BIOS Update Instructions for Intel® Whitebook with Aptio V BIOS Core

- **The latest BIOS update files for Intel® Whitebook products are available on Download Center.**
- 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 may not be supported. An earlier BIOS version may not contain the support for the latest processors, bug fixes, critical security updates, or support the latest board revisions currently being manufactured.
- 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.
- All images in this example are for illustration purposes only. You need to select the correct BIOS files for your Intel® Whitebook.

Choose an update method

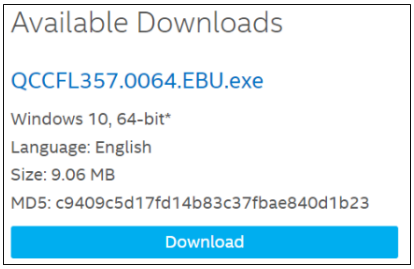
Express BIOS update	Starts the BIOS update from within Windows*.
F7 update	Starts the BIOS update by pressing the F7 key during the boot process (before the operating system loads).
BIOS Recovery	In the unlikely event that a BIOS update is interrupted, it's possible the BIOS may be left in an unusable state. Try the BIOS Recovery method to fix the issue.

After any BIOS update, Intel recommends the following steps:

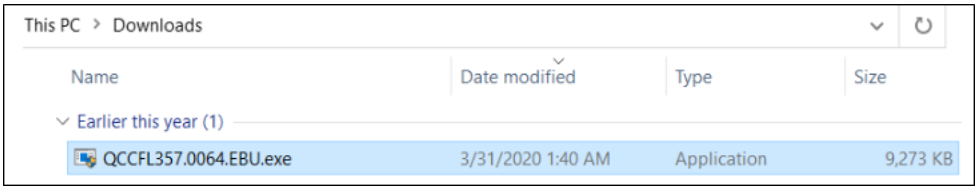
1. Press **F2** during boot to enter BIOS Setup.
2. Press **F9** to set BIOS default values.
3. Customize any BIOS settings, if desired (optional).
4. Press **F10** to save and exit BIOS Setup.

Express BIOS Update Instructions

1. Download and save the Express BIOS update file (.EBU.exe) to a temporary directory on the target computer. Example:

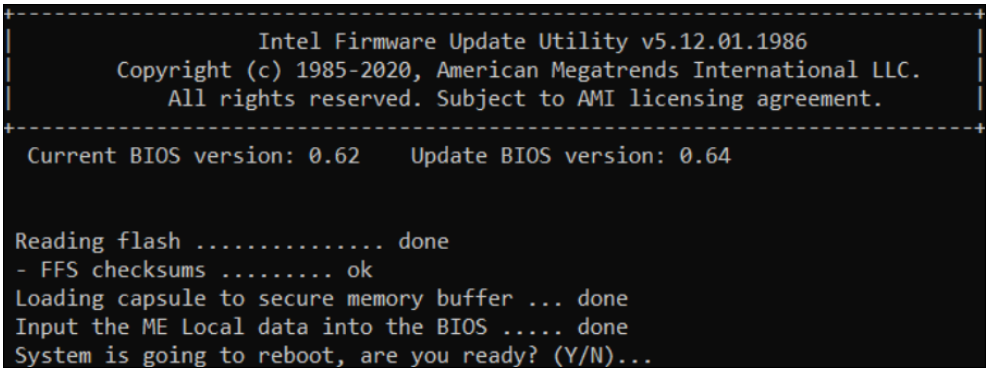


2. Double-click the *.EBU.exe file to run the Express BIOS update.



NOTE: You must have the AC power adapter connected to run the BIOS update.

3. A command dialog appears. Press Y to restart the computer and start the update.



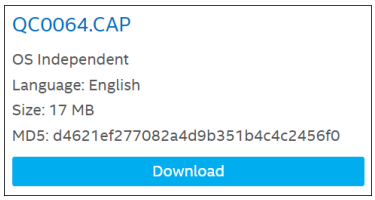
4. Wait 2-5 minutes for the update to complete.

5. When the BIOS update is complete, the computer will boot back into Windows.

F7 Update Instructions

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

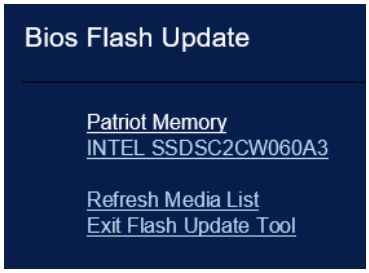
1. Download and save the Recovery BIOS capsule (**.cap**) file to a USB device. Example:



2. Plug the USB device into a USB port of the target computer.

3. Start the Intel Whitebook. During boot, when the F7 prompt is displayed, press **F7** to enter the BIOS Flash Update tool.

4. Select the USB device and press Enter.



5. Select the .cap file and press **Enter**

6. Confirm you want to update the BIOS by pressing Enter.

7. Wait 2-5 minutes for the update to complete.

8. When the BIOS update is complete, the computer will boot back into Windows.

BIOS Recovery Instructions

In the unlikely event that a BIOS update is interrupted, it is possible the BIOS may be left in an unusable state.

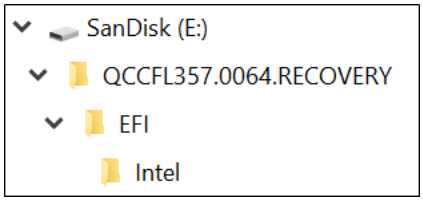
WARNING: This process is intended to be performed by a trained technician.

BIOS Recovery by the Security Jumper

Note: BIOS recovery using the BIOS security jumper will clear Trusted Platform Module (TPM) keys, Intel® Platform Trust Technology (Intel® PTT) keys, and High-bandwidth Digital Content Protection (HDCP) keys. These keys will not be restored after the BIOS recovery.

1. Download and save the Recovery BIOS (.bio) file to a USB device. Example:

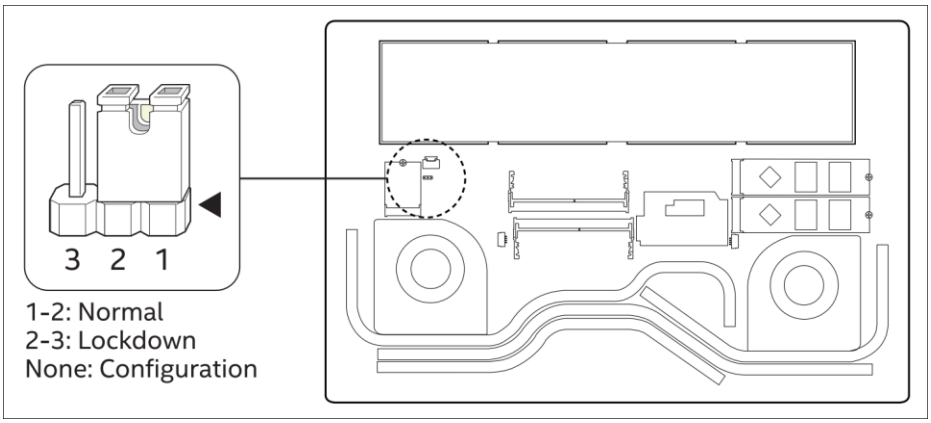
2. Extract *.RECOVERY.zip.



> **Note**
>
> It is important to extract the files with the file folder structure as shown. The USB device must contain a folder \EFI with the sub-folder \Intel, which contains the xxxxx357.CAP file. Otherwise the recovery will fail.
>
> Example: **D:\QCCFL357.0064.RECOVERY\EFI\INTEL\QCCFL357.CAP.**

3. Shut down the computer and unplug the AC power adapter.

4. Open the chassis and remove the BIOS security jumper.



5. Plug the USB device into a USB port of the target computer and turn it on.
6. Wait 2-5 minutes for the recovery process to complete.
7. The computer will either turn off when the recovery process is complete, or it will prompt you to turn it off.
8. Remove the USB device.
9. Replace the BIOS security jumper.
10. Close the chassis.
11. Restart the computer.