



Sony VAIO PCG-71811M Heat Sink Replacement

the laptop was shutting down after a few moments. the rotating plastic wheel of the cooler was broken after a fall. also the screen was broken but we will not see this in this guide. (screen was already gone before i started this guide.)

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INTRODUCTION

hello all , i will show you how to replace/ fix the CPU cooler. for this we will pull the laptop apart.
enjoy.



TOOLS:

- [Arctic Silver Thermal Paste](#) (1)
- [Metal Spudger](#) (1)
- [iSesamo Opening Tool](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [Phillips #000 Screwdriver](#) (1)



PARTS:

- [cpu cooler for an sony vaio pcg 71811m](#) (1)

Step 1 — Heat Sink



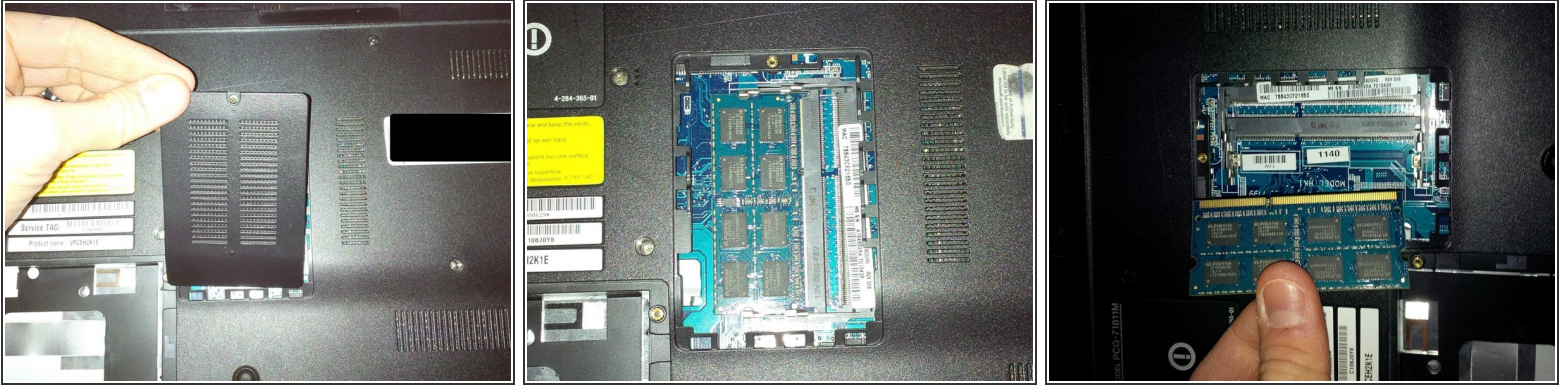
- like you see the screen is already removed.
 - close the lid and turn the device around.
 - remove the battery.
- ☒ before we will remove all the screws and other parts : like always , make a plan , scetch the laptop , tape the screws to the map you draw. Or use a magentic project map.

Step 2



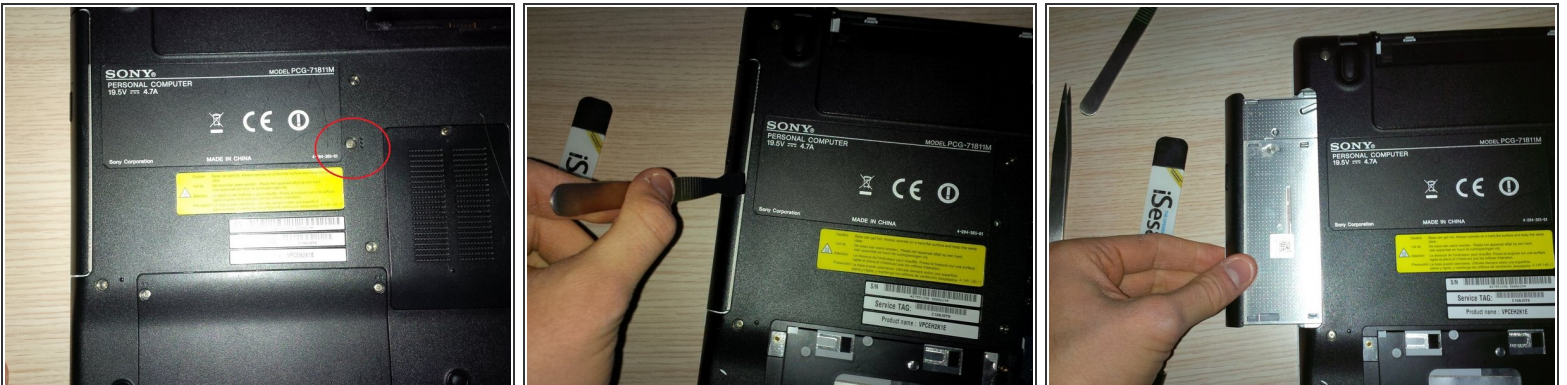
- remove the 2 screws of the HDD compartment
- slide the plastic plate towards you and put it aside.
- now you see the HDD. you can remove the HDD by pulling the plastic clip to the left.

Step 3



- now we will remove the RAM.
- remove the plastic plate.
- remove the RAM module.

Step 4



- In this step we will remove the DVD/rw player.
- remove the screw (in the black plastic you'll see 3 dots in a row) i made a red circckle around it.
- after removing the screw you can remove the DVD , using a spudger and slide it to the left.

Step 5



- now we will remove the other screws of the laptop.
- ☞ again: make (or draw) a plan , so afterwards it's easier to put the laptop together.
- first the bottom...

Step 6



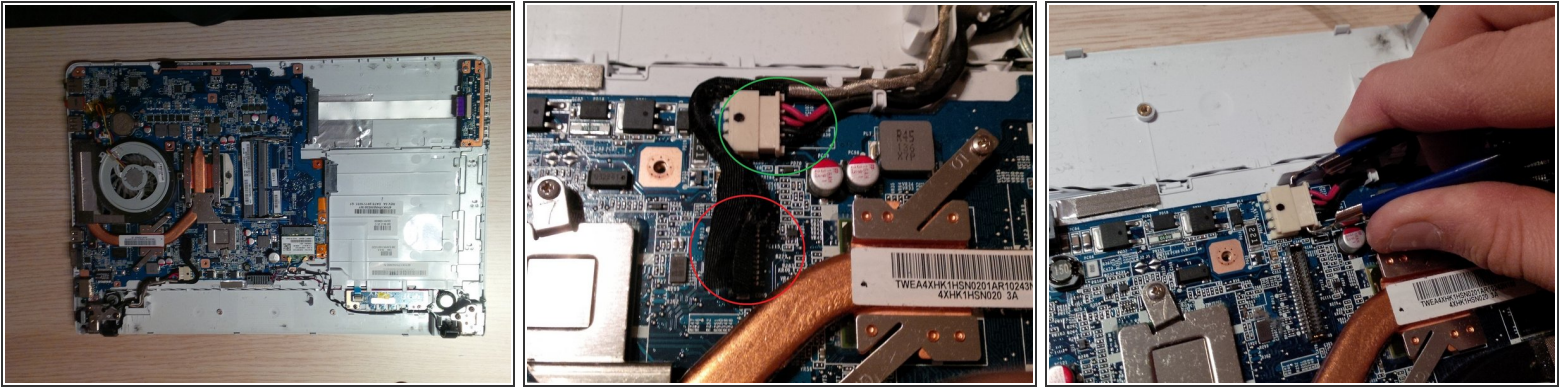
- now the other sides of the laptop.
- remove all the screws
- don't forget the 2 black screws in the battery compartment.

Step 7



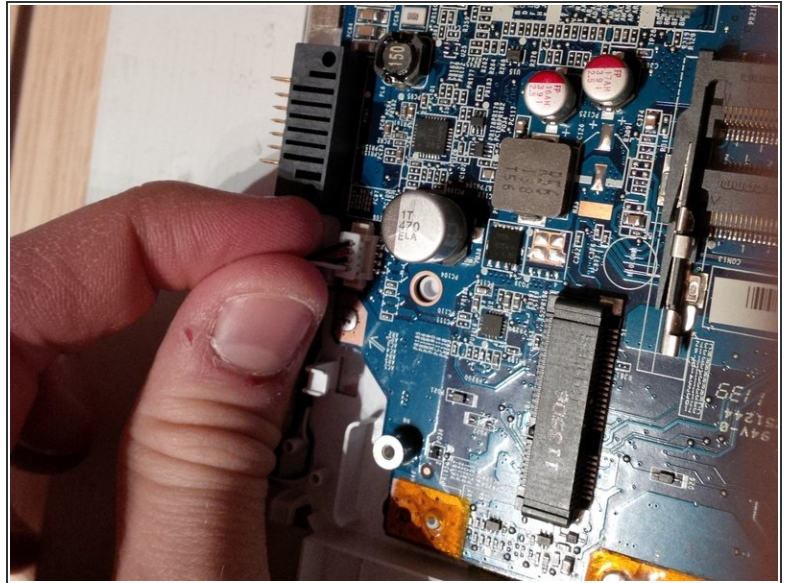
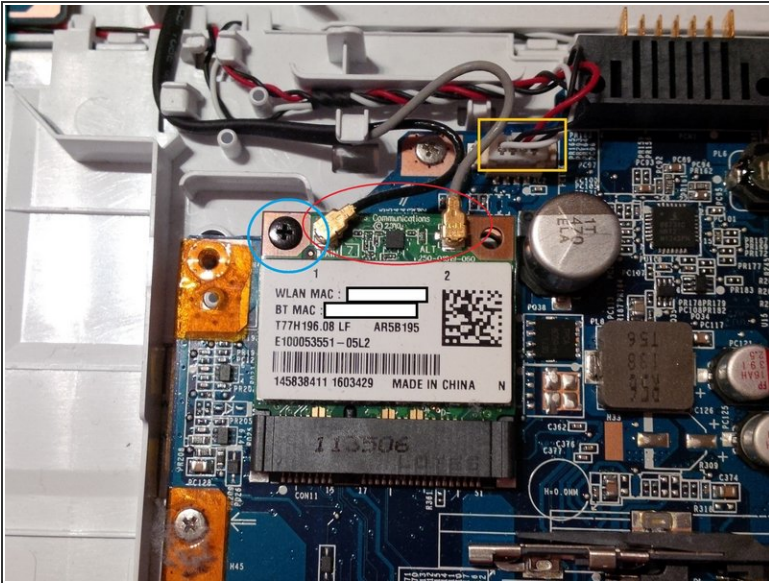
- now, after removing all the screws, we will open the bottom plate of the laptop.
- use a spudger, or a spudger and the isesamo, to open the laptop. but be careful
- ⚠ slide the spudger/isesamo, you will hear clicks ...
- then, gently pull the bottomplate towards you. see picture 3

Step 8



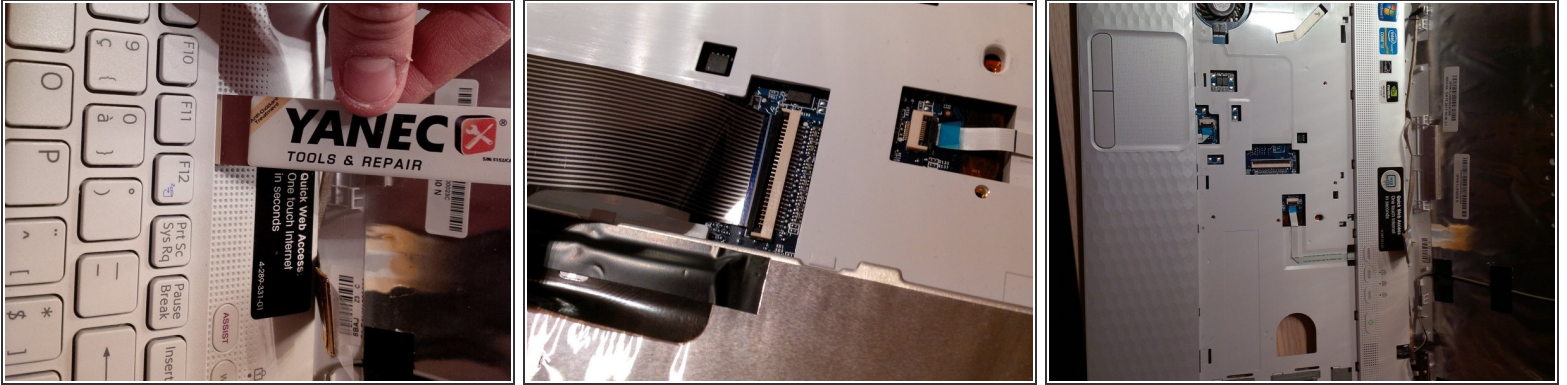
- after removing the bottomplate you'll see the motherboard or mainboard (in Belgium and the Netherlands we call it a motherboard.)
- we will remove the connectors and cable's from the mainboard.
- 2th picture : in green you'll see the DC jack power connector. gently remove it.
- in the same picture you see the screen connector (in red) gently remove it.
- i used a special tweezer to remove the DC jack power cable connector. like you see in the 3th picture.

Step 9



- now we will remove the wifi PCIe card and the cable's , together with the audio cable connector.
- first remove the grey and black cable (antenna's) use just a flat screwdriver or spudger or... (it will just click off..) circled in red.
- now remove the black screw , if you unscrew it, the pci e card will come towards you.
- remove the card by pulling it out.
- remove the audio cable's connector. i used a dentist picking tool. you can use a thick tweezer or a nose pliers (small one).

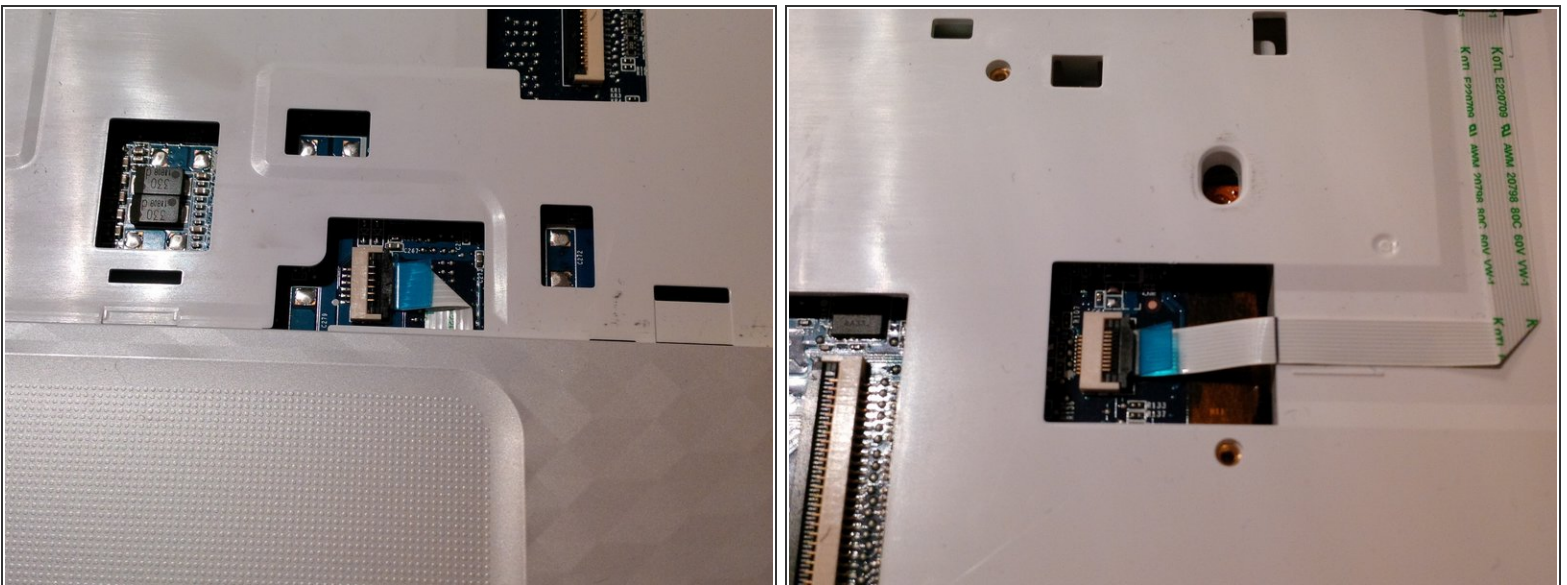
Step 10



- in this step we will remove the keyboard and the connector.
- first use the isesamo to remove the keyboard by pulling it towards you ..
- gently loosen up the connector. I use a dental picking tool to click the plastic holder up and then gently remove the cable.

⚠ the plastic clip (holder) is removable .. so watch out you dont loose it.

Step 11



- now remove (gently) the other connectors of the mousepad and the poweboard (PCB)
- as i said earlier, use a dental pick to loose the plastic holder of the connector.

Step 12

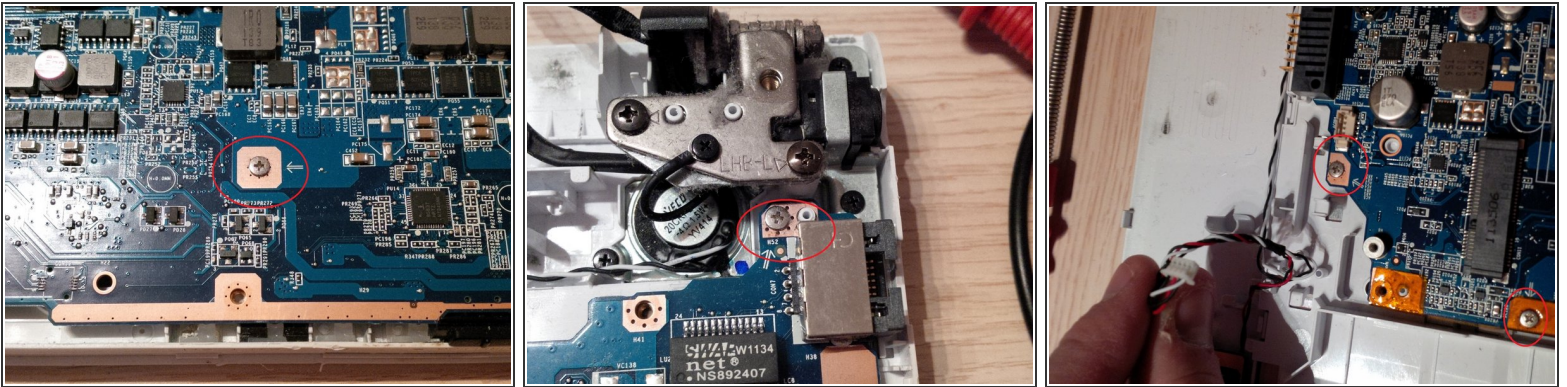


- now we will remove the last cable, before removing the mainboard or motherboard.

⚠ be carefull when removing the cable , its attached tot the plastic. gently pry the cable away of the plastic.

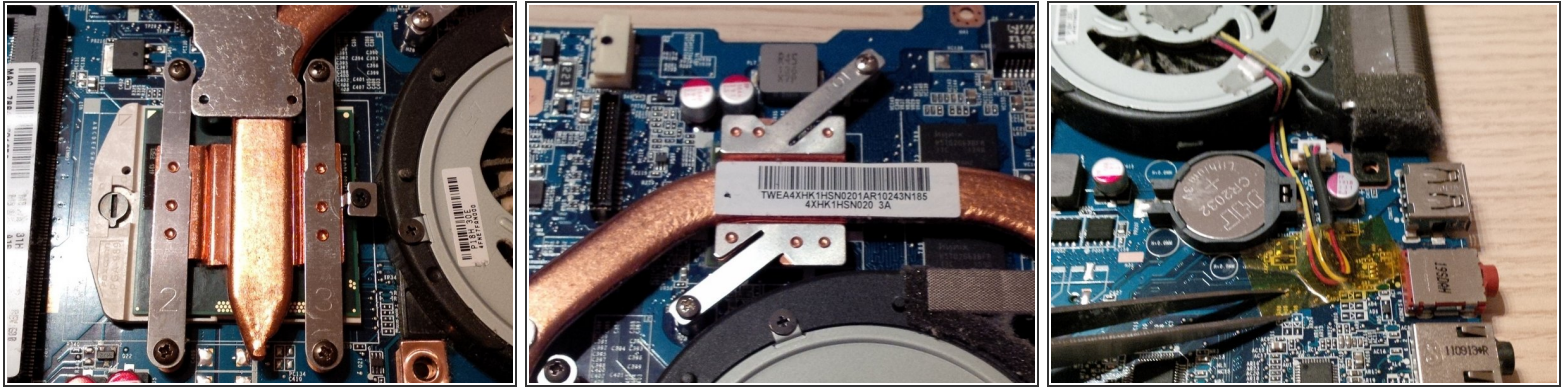
- remove the cable from the connector.

Step 13



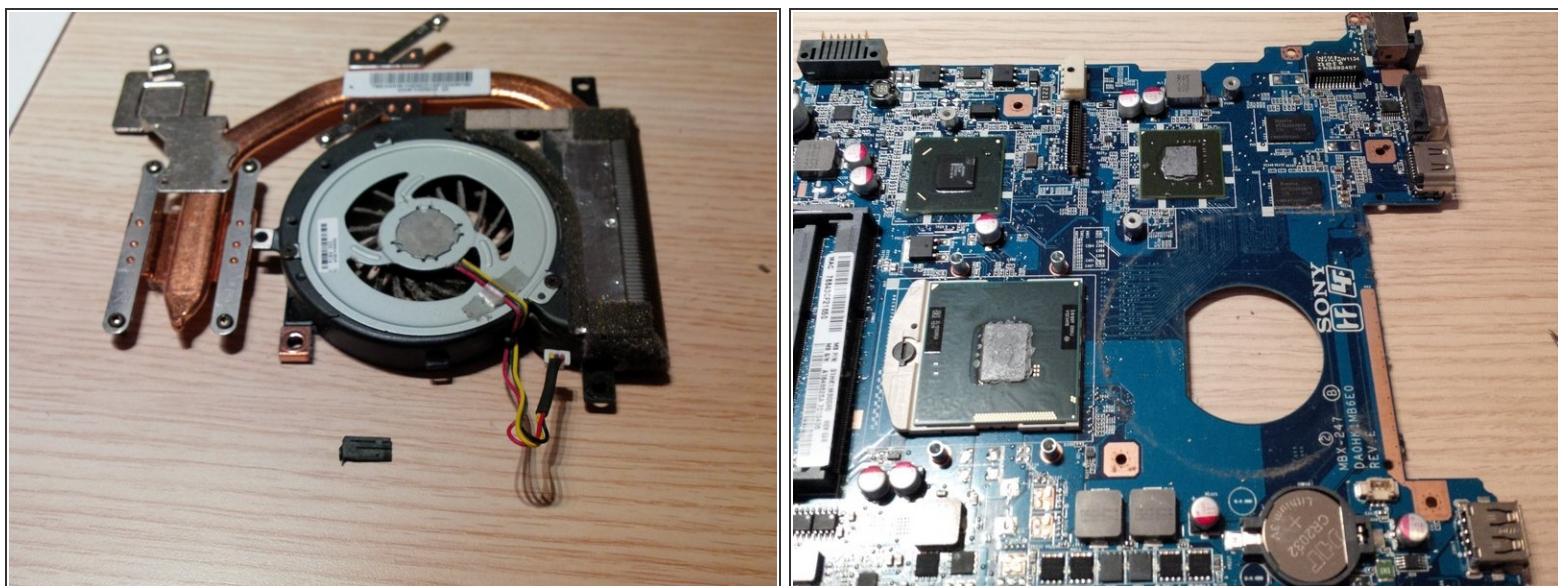
- now we can remove the mainboard.
- first remove the screws. as shown in the 3 pictures.
- take the mainboard out and put it apart.
- in the next step we will work with the mainboard, so put al the plastic at the side.

Step 14



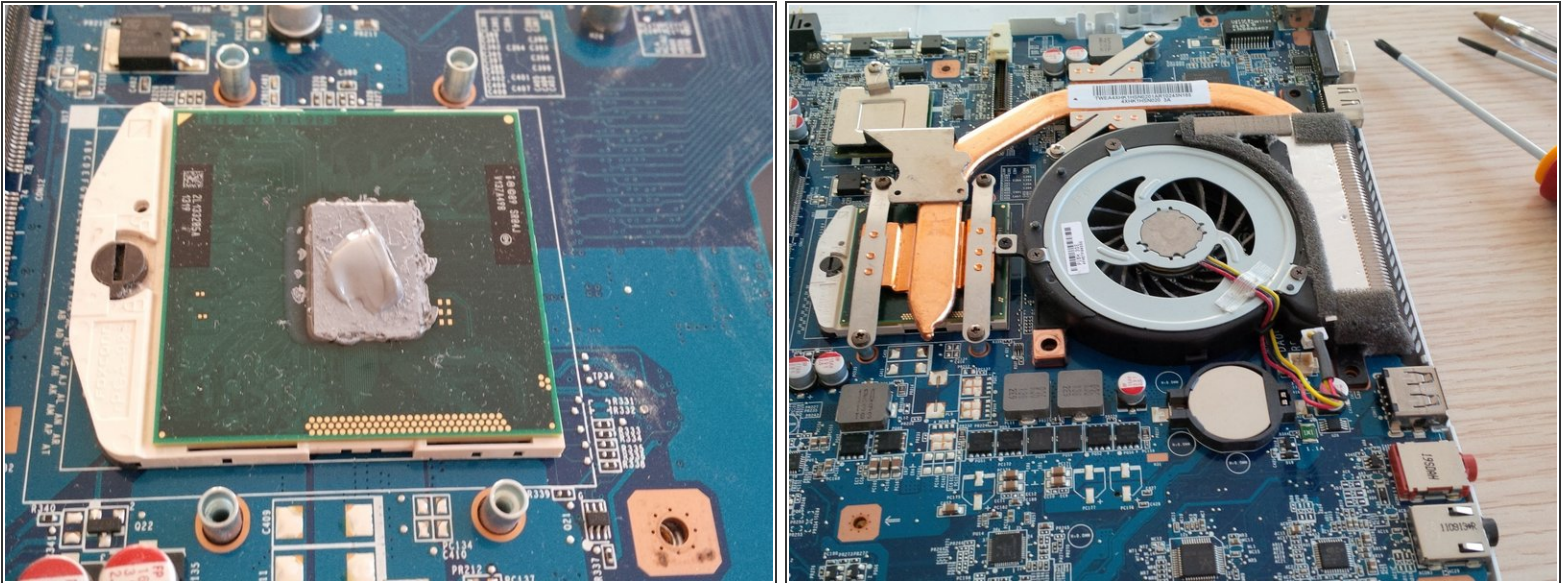
- in this step we will remove the CPU cooler.
- remove all the screws as shown in the picture.
- ⓘ only remove the screws of the collar , not the fan. (yet)
- remove the yellow tape on the wires and mainboard.
- unplug the connector, and remove the CPU cooler from the mainboard.

Step 15



- after removing the CPU cooler, use a power duster (air duster) to blow the dust out of the cooler.
- my CPU cooler was broke (a little plastic piece broke off...) so the computer was always rebooting cause the cpu could not cool down. (you will see the plastic piece in the first picture.)

Step 16



- put some new liquid thermal paste on the CPU.
- put the new cpu cooler on the mainboard and put everything together again.

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