# UPDATE BIOS ON BeFREE 10 or 20

1. Please download the new BIOS (get link from support)
2. Unzip the file and copy the resulting folder with content to a USB flash drive
3. Place USB key in one of blue USB slots
4. Connect Keyboard
5. When starting BeFREE, press <Del> when the Tipro logo appears to enter BIOS.
6. <Left Arrow> to go to the "Save & Exit" menu
7. choose to override the normal boot order by selecting the option "UEFI: Built-in EFI Shell", press <Enter>
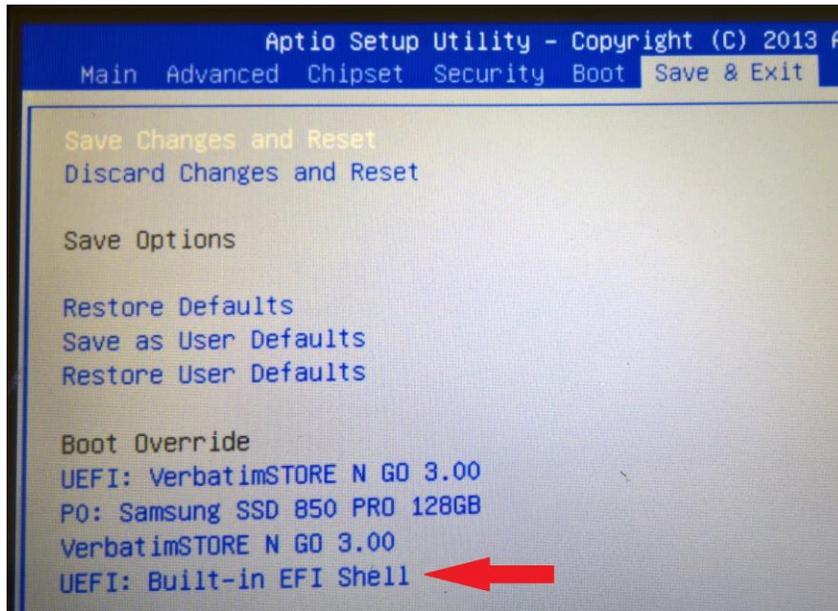
8. The BeFREE will restart, don't enter the BIOS, no need to press any key (just ignore message "press esc to skip startup.nsh")
9. You're now in the EFI shell.
10. Look at the listed storage devices, your USB Flash drive should be among them. It's most likely fs2, but it's the one where it says "Removable harddisk"

11. At the command prompt type the name of your flash drive, followed by the ":", then <Enter>. In this case: Shell>fs2:<Enter>
12. Now browse to the folder with the new BIOS. You can use DOS-like commands like "dir" to list the content of the current directory and "cd" to go to a specific directory. (<tab> will complete the file/directory name after you type just a few characters. It saves time.)
13. In the folder with the new BIOS, run the script file "go_x64.nsh". This should start the update process. Probably an unnecessary warning: Don't turn off the BeFREE and don't remove the USB drive during this process!
    - Don't worry about the "PDR Region does not exist" message; this is normal.

14. In green it will say that it successfully finished and "shell>" will show

```
...ogramming Flash [0x340000]    4KB of
 - Erasing Flash Block [0x3AB000] - 100% co
 - Programming Flash [0x3AB000]    4KB of
 - Erasing Flash Block [0x5DB000] - 100% co
 - Programming Flash [0x5DB000] 2220KB of 2
 - Verifying Flash [0x800000] 8192KB of 819
RESULT: The data is identical.

FPT Operation Passed
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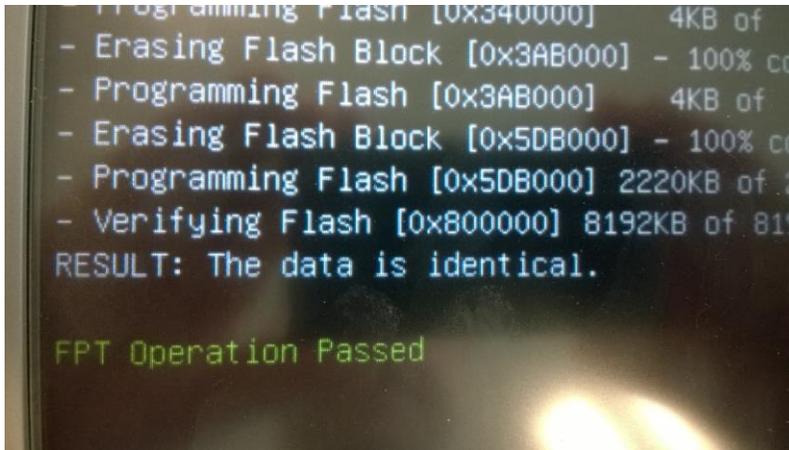
15. Restart the BF
16. Perhaps it's wise, just to be sure, to enter the BIOS at first start (<Del>, when you see the Tipro logo) and choose "Restore defaults", followed by "Save changes and reset" in the "save and exit" menu.
17. Of course, if you made some changes in the BIOS before the update, this would be the time to make the same changes again.

To disable C-states, in case you have Windows 10 and you experience occasional "freezing" of the computer, please refer to Disable_C_States.pdf