

BIOS Update Readme

BIOS Update Instructions for Intel® NUCs with Aptio® V UEFI Firmware

This readme file includes BIOS update instructions for advanced users. If you need more complete step-by-step instructions on how to use each of these BIOS update methods, refer to [NUC BIOS Update Instructions](#).

The following methods are available to update Intel® NUC with new Visual BIOS to the latest version.

- Express BIOS Update (Windows-based)
- F7 BIOS Update
- Power Button Menu BIOS Update
- UEFI Update
- BIOS Recovery Update

Important Notes:

- **Once the update process has started, DO NOT POWER DOWN YOUR SYSTEM before the update is complete. The update process will take up to 3 minutes.**
- Downgrading the BIOS to an earlier version isn't recommended and might not be supported. An earlier BIOS version might not offer support for the latest processors, bug fixes, critical security updates, or support the latest board revisions currently being manufactured. **If you're trying to downgrade to a previous BIOS version and its Intel® ME Firmware version is older than that currently on the motherboard, then the downgrade is NOT supported.**
- There may be a situation where the BIOS doesn't see your USB flash drive during an update or recovery. If this happens, try to reformat the USB flash drive, but de-select **Quick Format**. Then try the process again. You can find out more information in the article: [Troubleshooting BIOS Issues on Intel® NUC](#).
- If a BIOS update process is interrupted, your computer may not function properly. We recommend the process be done in an environment with a steady power supply (preferably with UPS).
- Before you start, record all BIOS settings that have been changed from default, so they can be restored after completing the BIOS update.

Express BIOS Update (Windows-Based) Instructions

1. Download the Express BIOS update file to the target Intel NUC.
2. Double-click the *.EBU.exe file to run the Windows-based BIOS update.
3. Follow all prompts.

F7 BIOS Update Instructions

The F7 BIOS update option allows you to update the system BIOS during the boot process and before the operating system loads.

1. Download the **.CAP** BIOS file and transfer it to a USB flash drive.
 2. Plug the USB device into a USB port of the Intel NUC when it's turned off (not in Hibernate or Sleep mode).
 3. Turn on (or restart) the Intel NUC.
 4. During boot, when the F7 prompt is displayed, press F7 to enter the BIOS Flash Update screen.
 5. Select the USB device and press Enter.
 6. Select the **.CAP** file and press Enter.
 7. Confirm you want to update the BIOS by pressing Enter.
 8. Wait 2-5 minutes for the update to complete.
 9. Remove the USB flash drive.
 10. Restart the computer.
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Power Button Menu BIOS Update Instructions

The Power Button Menu Update allows you to update the system BIOS during the boot process and before the operating system loads.

1. Download the **.CAP** BIOS file and transfer it to a USB flash drive.
2. Plug the USB device into a USB port of the Intel NUC when it's turned off (not in Hibernate or Sleep mode).
3. Press and hold down the power button for three seconds, then release it before the 4 -second shutdown override.
4. The Power Button Menu displays. Press F7 to start a BIOS update.
5. Wait 2-5 minutes for the update to complete.
6. The computer either turns off when the recovery process is completed, or it prompts you to turn it off.
7. Remove the USB flash drive.
8. Restart the computer.

UEFI Update Instructions

1. Download the UEFI Flash BIOS Update file.
2. Unzip the *.ZIP to extract its files.
3. Copy the **.EFI** folder, which contains the **.CAP** file, to a bootable USB flash drive*.
4. Plug the USB flash drive into a USB port of the Intel NUC when it's turned off (not in Hibernate or Sleep mode).
5. Configure the BIOS of the target computer to boot to the EFI Shell:
 - a. Press **F2** during start to enter BIOS setup.
 - b. Go to *Boot > Secure Boot > Secure Boot*.
 - c. Disable **Secure Boot**, if enabled.
 - d. Go to *Boot > Boot Priority > Internal UEFI Shell*
 - e. Enable **Internal UEFI Shell**
 - f. Press **F10** to save changes and exit BIOS Setup.
6. Press **F10** during boot to open the Boot Menu.
7. Select **UEFI: Built-in EFI Shell**.
8. Change the current directory to the USB flash drive by entering the command fsX: where X is the drive number of the USB flash drive from the device mapping list. Example: if your USB drive is fs0, then type fs0: and press enter.
9. At the command prompt, type: **iFlashVEfi64.efi XXX.CAP** (where XXX.CAP is the name of the .CAP file), then press **Enter**,
10. Press **Y** to reboot and begin the update.
11. Wait for the BIOS update to complete.
12. The computer will restart when finished.

After the BIOS update is complete, to turn off the **Internal UEFI Shell** and turn on **Secure Boot** (if necessary) follow these instructions:

13. Press **F2** during start to enter BIOS setup.
 14. Go to *Advanced > Boot > Secure Boot*.
 15. Enable **Secure Boot**, if enabled.
 16. Go to *Advanced > Boot > Boot Configuration*.
 17. In the Boot Devices pane, disable **Internal UEFI Shell**.
 18. Press **F10** to save changes and exit BIOS Setup.
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BIOS Recovery Update Instructions

BIOS Recovery by the Power Button Menu

In the unlikely event that a BIOS update is interrupted, it's possible the BIOS might be left in an unusable state. Performing a BIOS Recovery can resolve this problem.

1. **Plug** an USB device into an USB port of the Intel NUC when it's turned off (not in Hibernate or Sleep mode), then power up Intel NUC.
2. **Download** and **save** the zip Recovery BIOS file for your Intel NUC unit to that USB device. Example:
3. **Double-click** the *RECOVERY.zip* to extract its files.
4. **Power off** your Intel NUC, keep the USB device in USB port.
5. **Press and hold down** the power button for three seconds, then **release** it before the 4-second shutdown override. The Power Button Menu appears.
6. **Press F4** to start a BIOS Recovery.
7. **Wait** 2-5 minutes for the update to complete.
8. The computer will either turn off when the recovery process is completed or it will prompt you to turn off the computer.
9. **Remove** the USB flash drive.
10. **Restart** the computer.

BIOS Recovery by the Security Jumper

1. Download the **RECOVERY.zip** file into an USB flash drive.
2. Unzip the file and transfer the **cap. File** from the recovery folder to a USB flash drive root.
3. Turn off the Intel NUC and unplug the AC power.
4. Open the chassis and remove the BIOS security jumper. See [Technical Product Specifications for Intel® NUC Products](#) for details about the location of the jumper.
5. Plug the USB flash drive into an USB port and connect the AC power.
6. Turn on the Intel NUC. The recovery process will start automatically.
7. Wait 2 – 5 minutes for the recovery process to complete.
8. The Intel NUC will either turn off automatically when the recovery process is complete, or it will prompt you to turn it off.
9. Remove the USB device.
10. Unplug the AC power and replace the BIOS security jumper.
11. Close the chassis and reattach the AC power.
12. Restart the Intel NUC.

***Creating a Bootable USB Flash Drive**

Refer to any of the following websites for tips on creating bootable USB devices. Intel is unable to assist with the creation of bootable devices.

- [How to Boot from a USB Flash Drive](#)
- [Boot from USB Flash Drive](#)

You can also search for additional resources on the web for creating bootable USB devices. Search on "How to create bootable USB drives".
