



Garmin Vivoactive Motherboard Replacement

Use this guide to replace the motherboard.

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INTRODUCTION

The motherboard is one of the most important components of any electronic device. Damage to the motherboard could result for a variety of reasons. Replacing it may be the best option to get your Vivoactive back to running like new.

The Garmin team did a fantastic job backing a lot of punch into this tiny board, some of the most notable components are:

- GPS and GLONASS antenna
- Bluetooth antenna
- Heartbeat Sensor antenna
- Non-Volatile Flash Memory and RAM

If you're having problems with any of these components, you should consider following this replacement guide for a solution.



TOOLS:

- [Spudger](#) (1)
- [iFixit Opening Picks \(Set of 6\)](#) (1)
- [iOpener](#) (1)
- [iFixit Opening Tool](#) (1)
- [T5 Torx Screwdriver](#) (1)
- [T6 Torx Screwdriver](#) (1)
- [Phillips #00 Screwdriver](#) (1)



PARTS:

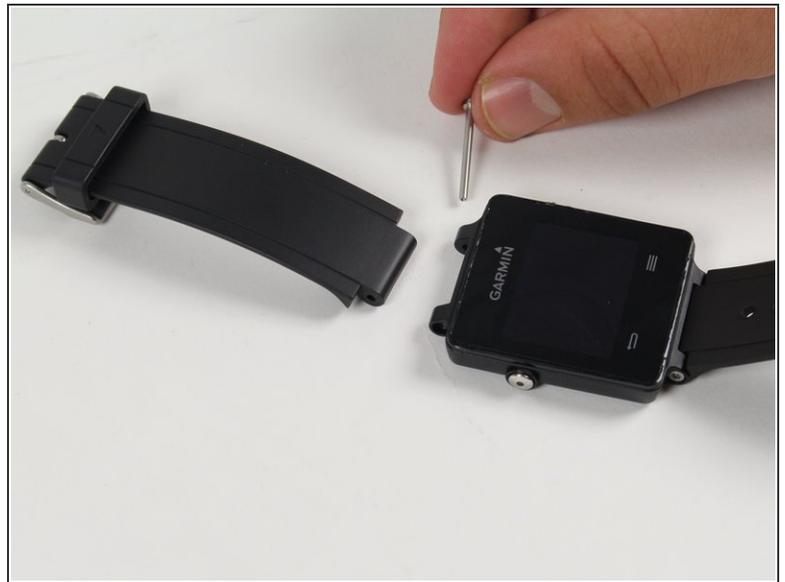
- [Garmin Vivoactive Motherboard](#) (1)

Step 1 — Wristband



- Hold the the metal screwdriver, with a T5 Torx bit, in your dominant hand.
- Hold the rubber screwdriver, with a Hex T6 Torx bit, in your other hand.
- While holding the rubber screwdriver in place, simultaneously unscrew the pin (counterclockwise) with the metal screwdriver in your dominant hand.

Step 2



- Once the 1mm screw is removed, reinsert the metal screwdriver in that same hole.
- Gently push the strap's pin out. It will begin to protrude from the other end.
- Use your fingers to grab the exposed pin and slide it free. The strap should now be disconnected from the device.

Step 3 — Display Unit



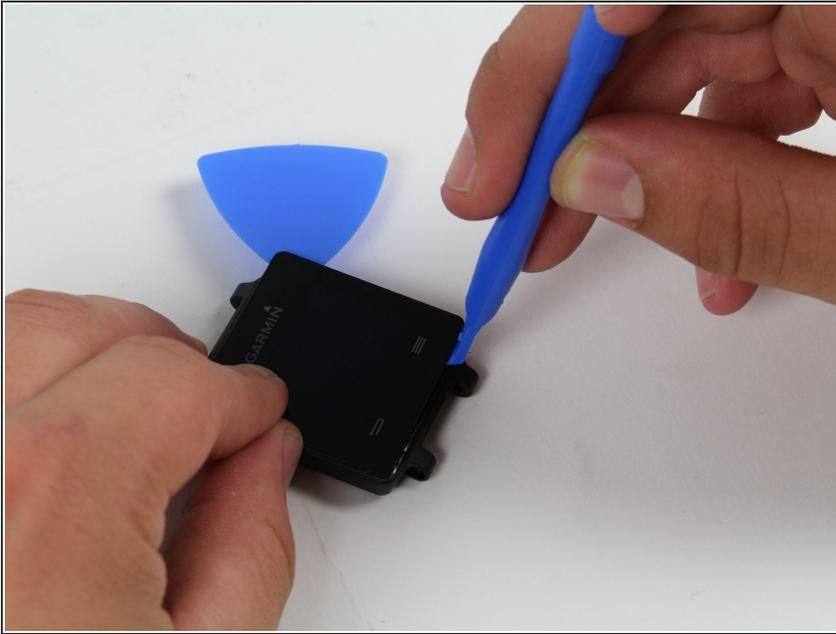
- Place a heated iOpener over the display to loosen the adhesive.
- After about a minute, the iOpener may be removed.
- ⓘ For more in depth instructions on using the iOpener, refer to the [iOpener guide](#).

Step 4



- Place the blue plastic opening tool in-between the screen and plastic casing of the watch and slowly pry up one side of the screen.

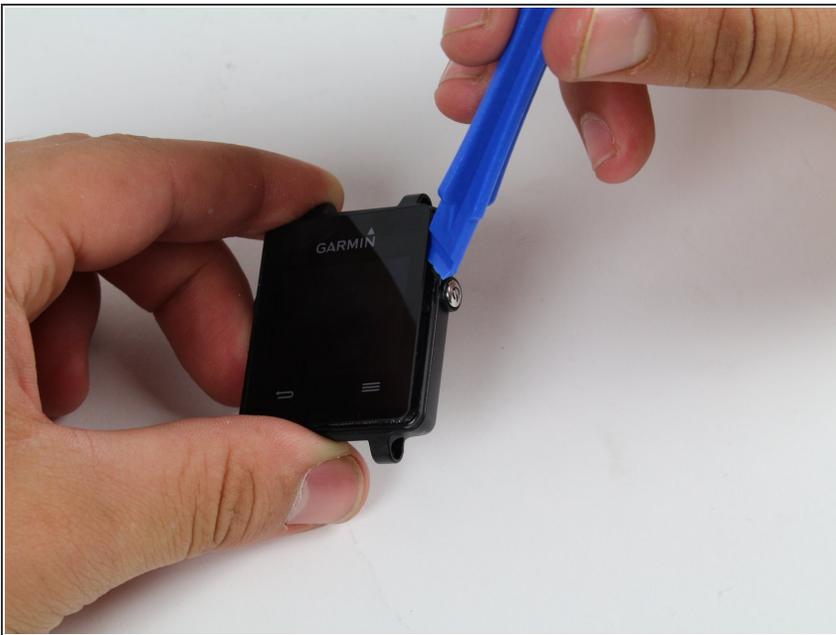
Step 5



- Once the first side has come free, wedge the blue pick in between the screen and watch unit on that side.
- Complete one pass around the perimeter of the screen to break the adhesive bond on all four sides.

⚠ Insert it a minimal distance to avoid damaging internal components.

Step 6



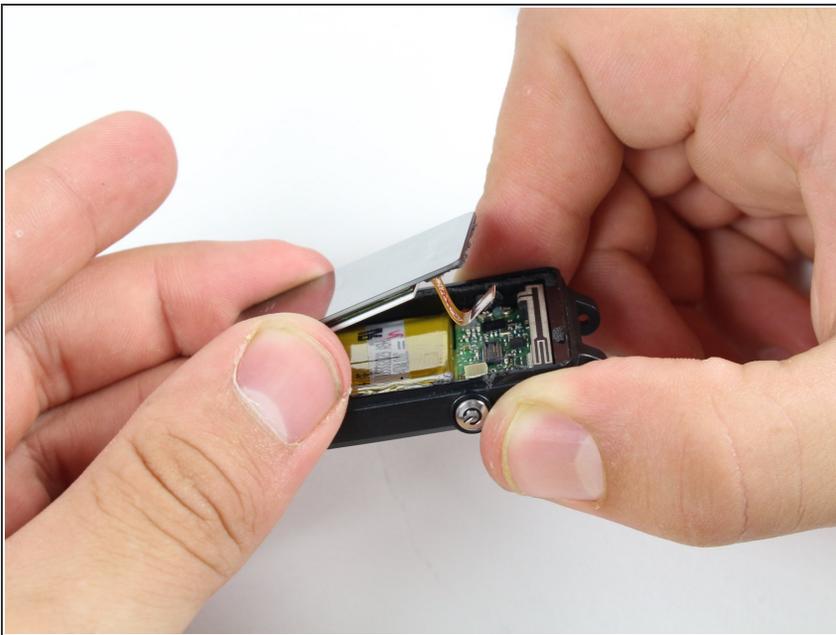
- Use the blue plastic opening tool to pry up the side of the glass. Raise it to a point where your fingernail can fit in the gap.
- Do the same on the opposite side of the device until you have a good grip of the screen.

Step 7



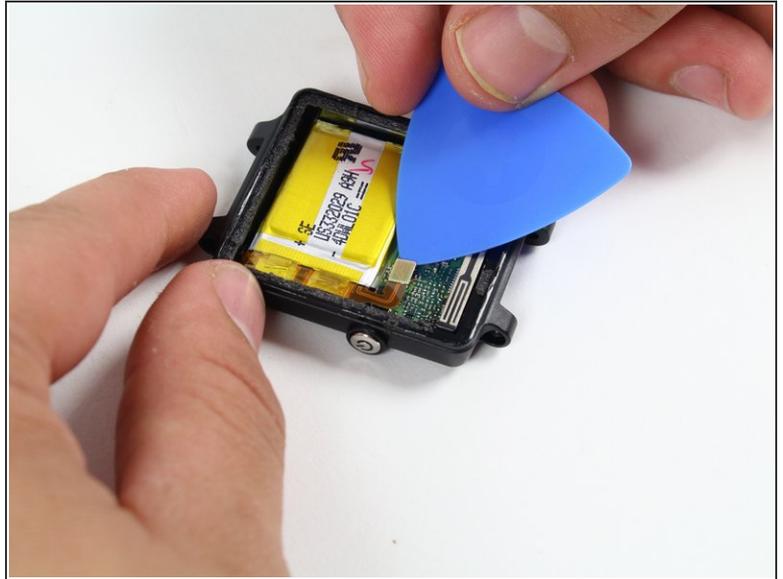
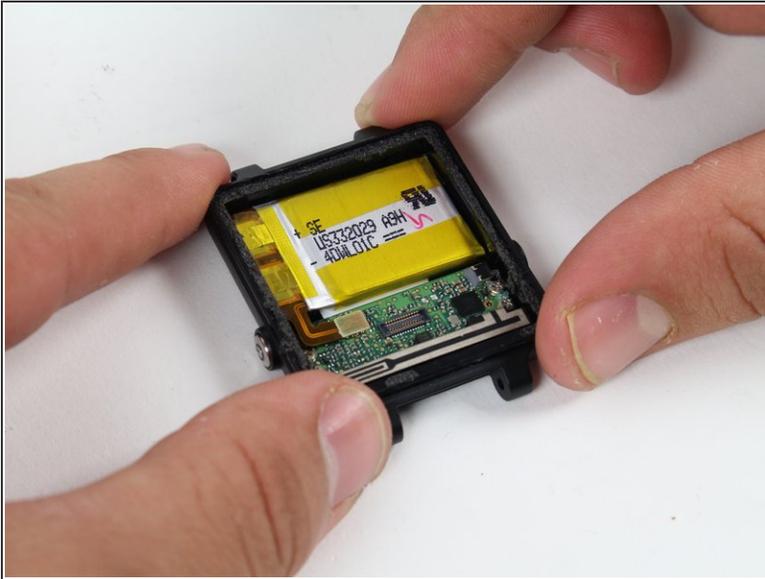
- Obtain a careful grip of the screen from two of its sides.
- Slowly lift the screen off of the case. Separate it just enough so as not to damage the connection to the motherboard.

Step 8



- Detach the orange tab that connects the screen to the motherboard with a gentle uplift using a plastic opening tool.
- Upon completing this step, the screen should be free from the rest of the device.

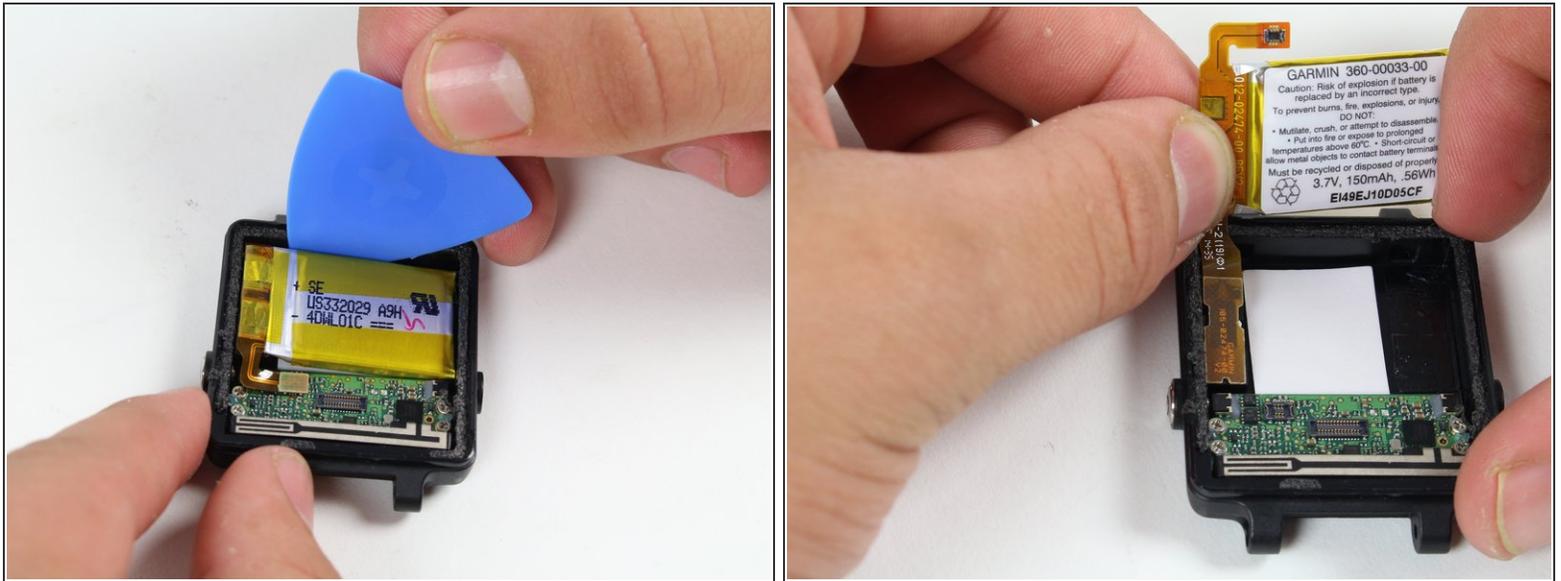
Step 9 — Battery



- Follow previous guides until you've exposed the battery as shown.
- Begin by removing the battery connector tab.

⚠ Be sure not to use a metal implement or your fingers to remove this tab. Doing so may cause personal harm or damage to the electrical components.

Step 10



- Use a plastic opening pick to gently pry out the battery as shown.

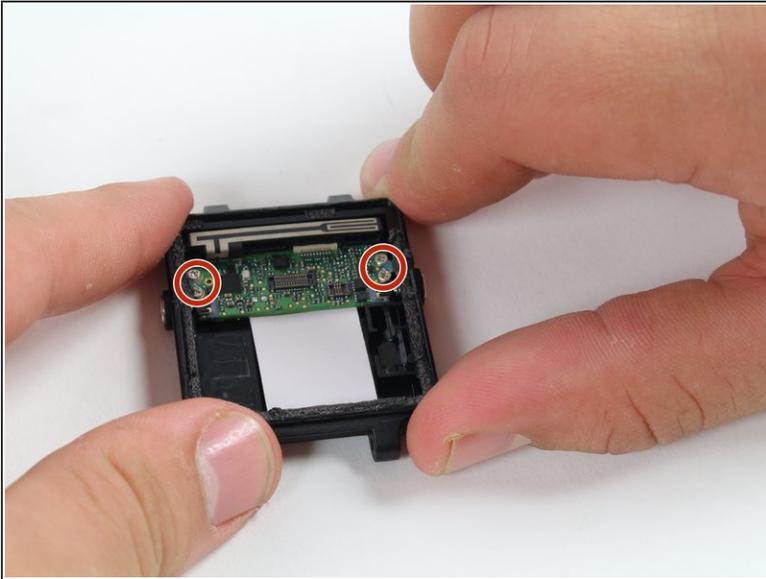
⚠ The battery is Lithium Polymer, follow safe handling procedures and **DO NOT** deform it upon removal.

Step 11



- With the battery loose from the case, rotate it to expose the attached tab
- Gently pry up the attached tab with a fingernail.
- i** Keep the vibrator, circled in red, as you may need to solder it to the new battery upon re-installation later.

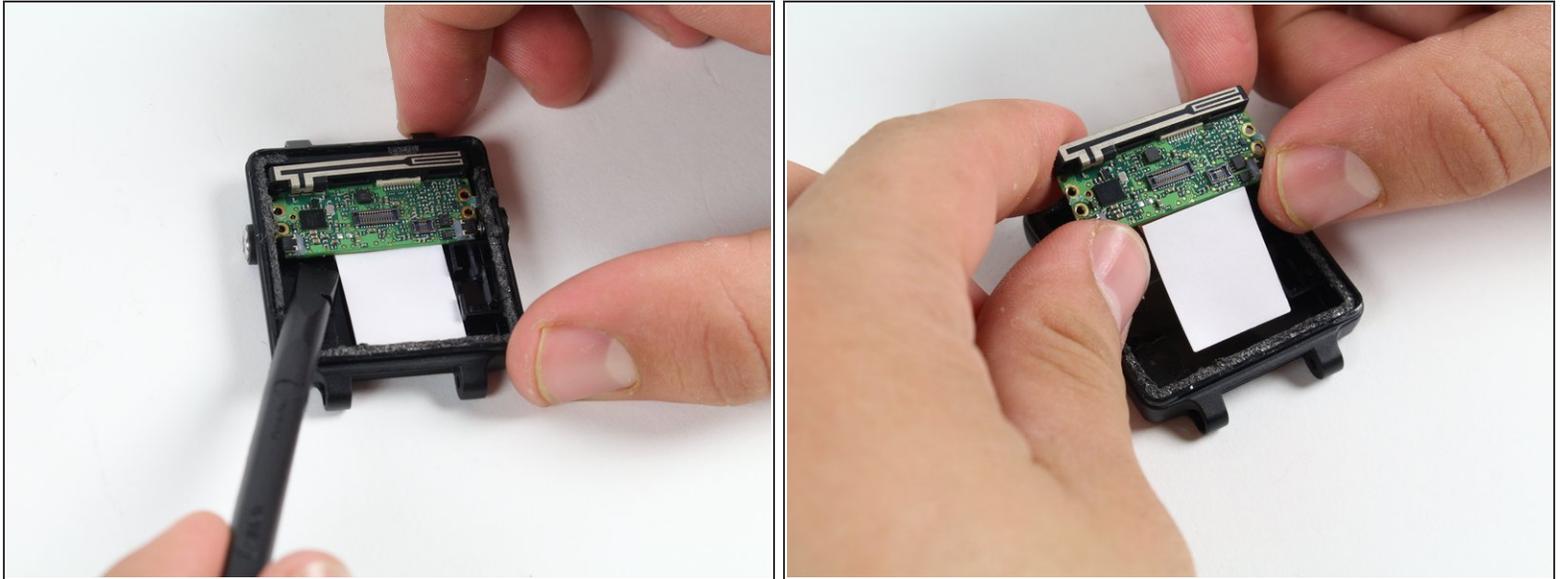
Step 12 — Motherboard



- Remove the four 2.4 mm screws with a PH00 Phillips head screwdriver.

⚠ Make an effort not to damage any nearby components of the motherboard with the screwdriver.

Step 13



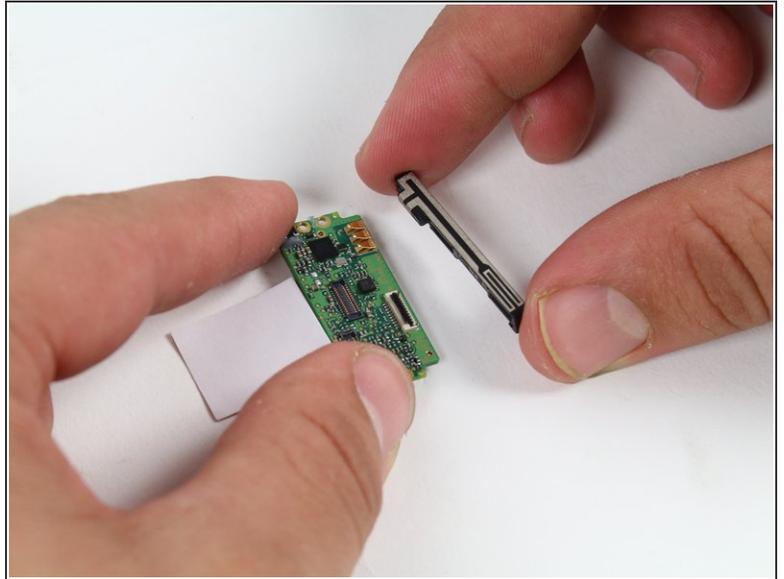
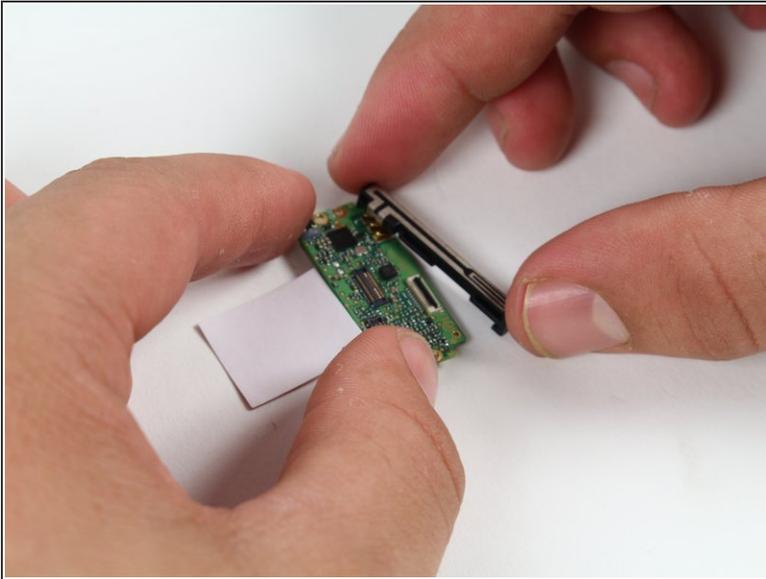
- Use the spudger to pry up the board from the case.

⚠ Insert the spudger a minimum distance beneath the board as there are components below.

- Wiggle the exposed side of the board from each end until it comes free.

⚠ Use proper [electrostatic discharge](#) safety when removing and handling the board.

Step 14



- Remove the GPS antenna by sliding it away from the board.
- ⓘ Keep track of the antenna and add it to the new board upon replacement.

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