

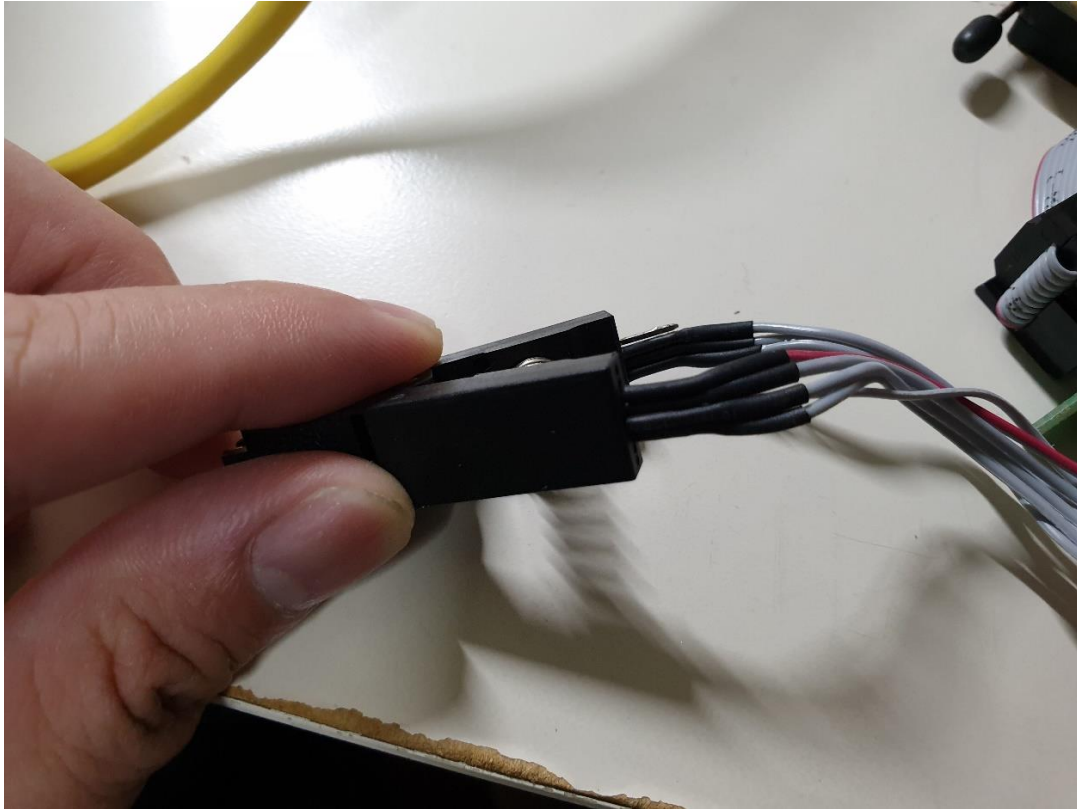
Guide by xy.tech

LVDS patch by again, Whitelist By OX, AdvancedMenu By leokim

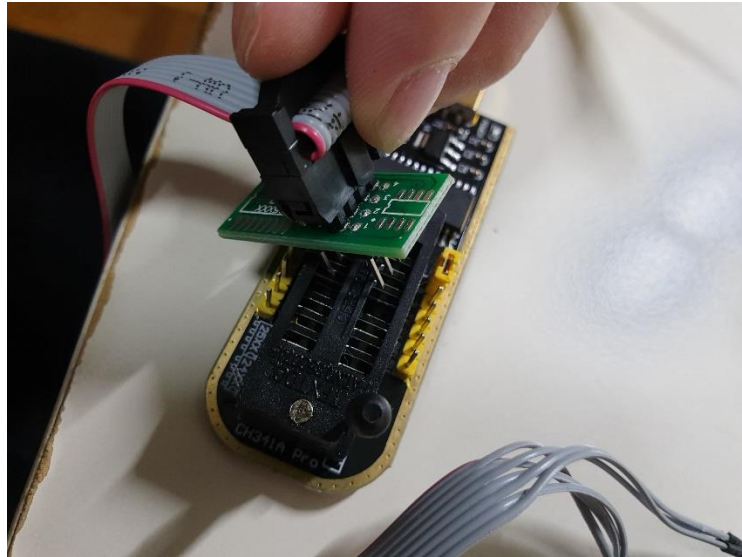
Guide on how to use the CH341a (gold) with 3.3v power built-in

Download the CH341a programmer and install the driver. The programmer should say connected if the driver is correctly installed.

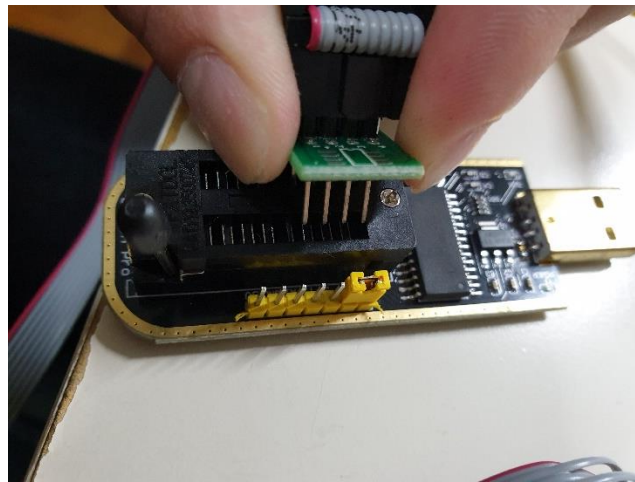
Setup the clip as shown below:



Cut off the wire opposite the red cable (this is to remove the power 3.3v from the programmer as the BIOS chip will be powered by the programmer itself).



Insert the clip into the green PCB in any orientation as the PCB pins are directly attached to the clip.



Insert the clip into the USB programmer as shown. The clip will occupy the pins aligned to the right hand side.



The clip should look like this

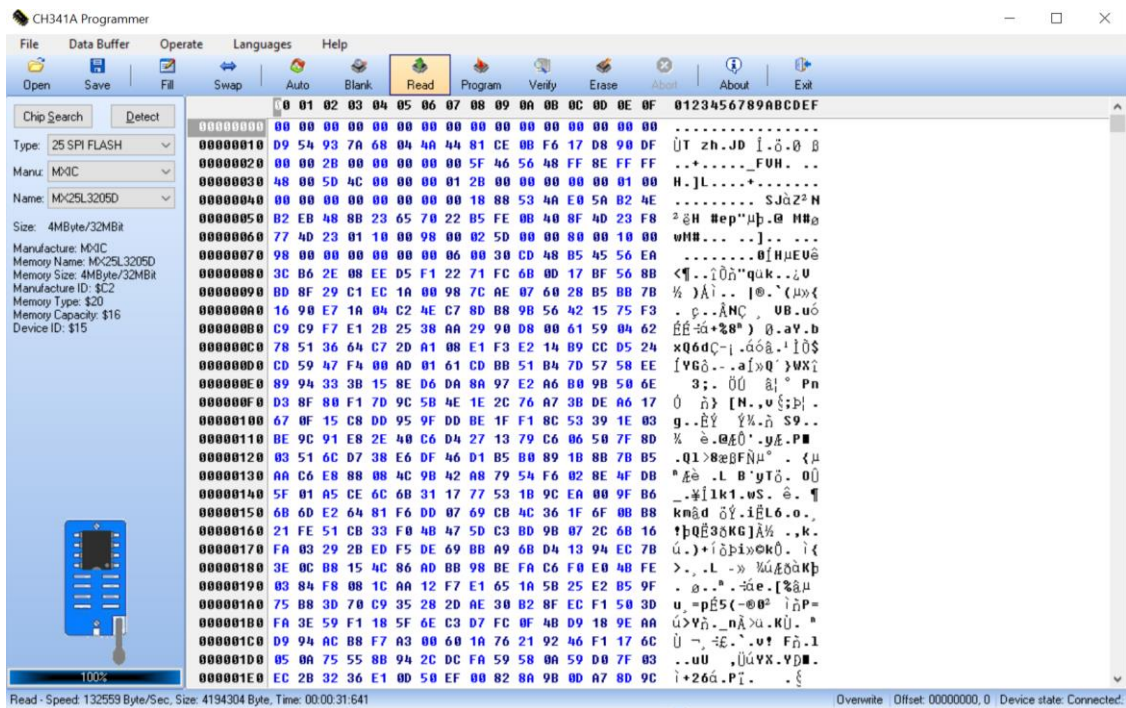


Enable wake on lan feature in the BIOS. Shutdown and connect the LAN cable with power cable attached. The LAN port should have a light, meaning that the BIOS chip is powered.

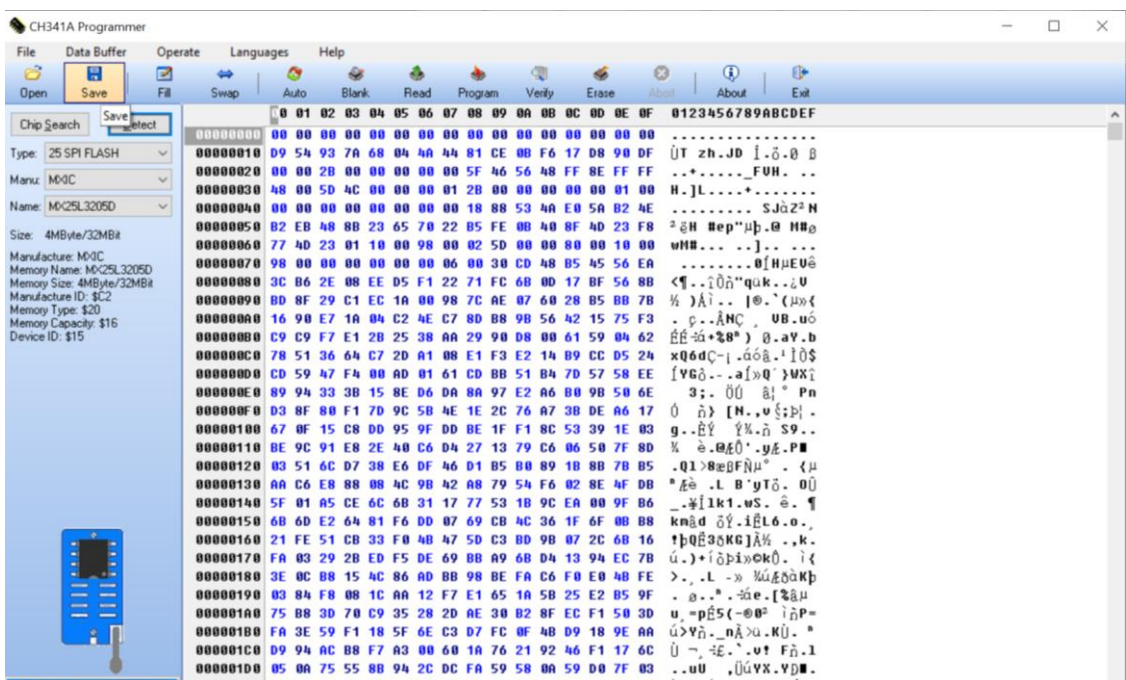




Tear open the black mylar sheet next to the expresscard slot and clip the upper chip as shown with the red wire in the bottom right clip facing the laptop.

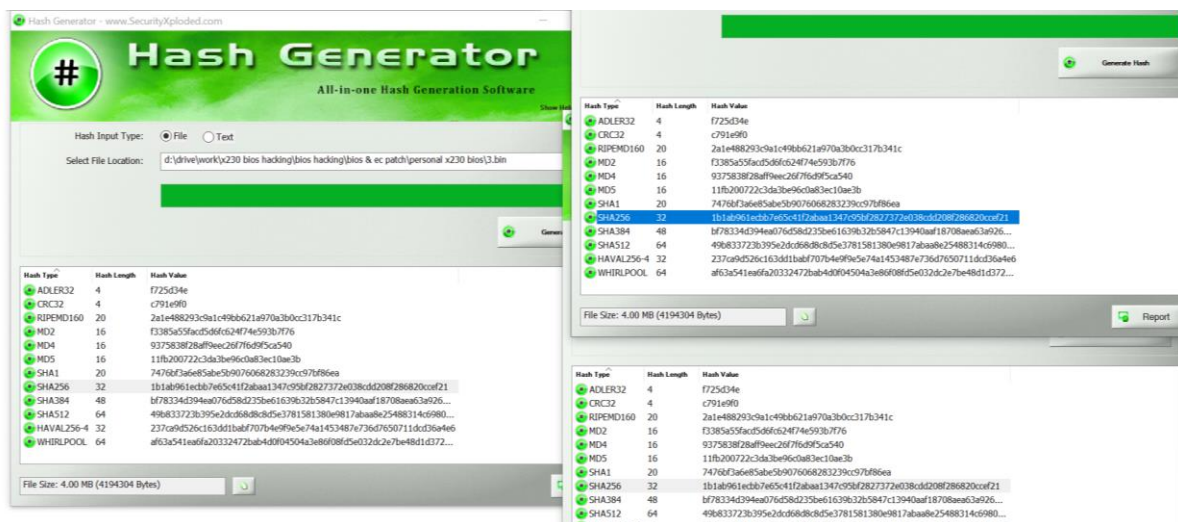


Click detect and the MX chip with the correct 4MB size should be detected. If not detected, readjust the clip until the chip could be read. The readjustment might take a while to get the clip to read the chip. Click read after the chip is detected.

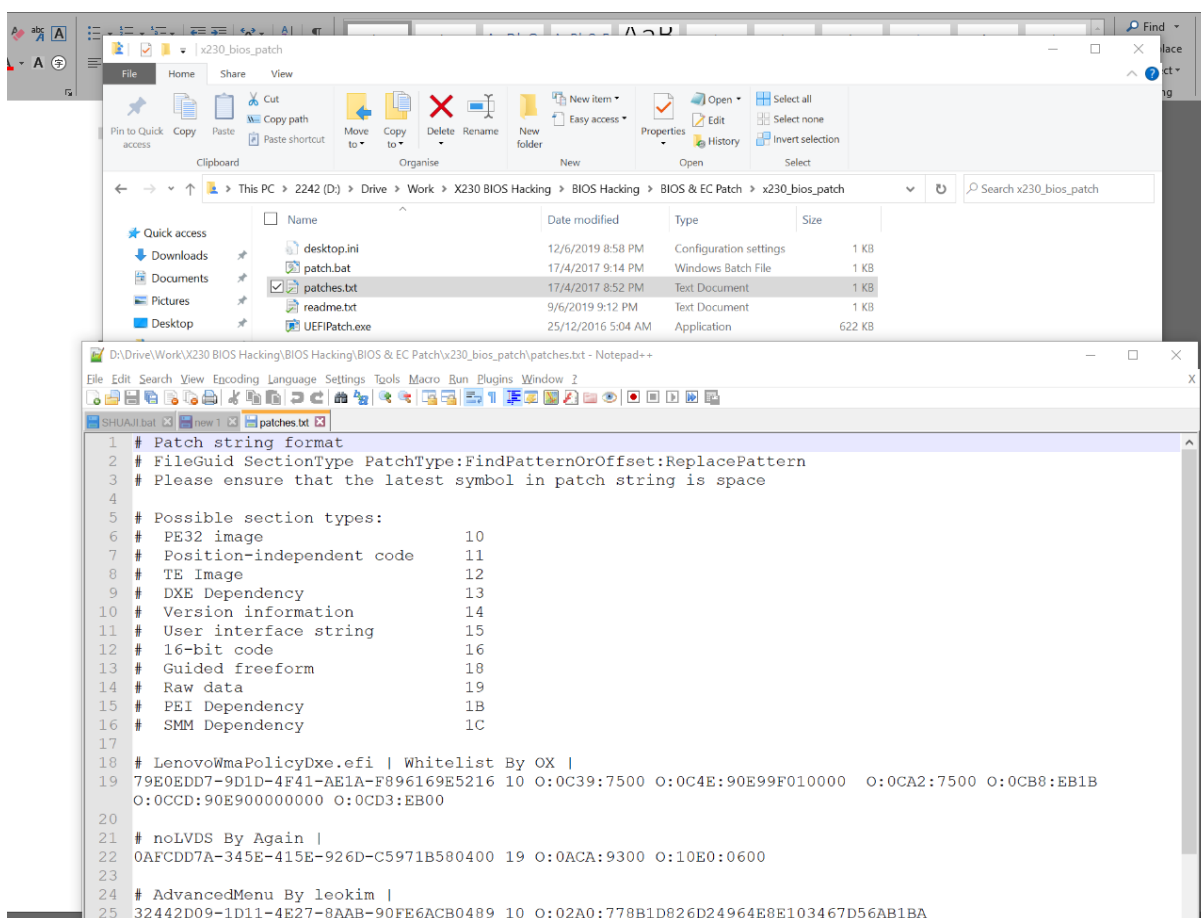


Once the chip is read, it should have number and letters in the programme. Click save to save the dumped BIOS.

<input type="checkbox"/> Name	Date modified	Type	Size
1.bin	12/6/2019 9:18 PM	BIN File	4,096 KB
2.bin	12/6/2019 9:18 PM	BIN File	4,096 KB
3.bin	12/6/2019 9:18 PM	BIN File	4,096 KB
desktop.ini	12/6/2019 9:18 PM	Configuration settings	1 KB



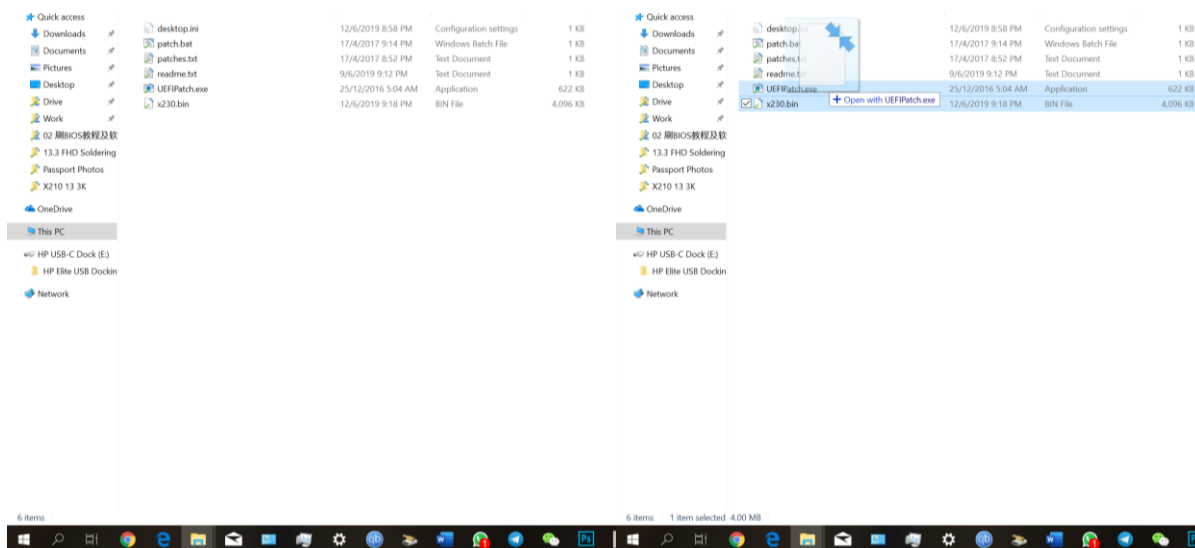
Read your BIOS again a few times and save them as different names. We will compare these BIOS dumps to make sure they are the exact same and no errors were made during the extraction of the BIOS. Use any of your favourite hash generator to compare the SHA256 value. Shown here is 3 BIOS dumps that have the same value. This means that the dumped BIOS are exactly the same.



Open patches.txt and place a # in front of any of the patches that you do not want to use. If you do not want to disable the LVDS connector (dual display mode with native fn brightness), place a # in front of the string of patch under noLVDS by Again.

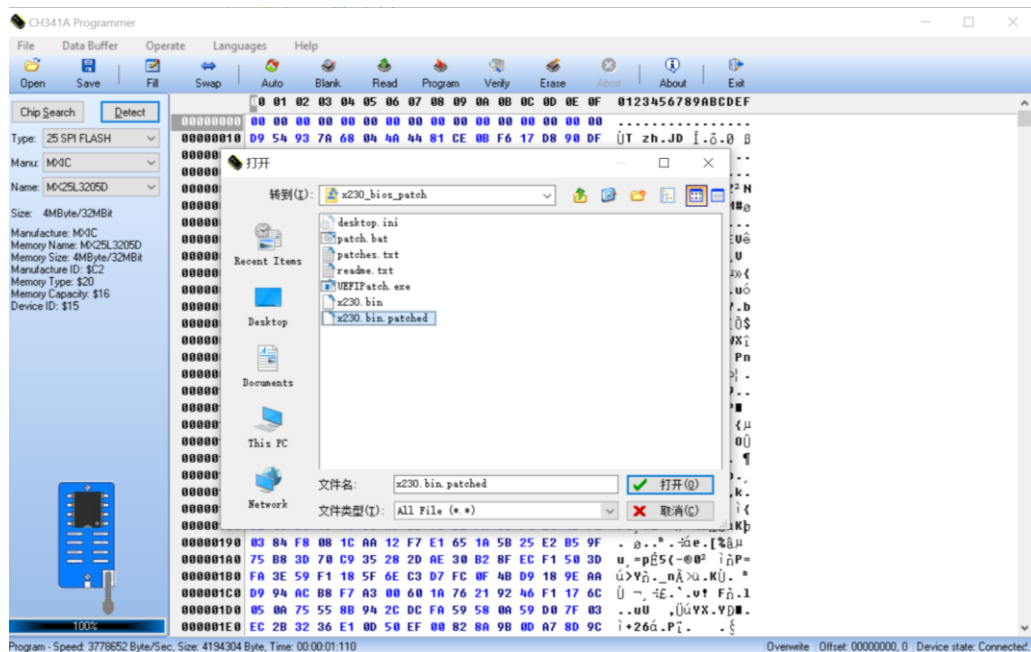
	desktop.ini	12/6/2019 8:58 PM	Configuration settings	1 KB
	patch.bat	17/4/2017 9:14 PM	Windows Batch File	1 KB
	patches.txt	17/4/2017 8:52 PM	Text Document	1 KB
	readme.txt	9/6/2019 9:12 PM	Text Document	1 KB
	UEFIpatch.exe	25/12/2016 5:04 AM	Application	622 KB
	x230.bin	12/6/2019 9:18 PM	BIN File	4,096 KB
<input checked="" type="checkbox"/>	x230.bin.patched	12/6/2019 9:18 PM	PATCHED File	4,096 KB

The patched BIOS will be called x230.bin.patched

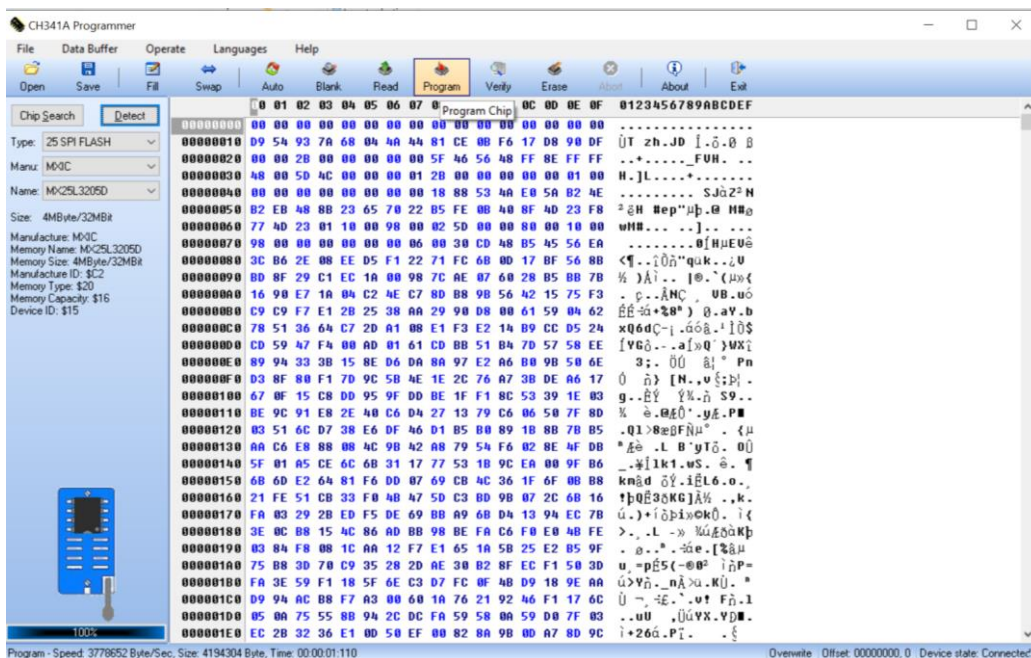


Rename the dumped BIOS as x230.bin and drag it on uefipatch.exe





Click open and select the patched X230 bios.



Click program and wait for the BIOS to be flashed into the chip. Remove the clip and boot up your laptop to check if the patch has been applied.