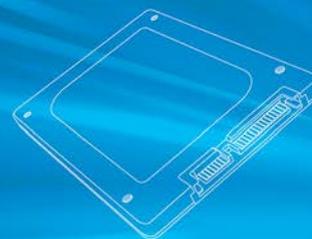


crucial

M4
FIRMWARE UPDATE



SSD Firmware Update Utility Guide

Crucial® m4 2.5" SSD Firmware Revision 070H Firmware Update Guide for Windows 8
(Update from Rev 0001, 0002, 0009, 0309, 000F, 010G, 040H to Rev 070H)

Introduction

This document describes the process of updating the firmware on the Crucial m4 SSD using our Windows update utility. The utility is a single executable file that contains all the code necessary to perform the upgrade. The creation of a separate bootable device is not necessary.

This program is to be used for updating the **firmware from Revisions 0001, 0002, 0009, 0309, 000F, 010G or 040H to Revision 070H.**

PLEASE NOTE: This firmware update is **not applicable** to any Micron SSD which was purchased separately or as original equipment in a computer system. Any firmware updates for such drives, if necessary, will be made available by the computer manufacturer or at www.micron.com. This firmware update is not applicable to any Micron RealSSD C300 drive. It should not be used with any Micron RealSSD C400 Self Encrypting Drive (SED). This update is for 2.5" m4 drives only and should not be used to update mSATA m4 drives.

WARNING: As with all firmware updates, it is strongly recommended that you backup or make copies of all important files before performing this update. This firmware update process is done entirely at your own risk. If performed correctly, there will be no loss of system or user data on the drive. However, if the firmware process is interrupted for any reason, your solid state drive may not function properly. If this update is done on a notebook computer, it is strongly recommended that power be supplied by the AC power adapter.

General Instructions

Complete the following steps before starting the firmware update process:

1. Backup the Solid State Drive

It is highly recommended that full system backup be completed before starting this firmware upgrade procedure. If the upgrade is interrupted (by a power loss or hardware failure of some sort), it is possible that the solid state drive may not function properly.

2. Use AC Power

Ensure your mobile PC or desktop PC is plugged in to AC power during the update process. It is not recommended to use only battery power during the upgrade. Do not remove power at any time during the firmware update process as this could produce incomplete results and may render your solid state drive unusable.

3. Disable/Remove Drive Passwords

Password protection, such as OS drive encryption or BIOS-level passwords can block firmware updates. Drive encryption can be disabled in the OS or software tool you use for encryption. To disable a BIOS password, you may need to edit your computer's BIOS settings. Please see your computer's owner's manual for details on editing these settings. Enter the BIOS (typically by hitting the "Delete", "F2" or "F12" key during start-up screen) and disable any passwords that you may have set on the SSD.

Download the Firmware Update

1. Before beginning the firmware download process, close all other programs except for your Internet browser.
2. Find the Firmware Windows Update Utility associated with your Crucial m4 SSD at:
<http://www.crucial.com/support/firmware.aspx>
3. Click the link for the Firmware Windows Update Utility and select Save to download the ZIP file containing the firmware update utility to your system.
4. Double-click the ZIP file to extract the files inside. Save them to your desktop.

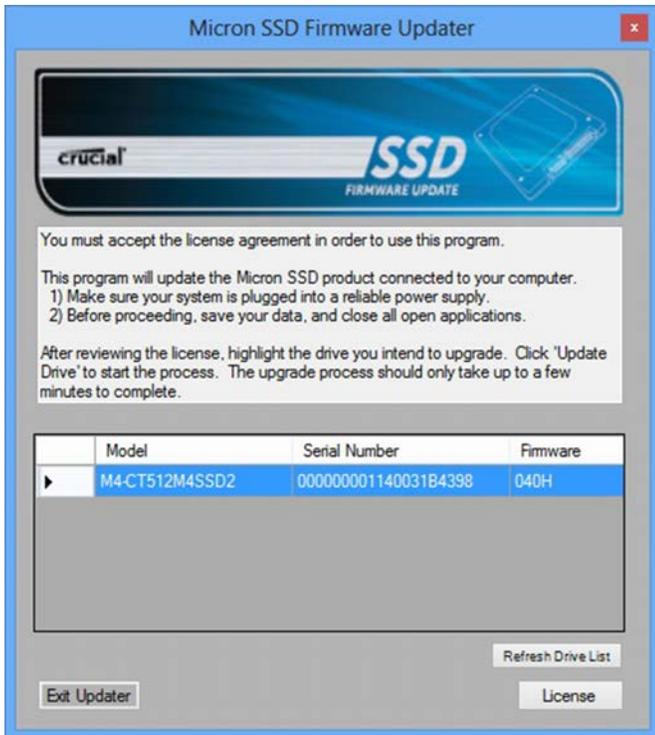
Run the Firmware Update

1. If not already done, copy the update utility file to your desktop.
2. Double-click the icon to launch the update utility.

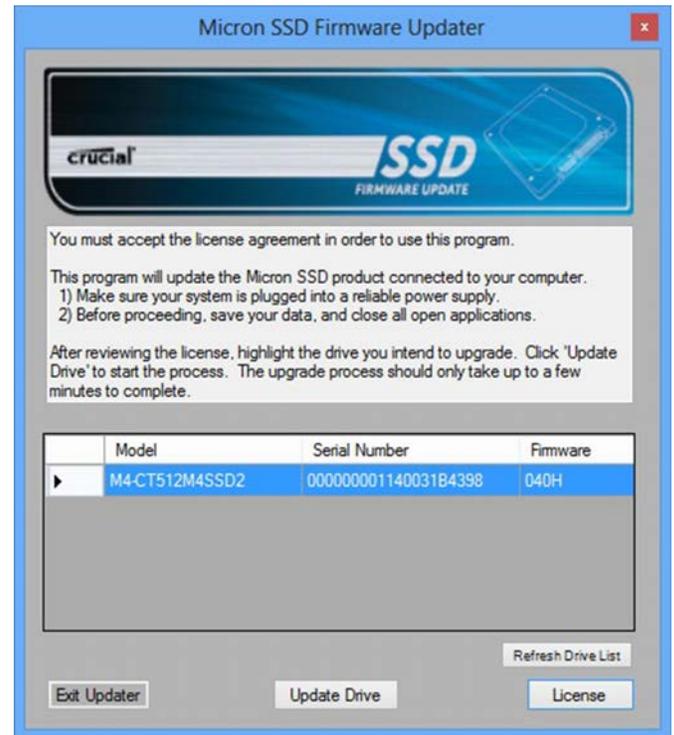
3. A User Account Control box will open:



Ensure that the Verified Publisher is clearly listed as "Micron Technology, Inc." If this is not the case, select "No" to abort this operation. Click "Yes" to proceed if the file is properly signed.



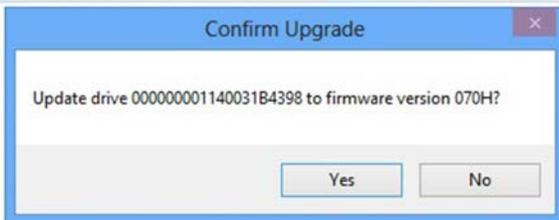
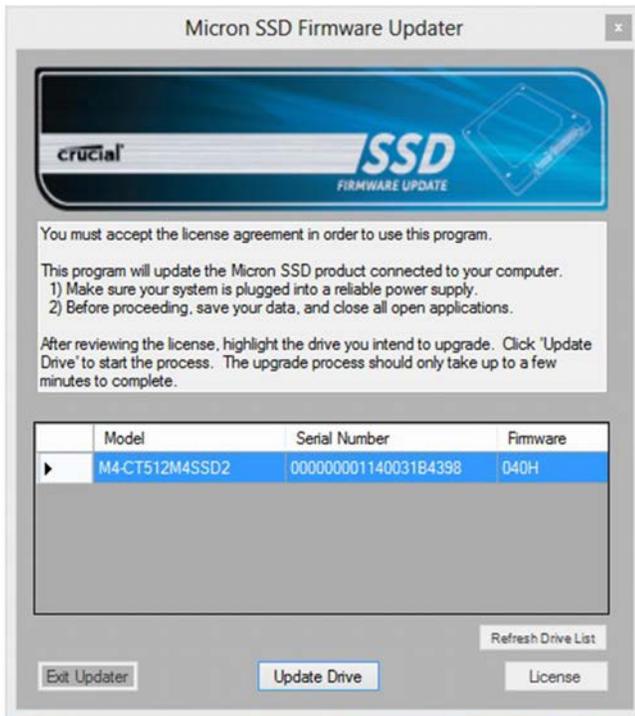
4. You must accept the License Agreement to proceed. When you see the following window, click on the "License" button.
5. Scroll through and read the Software License Agreement. If you wish to proceed, then click the "Accept" button to continue.
6. The utility is ready to start the update process. Before clicking "Continue," ensure that all other work is saved and that open applications are closed. Clicking "Continue" will start the process.
7. The screen will refresh and you will see:



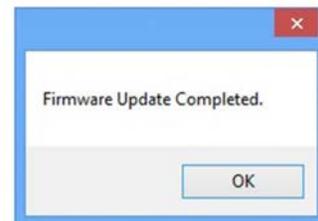
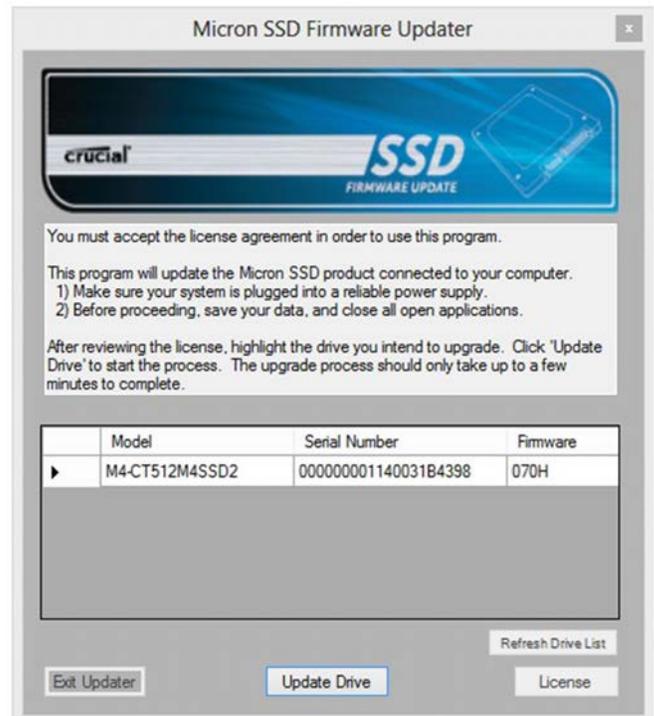
8. Click on "Update Drive"

A text box will open asking you to confirm your selection to verify that the correct drive has been chosen.

9. Click "Yes" and the firmware update process will begin. The process takes roughly a few seconds to a minute to complete. Once done you will see a screen showing the new Firmware of the drive and a text box confirming that the process was successful.



10. Click "Exit Updater" and reboot your system.



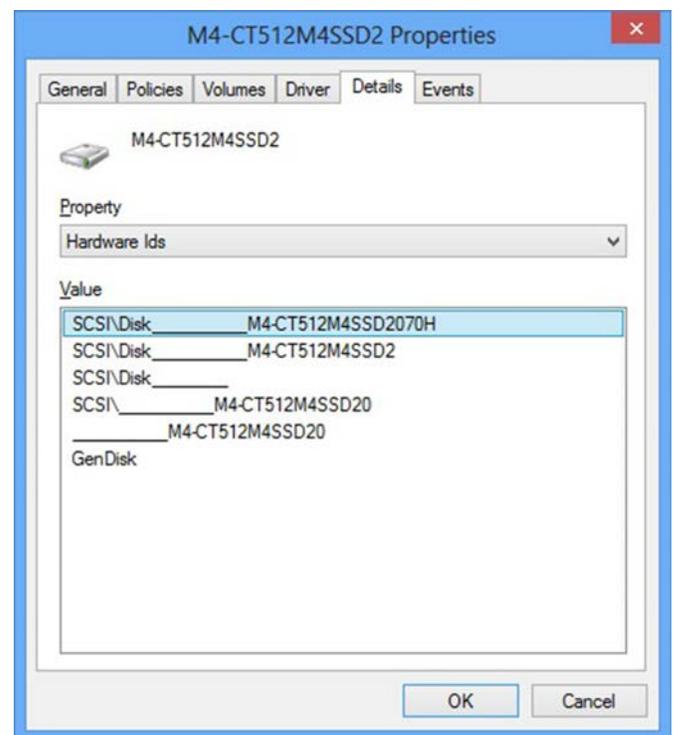
Troubleshooting Tips

- Although efforts have been made to test the compatibility of this software with various system and chipset configurations, it is not possible to test every available system. Therefore, certain systems (e.g., older systems) may experience compatibility problems.
- If you experience issues after the tool reboots, verify that you have disabled any drive passwords BIOS.
- If your m4 drive is not recognized in Step 8 of the “Run the Firmware Update” section above, it may be necessary to run this update in IDE mode instead of AHCI mode, on some older systems. When it is necessary to change the system to IDE or AHCI mode, it may be necessary to reboot the system using external media, such as a bootable CD-ROM. Instructions for running the 070H update from bootable media are available on the SSD Support page at <http://www.crucial.com/support/firmware.aspx>
- Some systems prevent firmware updates when in RAID mode. In this case, changing to AHCI or IDE mode may help to complete the update process. Any RAID configurations should be preserved after the update, when the system is put back into RAID mode, but check with your system’s user manual before proceeding.
- Peripheral RAID cards will not pass the necessary commands to perform firmware updates. You may need to move the target drive onto a SATA host bus adapter or SATA connector on the motherboard that facilitates these commands.

Validating the Current Firmware Revision

Windows 8 allows the user to check the current firmware revision of the drive by following these steps:

1. From the Start screen, right click on an open area and then click on the circle labeled “All Apps” in the lower right corner of the screen.
2. Under “Windows System”, click on the “Control Panel” and then click on “Administrative Tools” and then click on “System Management”.
3. Once this Window opens, click “Device Manager” and then click the arrow next to “Disk Drives”.
4. Right click on the m4 SSD drive you updated and click on properties. Then click on the “Details” tab, select and from the drop down list click on “Hardware IDs” from the drop down and you should see the following display:



Firmware Release Notes

Firmware for the m4 SSD is being updated from version 040H to 070H.

Firmware 070H is recommended for anyone currently running 040H or previous firmware releases. It includes incremental improvements and refinements over these versions which may improve the overall user experience.

Like recent firmware versions, version 070H has improvements over versions 000F which are specific for Windows 8 and new UltraBook systems, although systems running Windows 7 and other operating systems may also see improvements. Any m4 firmware version will function normally in Windows 8, even without these performance improvements.

The following is a summary of changes between 040H and 070H, which are independent of operating system:

- Resolved a power-up timing issue that could result in a drive hang, resulting in an inability to communicate with the host computer. The hang condition would typically occur during power-up or resume from Sleep or Hibernate. Most often, a new power cycle will clear the condition and allow normal operations to continue. The failure mode has only been observed in factory test. The failure mode is believed to have been contained to the factory. This fix is being implemented for all new builds, for all form factors, as a precautionary measure. The fix may be implemented in the field, as desired, to prevent occurrence of this boot-time failure. To date, no known field returns have been shown to be related to this issue. A failure of this type would typically be recoverable by a system reset.

Revision History

Rev. A..... 2 April 2013

- Initial release