



BIOS Update Readme

BIOS Update Instructions

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.

- F7 BIOS Update
- Power Button Menu BIOS Update
- Windows BIOS Flash Update by one-click .exe Instructions
- 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.**
- 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.

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 and save the Recovery BIOS (.CAP) file to a USB flash drive.
 2. Plug the USB flash drive into a USB port of the target Intel NUC.
 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.
-

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 and save the Recovery BIOS (.CAP) file 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.

Windows BIOS Flash Update by one-click .exe Instructions

1. Download and save the BI.exe file to a temporary folder.
2. Unzip the downloaded file.
3. Double-click the *.exe file and select Yes in UAC prompt to get privilege to run the Flash update program.
4. Press Y to begin the update.
5. Upon restart, you'll see the BIOS update process status window. Do NOT at any time power off the computer at this stage. The computer will restart when finished.

UEFI update instructions

1. Download the UEFI Flash BIOS Update file.
2. Double-click the *.ZIP to extract its files.
3. Copy AfUefi.efi and the .CAP file to the bootable USB flash drive.
4. Connect the USB drive to a port on the Intel NUC.
 - a. Configure the BIOS of the target computer to boot to the EFI Shell:
 - b. Press **F2** during start to enter BIOS setup.
 - c. Go to **Boot > Secure Boot > Secure Boot**.
 - d. Disable Secure Boot, if enabled.
 - e. Go to **Boot > Boot Priority > Internal UEFI Shell**
 - f. enable Internal UEFI Shell
 - g. Press **F10** to save changes and exit BIOS Setup.
5. Press **F10** during boot to open the Boot Menu.
6. Select **UEFI: Built-in EFI Shell**.
7. 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 fs3, then type fs3: and press enter.
8. At the command prompt, type AdUefi.efi XXX.CAP, where XXX.CAP is the filename of the .CAP file and press Enter.
9. Press **Y** to begin the update.
10. Wait for the BIOS update to complete.
11. The computer will restart when finished.

After the update is complete, set the BIOS back to original settings:

1. Press **F2** during start to enter BIOS setup.
 2. Go to **Boot > Boot Priority > Internal UEFI Shell**.
 3. Disable **Internal UEFI Shell**.
 4. Go to **Boot > Secure Boot > Secure Boot**.
 5. Enable Secure Boot, if it was originally enabled.
 6. Press **F10** to save changes and exit BIOS Setup.
-

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. Format a USB device to either FAT32 or NTFS
2. Download RECOVERY.zip, unzip the folder and save all its' content to the USB device, so your USB drive will contain folder "UFI" with the folder "Intel" inside, containing INWHL357.CAP file. Example: E:\EFI\INTEL\INWHL357.CAP.
3. Please note, that this is important to use the .CAP file from recovery folder for the BIOS recovery. Otherwise the recovery will fail.
4. Plug the USB device into a USB port of the Intel NUC when it's turned off (not in Hibernate or Sleep mode).
5. Press and hold down the power button for three seconds, then release it before the 4 -second shutdown override.
6. The Power Button Menu displays. 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. Format a USB device to either FAT32 or NTFS
2. Download RECOVERY.zip, unzip the folder and save all its' content to the USB device, so your USB drive will contain folder "UFI" with the folder "Intel" inside, containing INWHL357.CAP file. Example: E:\EFI\INTEL\INWHL357.CAP.
3. Please note, that this is important to use the .CAP file from recovery folder for the BIOS recovery. Otherwise the recovery will fail.
4. Shut down the computer and unplug the AC power adapter.
5. Open the chassis and remove the BIOS security jumper. See the Technical Product Specification for details including the location of this jumper.
6. Plug the USB device into a USB port of the target computer and turn it on.
7. Wait 2 – 5 minutes for the recovery process to complete.
8. The computer turns off when the recovery process is complete, or it prompts you to turn it off.
9. Remove the USB device.
10. Replace the BIOS security jumper.
11. Close the chassis.
12. Restart the computer.

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".
