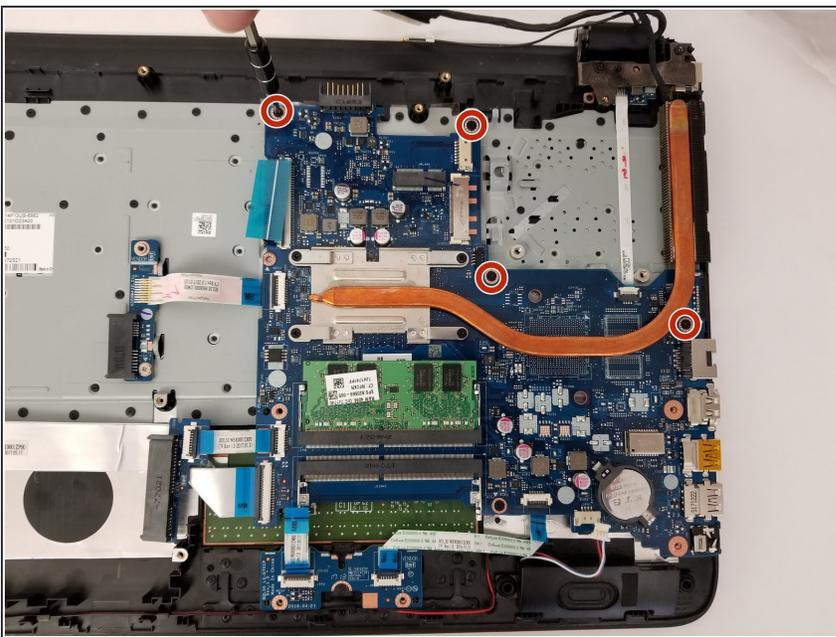
- Unplug the speakers from the motherboard.

Step 21



- Unplug the power button from the motherboard.

Step 22



- Unscrew the four 3mm JIS #0 screws that secure the motherboard.
- ⓘ Once all the screws are removed, the motherboard can be removed by simply lifting it up.

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