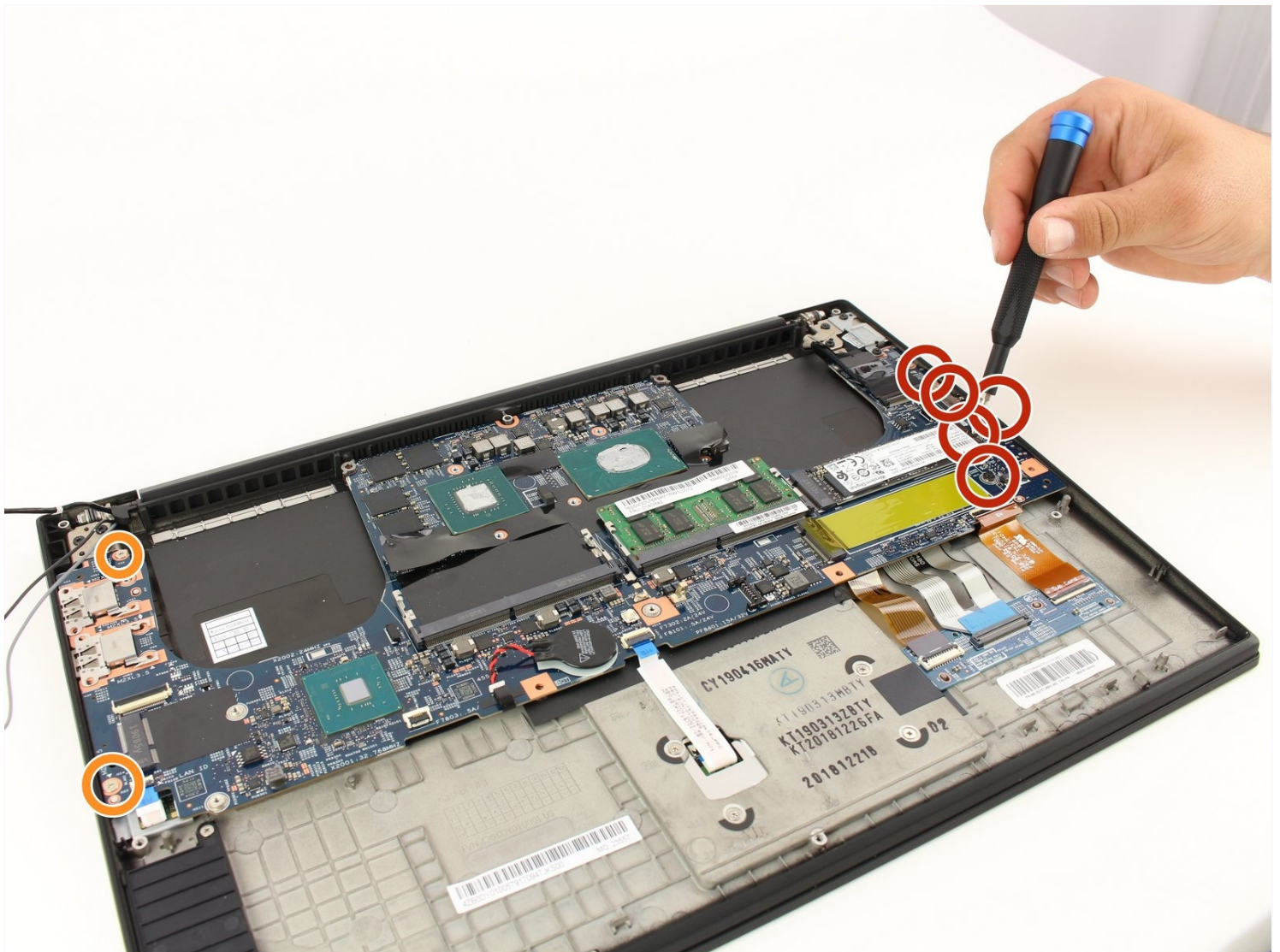




# Lenovo ThinkPad X1 Extreme Motherboard Replacement

With so many components playing a role to make...

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# INTRODUCTION

With so many components playing a role to make a computer function, it's important for the components to be able to communicate with each other. The motherboard acts as the central hub of communication for all components in a device. If you find that your computer is acting slow, struggling to load, or displays the blue screen of death (BSOD), your motherboard may be faulty. Follow these instructions to replace the motherboard in your device.

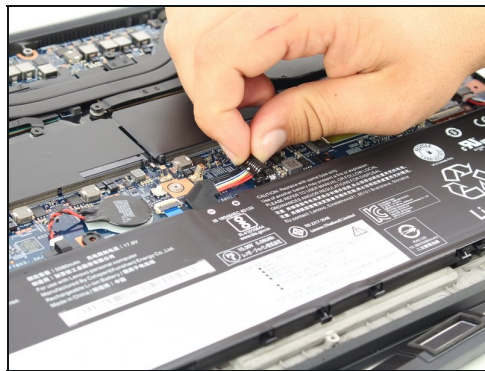
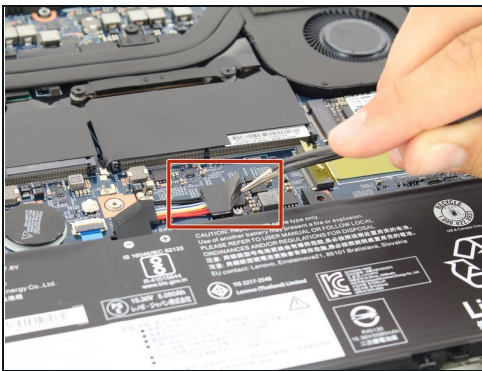
## TOOLS:

[iFixit Opening Picks \(Set of 6\)](#) (1)  
[Phillips #00 Screwdriver](#) (1)  
[Tweezers](#) (1)  
[iFixit Precision 4 mm Screwdriver Bit](#) (1)

## PARTS:

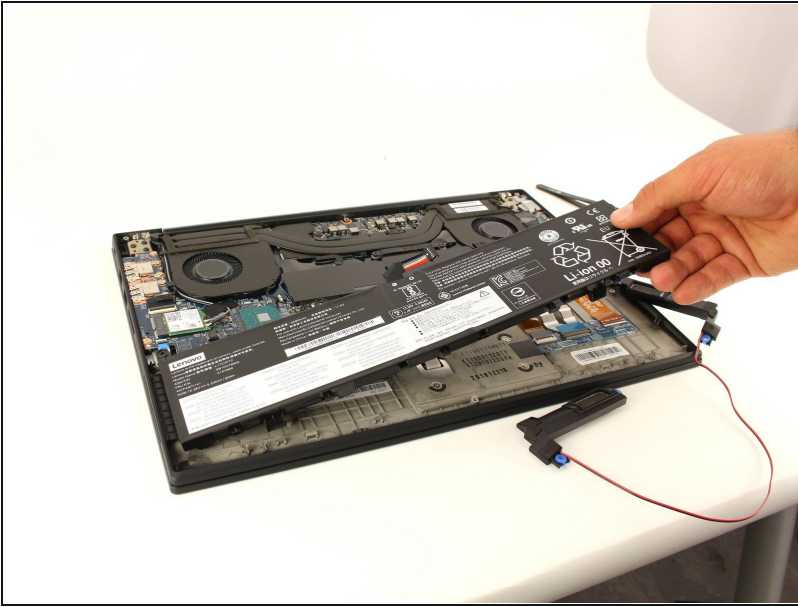
[01YU945 - Lenovo Laptop Motherboard - Genuine](#) (1)

## Step 1 — Battery



- Use tweezers to peel the plastic cover off the connector.
- Use a spudger or your fingernail to pry up the battery straight up from the motherboard.

## Step 2



- Lift the battery out of the frame and remove it from the device.

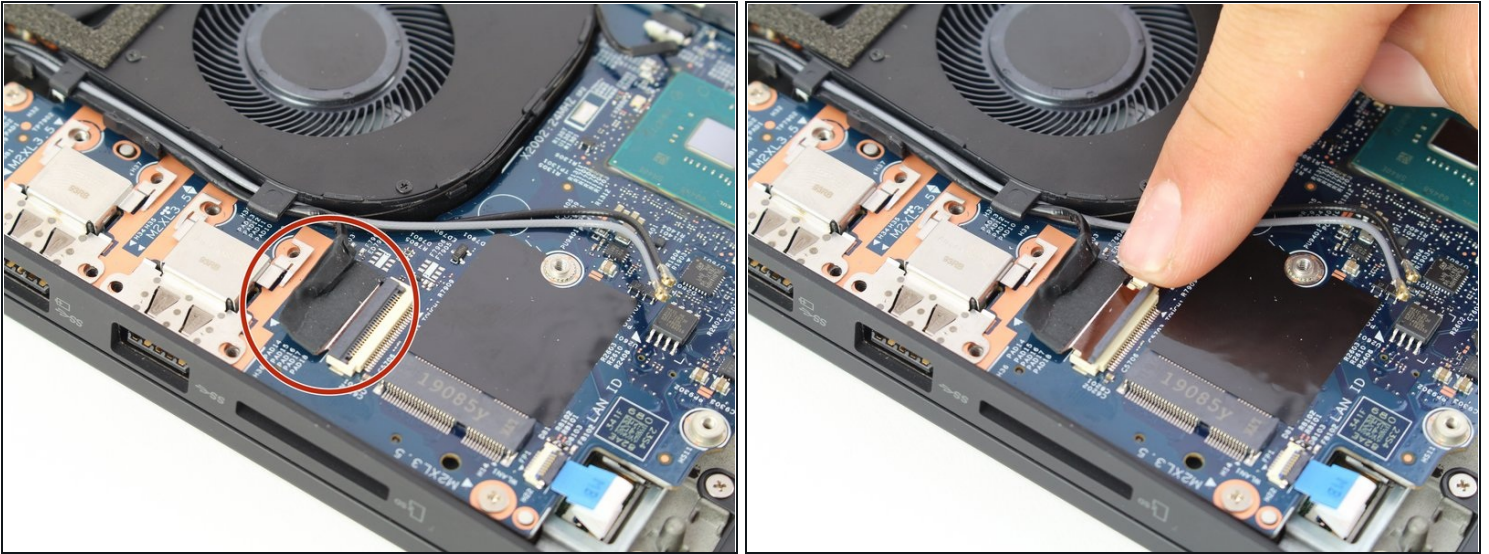
## Step 3 — Fan



- Unscrew the 3mm screw holding down the wireless adapter using a Phillips #00 screwdriver.
- Slide the adapter out of its connector.
- Detach the black and gray cables and separate them from the frame of the fan by gently pulling upwards.

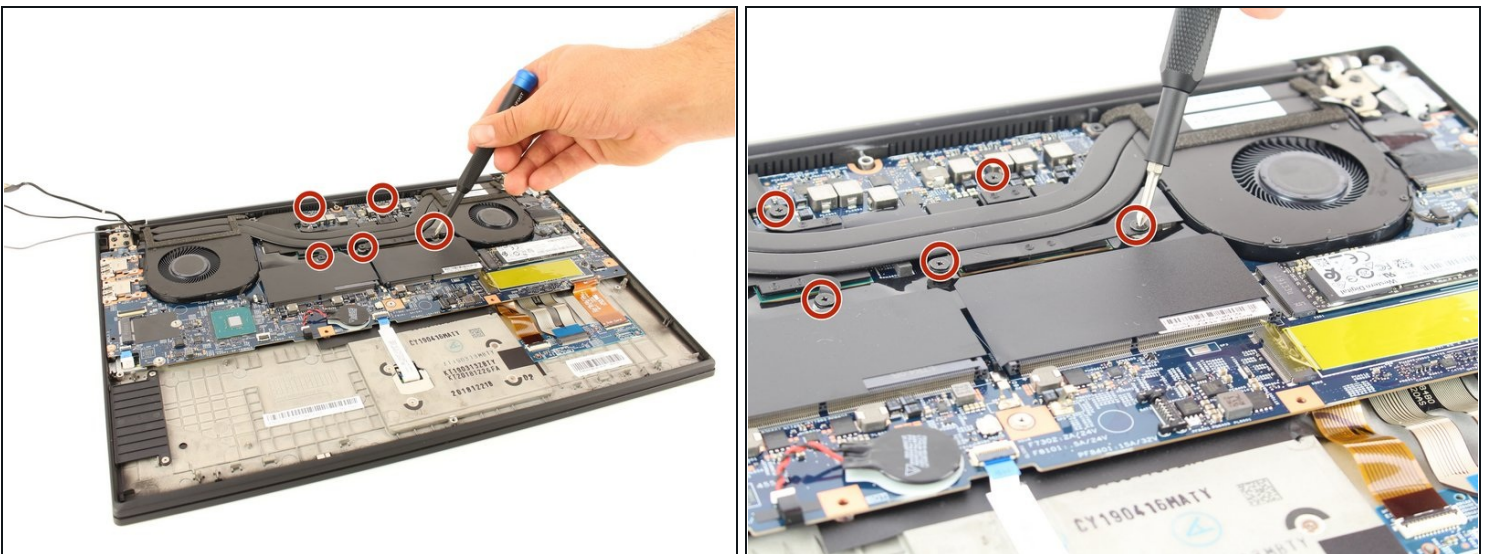


## Step 4



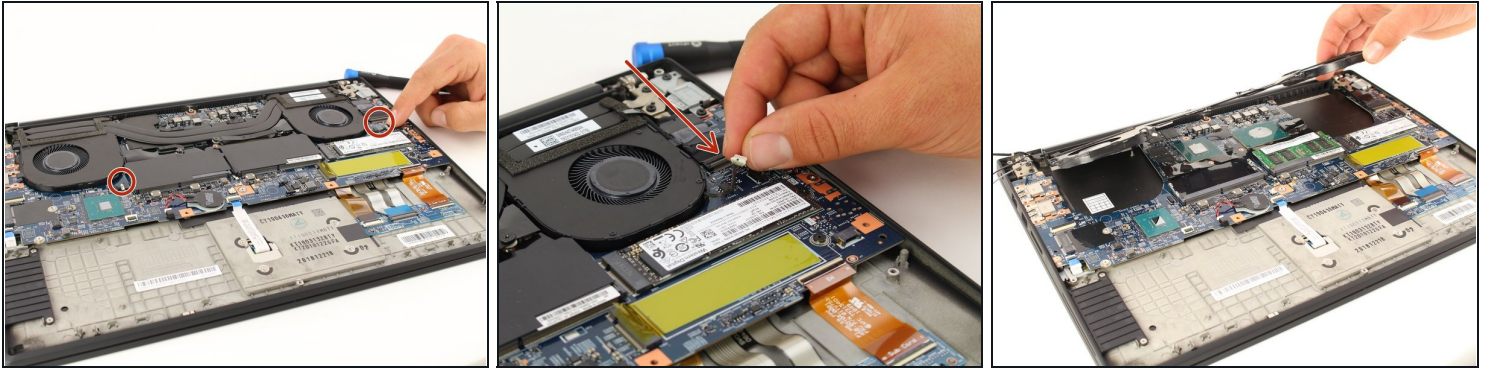
- Unlatch and remove the cable connecting to the frame of the fan by flipping the thin black tab up.
- Separate the cable from the frame of the fan.

## Step 5



- Loosen the five screws connecting the fan to the motherboard using a Philips #00 head screwdriver.
- ① These screws will not come out and will stay connected to the fan.

## Step 6



- Gently disconnect the two cables located on right and left side of the fan.
- ① To identify these, they are labeled "FANR1" and FANL2" on the motherboard.
- Lift the fan up and out and remove it from the device.

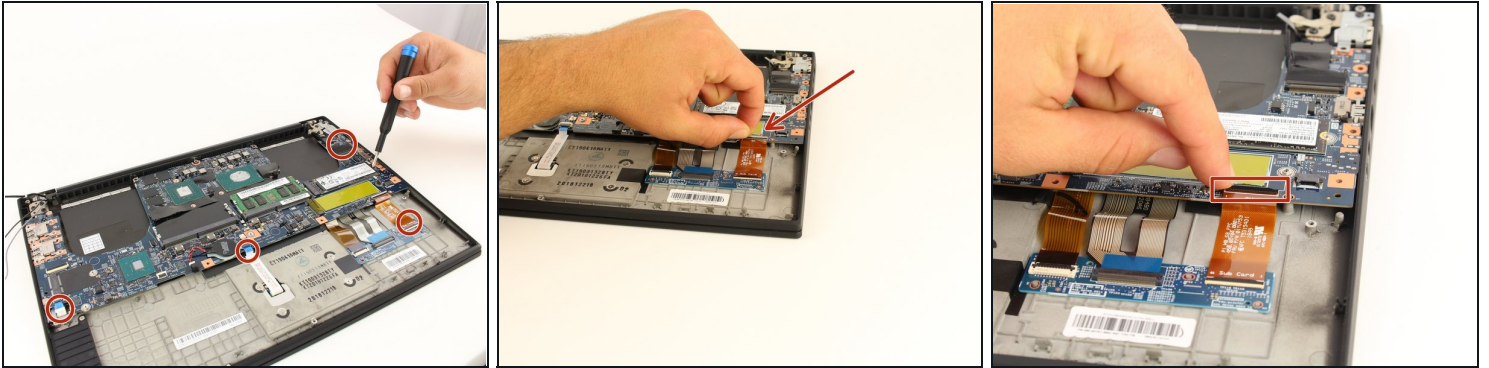
## Step 7 — Motherboard



- Use a Phillips #00 screwdriver to remove the five 4 mm screws below the charging port.
- Use a Phillips #00 screwdriver to remove the two 3 mm screws.
- Use a Phillips #00 screwdriver to remove the two 5 mm screws securing a silver plate on the charging port, in the top-right.
- Remove the silver plate on top of the charging port.



## Step 8



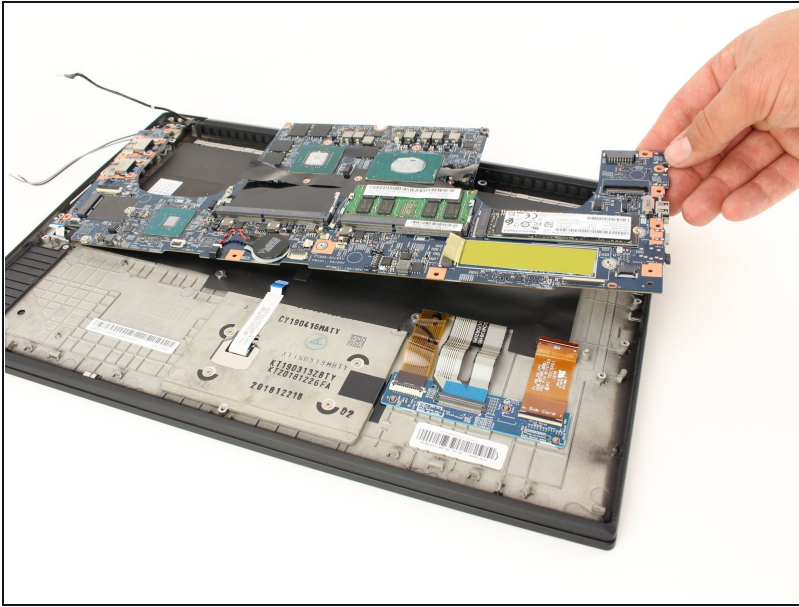
- Disconnect all the ribbon wires from the motherboard.
- All ribbon wires can be disconnected by flipping up the thin black tab at their connection points, and pulling the ribbon out.

## Step 9



- Disconnect the black attachment at the top right corner of the motherboard.
- Insert the SIM eject bit into the small hole on the top and apply a small amount of pressure to release the clip.
- While maintaining pressure, gently pull on the wire that is connected to it to remove it.

## Step 10



- Gently lift the motherboard out of the computer.

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