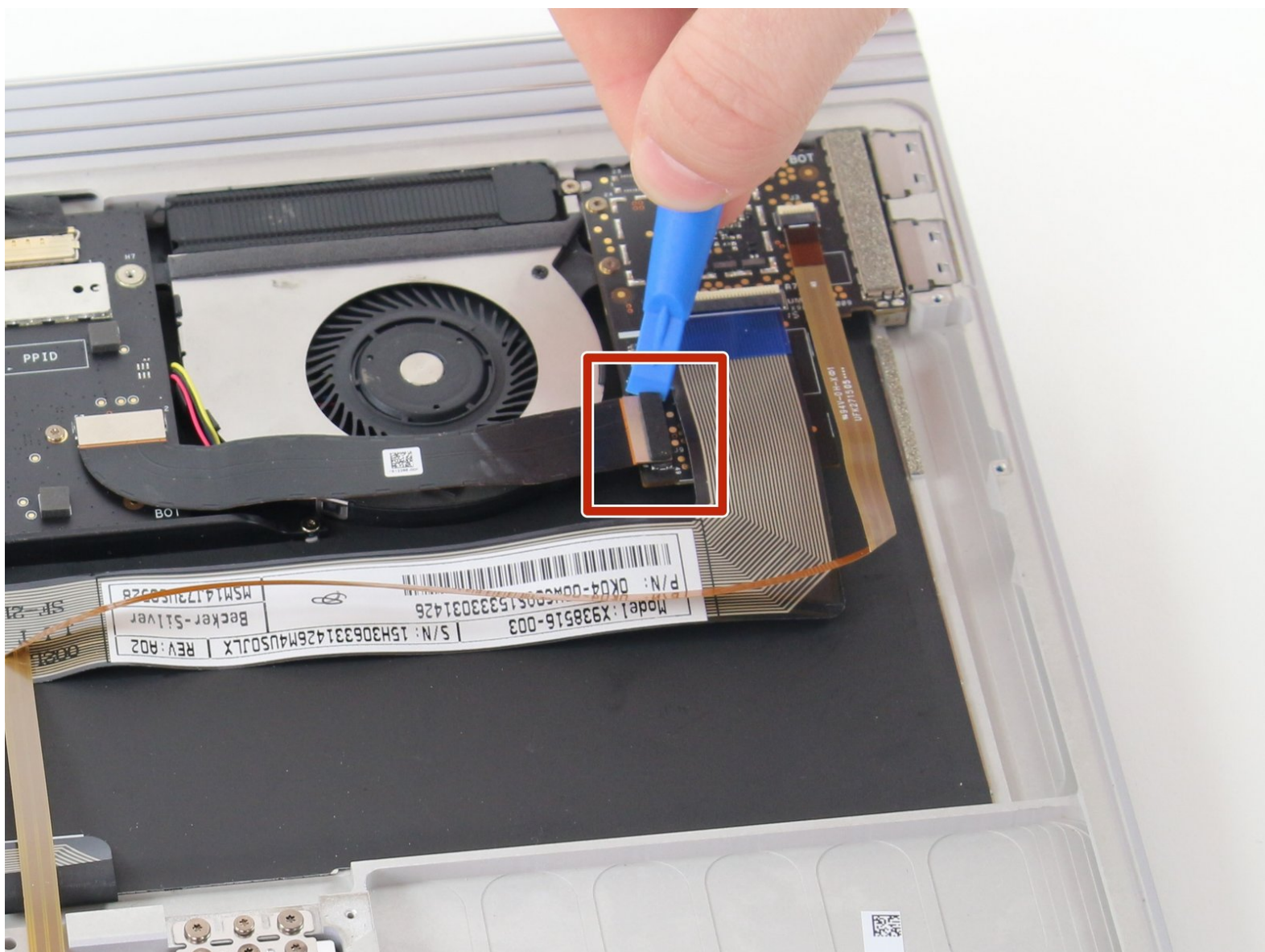




# Microsoft Surface Book Keyboard GPU board Replacement

If you need to replace your GPU board, here is the place.

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## INTRODUCTION

You will learn how to replace/ repair the GPU board. The GPU board is home to the Nvidia N16S-LG Custom GeForce GPU as well as 1GB worth of RAM. This is the major connections component of the keyboard; it hooks everything together and makes it all work. This guide will require the removal of the SD card slot, USB ports, and the GPU board. Make sure you have a place to store all the tiny screws you will be removing.



### TOOLS:

- [iFixit Opening Tools](#) (1)
  - [T3 Torx Screwdriver](#) (1)
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## Step 1 — Back Panel



- Flip the keyboard over so you can see the back panel.

## Step 2



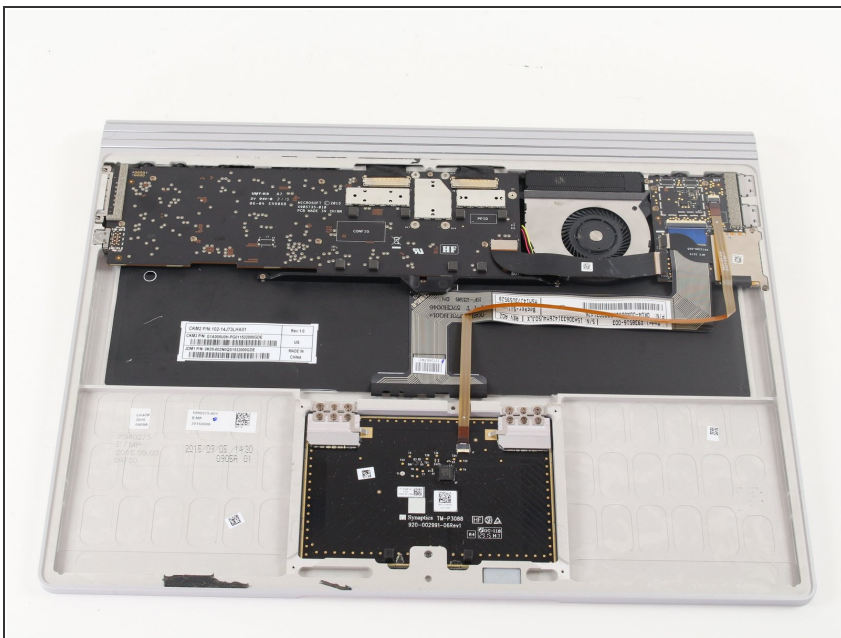
- Insert the plastic opening tool in the crevice between the panel and the keyboard.
- Apply some pressure and lift up so that the back panel is pried away from the keyboard.
- ⓘ The panel is glued down on the inside so this may require some force to lift away the panel.
- Continue to lift until the panel is completely separated from the keyboard.
- ⓘ The panel is still attached to the keyboard by a ribbon cable so only lift the panel a few inches.

## Step 3



- Lift the panel away with the ribbon cable still attached and set aside the panel so that you can work on other components.

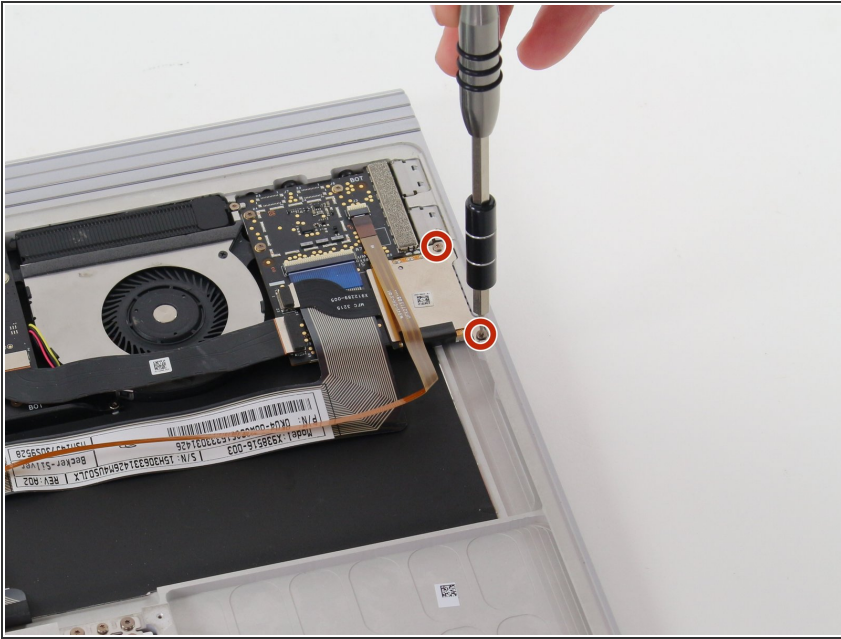
## Step 4 — SD Card Reader



- Orient your keyboard with the internals facing up and the USB ports on the right.

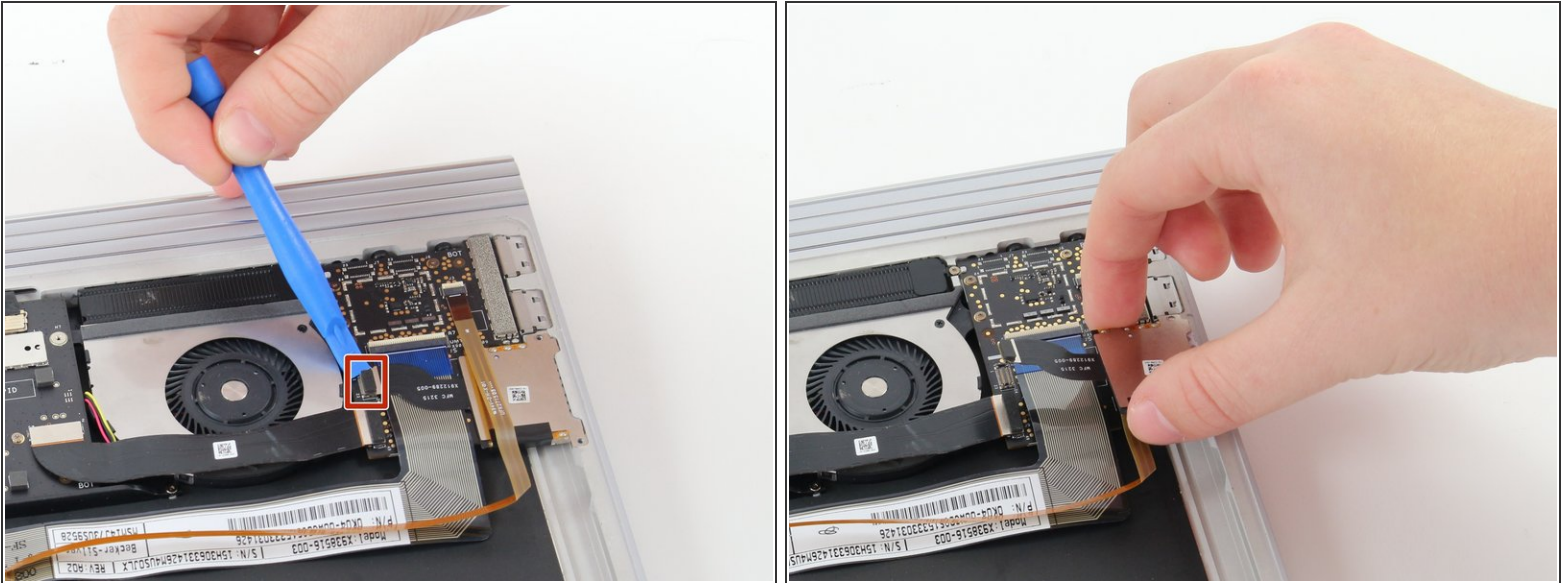


## Step 5



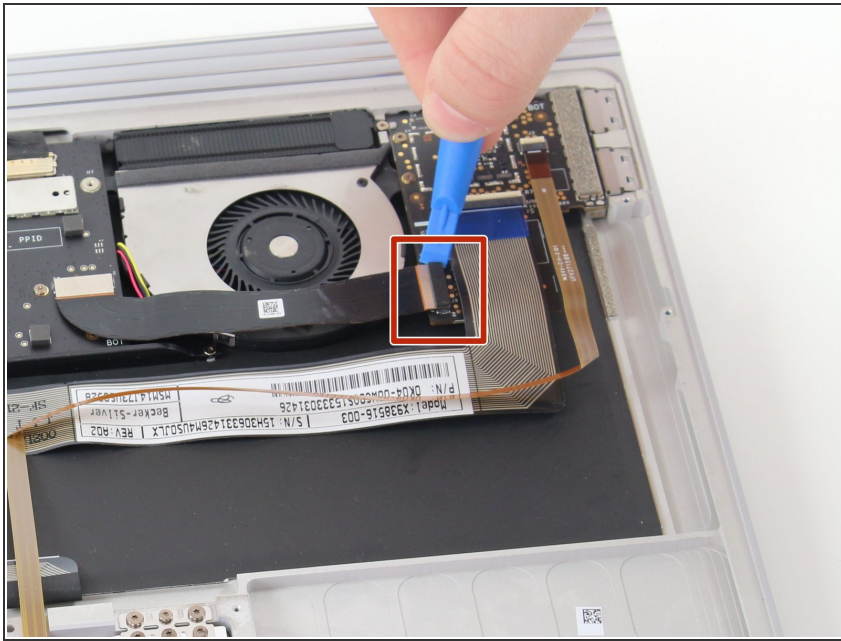
- Use the T3 screwdriver to remove the two 4 mm screws on the right side of the SD Card Reader.

## Step 6



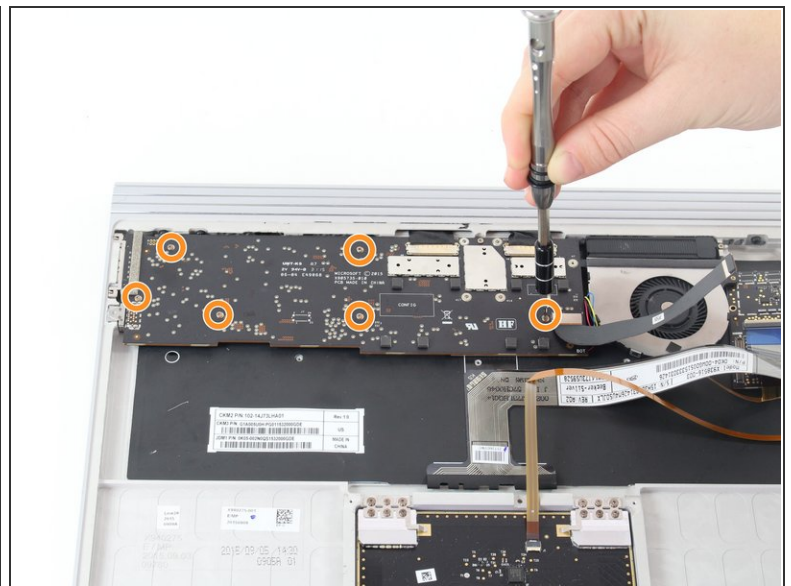
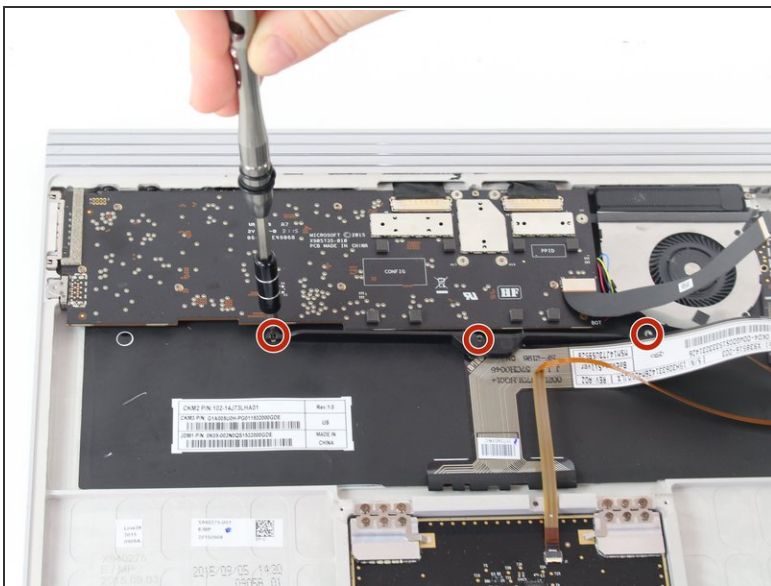
- Remove the black ribbon cable tab on the SD card reader from the chip with a plastic opening tool. Place the tool underneath the tab and pry it off.
- ⓘ Removing this tab can be a little difficult. Be sure that you have a good angle and do not get discouraged if removing the tab takes you multiple tries.
- Lift the SD card reader away from the keyboard to replace it.

## Step 7 — GPU board



- Remove the larger, black ribbon cable located on the USB card with a plastic opening tool by lifting the tab away from its connector. Again, place the tool underneath the tab and pry it off.
- ⓘ This may require some force. Do not get discouraged if it does not detach on the first try.

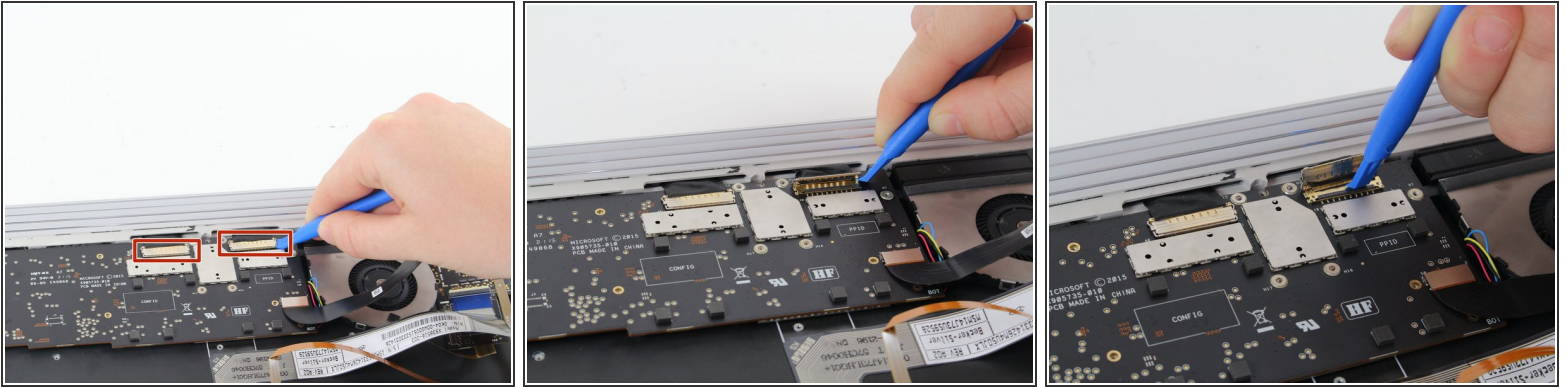
## Step 8



- Use the T3 screwdriver to remove three 4 mm screws located on the black bar towards the bottom of the board.
- Use the T3 Torx Screwdriver to remove the remaining six 4 mm screws.



## Step 9



- Lift both clamps with the blue plastic opening tool. Place the tool underneath the clamps and pry them open.
- Use the plastic opening tool to slide ribbon cable toward the wall of the keyboard until the ribbon cables come loose.

## Step 10



- Wiggle the the GPU board out away from the keyboard.
- ⓘ This may require some force to remove.

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