



BIOS Update Instructions for the Intel® NUC

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 [BIOS update instructions](#).

There are several methods to update an Intel® NUC BIOS to the latest version. The options available can vary by the Intel NUC model. You only need to use one.

- [F7 BIOS Flash Update](#)
- [Power Button Menu Update](#)
- [UEFI Update](#)
- [iFlash Update](#)
- [BIOS Recovery Update](#)
- [Create Bootable Flash Drive](#)

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 is not recommended and might not be supported. An earlier BIOS version might not offer support for the latest processor microcode, bug fixes, critical security updates, or support the latest board revisions currently being manufactured. **If you are 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 updating the BIOS, manually record all BIOS settings that have been changed (from default) so they can be restored after completing the BIOS update.

To identify your current BIOS version:

1. Press **F2** during boot to enter BIOS setup.
2. The third segment of the BIOS ID string (a 4-digit number) is the current BIOS version.
3. Press **ESC** to exit BIOS.

Example:



[F7 BIOS flash update instructions](#)

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

1. Download and save the Recovery BIOS (.BIO) file to a USB portable device.
2. Plug the USB device 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 .BIO 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 device.
10. Restart the computer.

[Power button menu update](#)

The Power Button Menu Update allows you to update the system BIOS during the boot process and before the operating system loads. *Note: some Intel NUC models do not include this feature.*

1. Download and save the Recovery BIOS (.BIO) file to a portable USB device.
2. Plug the USB device into a USB port of the Intel NUC when it is 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. Options on the menu can vary, depending on the Intel NUC model.
5. You can do a normal BIOS update by pressing F7 or a BIOS Recovery by pressing F4.
6. Wait 2-5 minutes for the update to complete.

7. The computer either turns off when the recovery process is completed, or it prompts you to turn it off.
 8. Remove the USB device.
 9. Restart the computer.
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[UEFI update instructions](#)

1. Download the UEFI Flash BIOS Update file.
 2. Double-click the *.ZIP to extract its files.
 3. Copy UefiFlash.efi and the .BIO file to the bootable USB device.
 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 **Advanced > Boot > Secure Boot**.
 - d. Disable **Secure Boot**, if enabled.
 - e. Go to **Advanced > Boot > Boot Configuration**.
 - f. In the Boot Devices pane, 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 **UefiFlash.efi XXX.BIO**, where XXX.BIO is the filename of the .BIO 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.
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[iFlash update instructions](#)

1. Download and save the iFlash Update .ZIP file to a temporary folder.
 2. Unzip the downloaded file.
 3. Copy the .BIO file and IFLASH2.EXE to a *bootable* USB device (*see information below*).
 4. Boot the target PC to DOS.
 5. At the appropriate directory prompt for the USB drive, type **IFLASH2 /pf XXX.BIO** (where XXX.BIO is the filename of the .BIO file) to launch the iFlash BIOS update process.
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[BIOS Recovery update instructions](#)

In the unlikely event that a BIOS update is interrupted, it is possible the BIOS may be left in an unusable state. The recovery process requires the chassis to be opened to move the onboard BIOS Configuration Jumper.

WARNING: This process is intended to be performed by a trained technician.

1. Copy the recovery file (*.bio) to a bootable USB device.

2. Plug the USB device into a USB port of the target Intel NUC.
 3. Shut down the computer and unplug AC power.
 4. Open the chassis and remove the yellow BIOS Configuration Jumper. See the Technical Product Specification for the location of this jumper.
 5. Power the system on.
 6. Wait 2-5 minutes for the update to complete.
 7. The computer will either turn off when the recovery process is completed or it will prompt you to turn off the computer.
 8. Remove the USB device from the USB port.
 9. Replace the BIOS Configuration Jumper.
 10. Restart the computer.
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[Creating a Bootable USB Device](#)

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 at <http://www.bootdisk.com/pendrive.htm>
- Boot from USB Flash Drive at http://www.weethet.nl/english/hardware_bootfromusbstick.php

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