Keysight M9038A
BIOS Update Utility

KEYSIGHT

BIOS UPDATE GUIDE

Description

This Keysight M9038A BIOS upgrade utility allows you to restore or update the BIOS in your M9038A PXIe Embedded Controller. As an example, this Update Guide will use BIOS version KS08.

There are three primary steps to updating the BIOS:

A) Obtain the M9038A BIOS files from the Keysight M9038A Embedded Controller website.

B) Create a bootable USB flash drive using Rufus Tool.

C) Use the bootable USB flash drive to update the BIOS in your M9038A controller.

The remainder of this guide provides instructions on obtaining the necessary files and using them to update the M9038A controller BIOS.

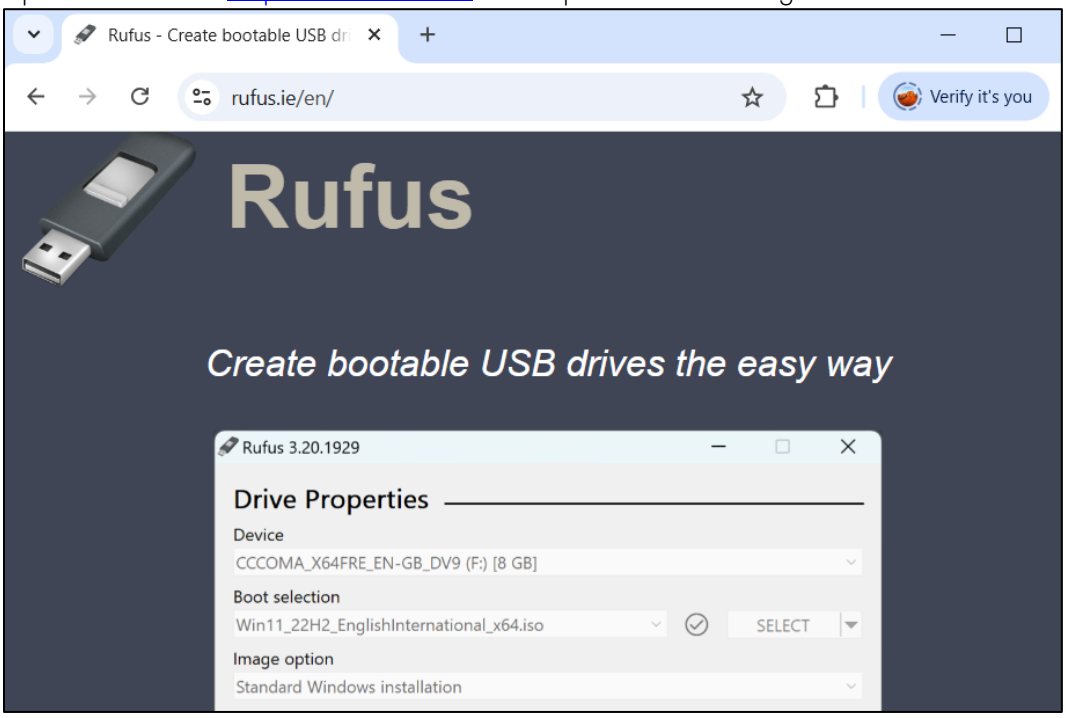
NOTE In order to upgrade the BIOS, you must be logged in the Keysight M9038A Embedded Controller as a single user with Administrator privileges. If you are not, you must logout and then login in again as a single user to an account with Administrator privileges. Set the User Account Control to the default position.

Step A. Obtain M9038A BIOS Files

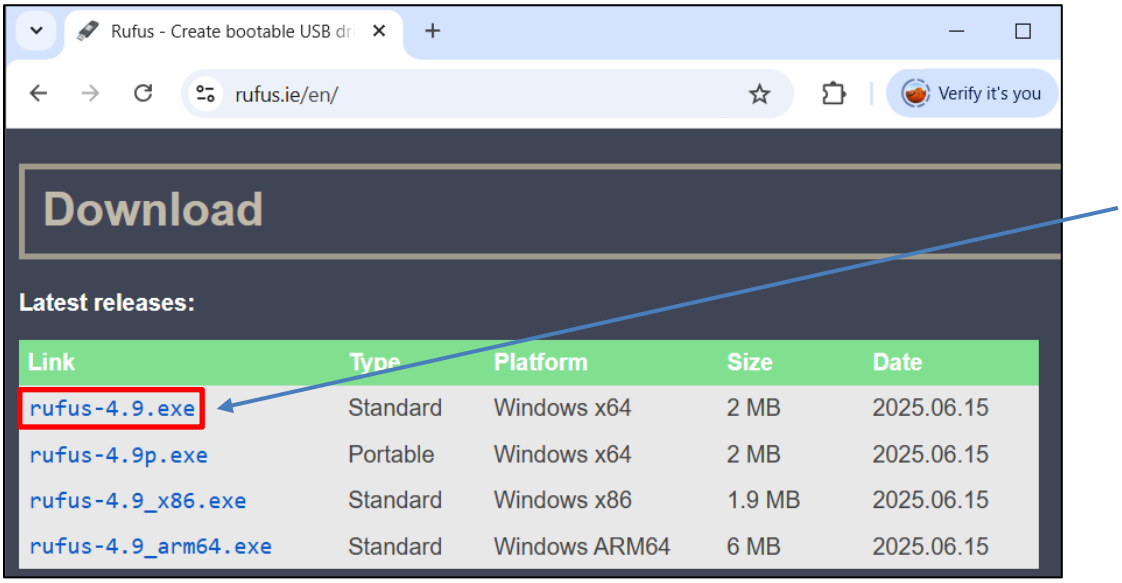
1) Open your browser to: www.keysight.com/find/M9038A .
2) Left-click on **Visit Technical Support**.
3) Left-click the tab named **Drivers, Firmware & Software**.
4) Select **M9038A BIOS Downloads**.
5) Click the **Download** button and save the downloaded zip file.
6) Move the **M9038A_KS09.0_UpdateMEBIOS** zip file to the M9038A desktop.

Step B. Create A Bootable USB Flash Drive

1) **Insert an empty USB flash** drive into a USB port on the M9038A. A 16GB flash drive or larger should be used.
2) Open browser to: https://rufus.ie/en/. This opens the following window:

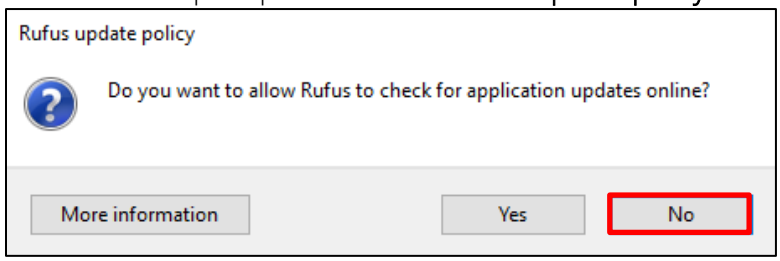


3) Scroll down to the **Download** section and click on the **Rufus link**.

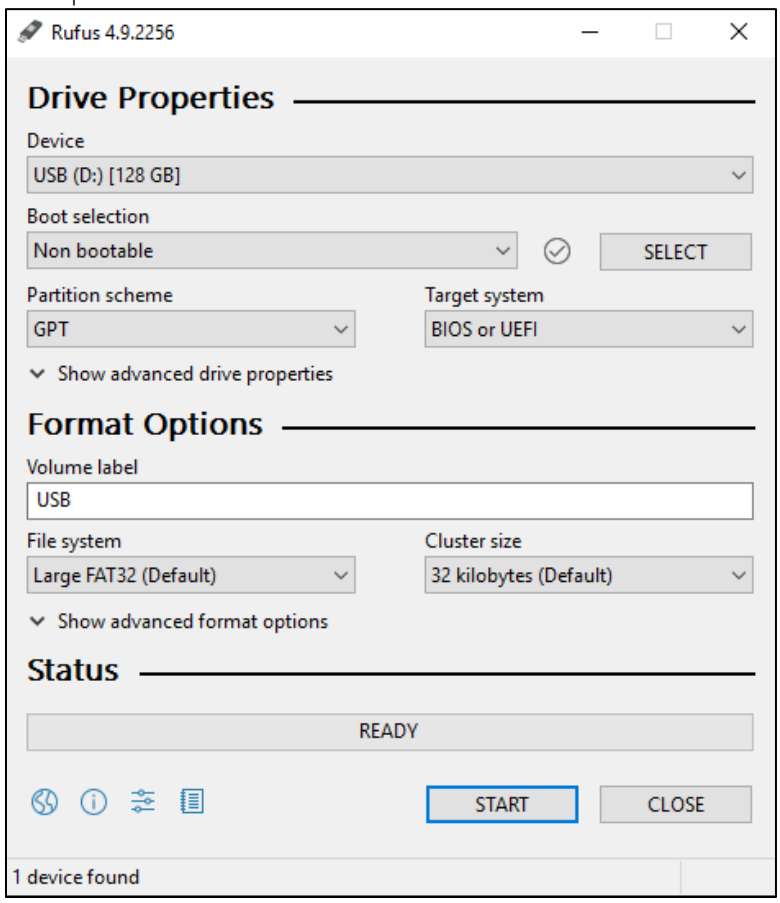


4) **Run** the downloaded **Rufus utility**.

5) Click **No** when prompted about the **Rufus update policy**.

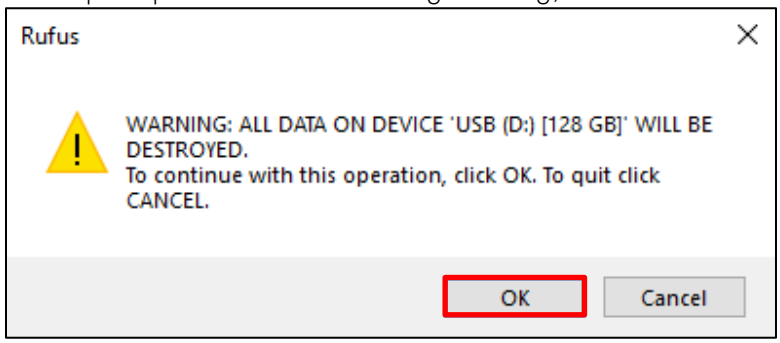


6) Verify that the **Device** shown is correct and select all the **Options** following in the image below. In this example there is a 128GB flash drive.

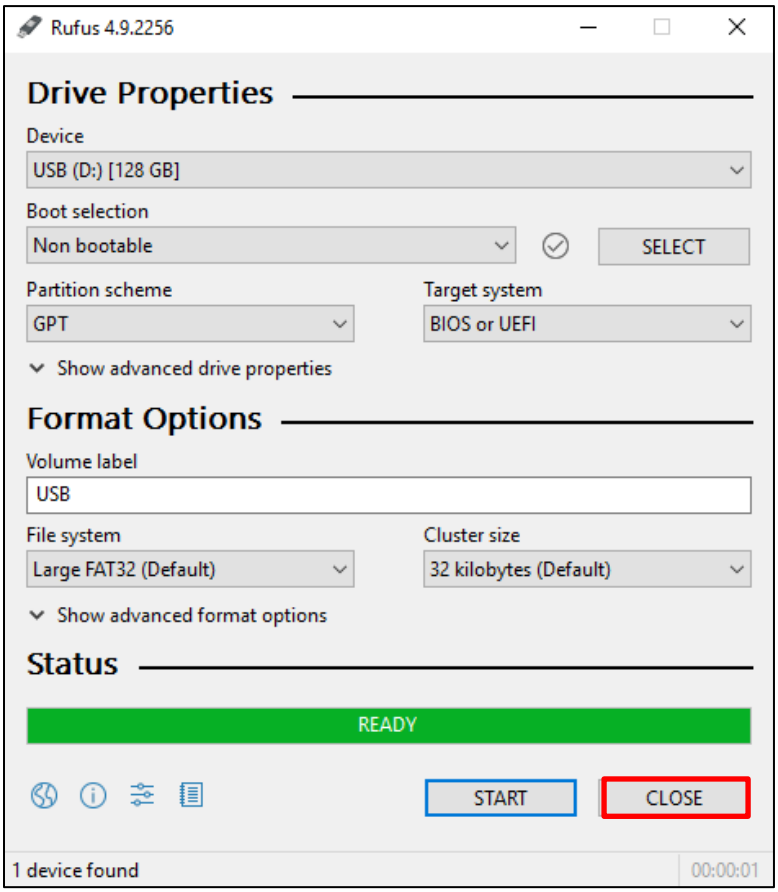


7) Click on **Start**.

8) When prompted with the following warning, click **OK** to continue.



9) In less than 5 seconds the READY progress bar will be filled up. The screen should now look like this. Click Close.

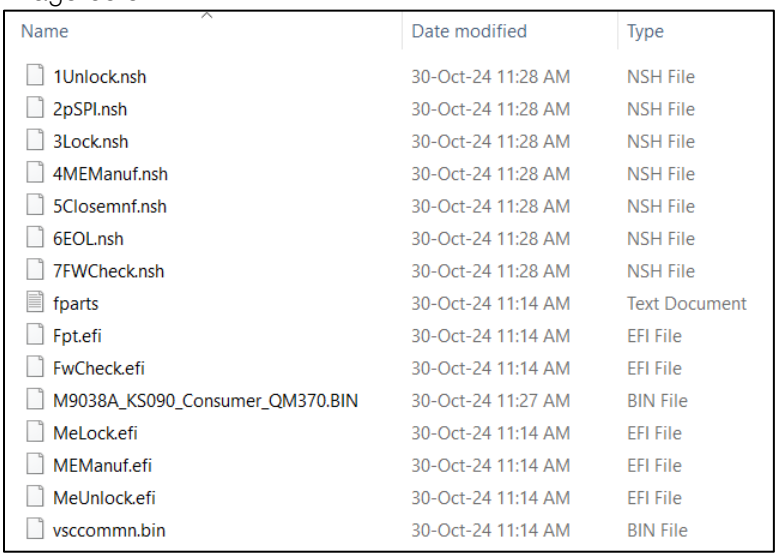


10) You have created a bootable USB flash drive. You are ready for Step C.

Step C. Update the M9038A BIOS

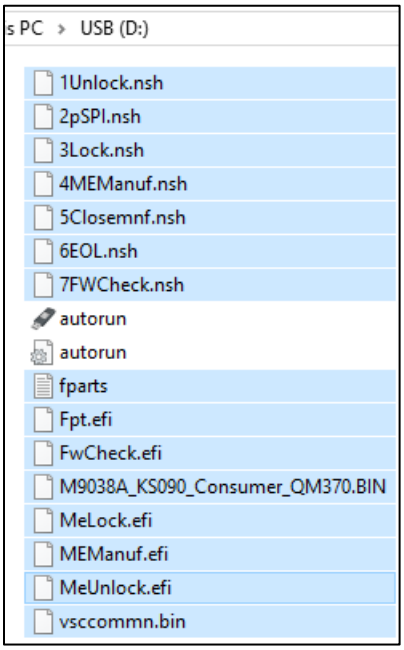
1) Using the zip file you have downloaded from **Step A**, unzip it to your desktop.

2) You will have the unzip folder **M9038A_KS09.0_UpdateMEBIOS**, which contains several files as listed in the image below.

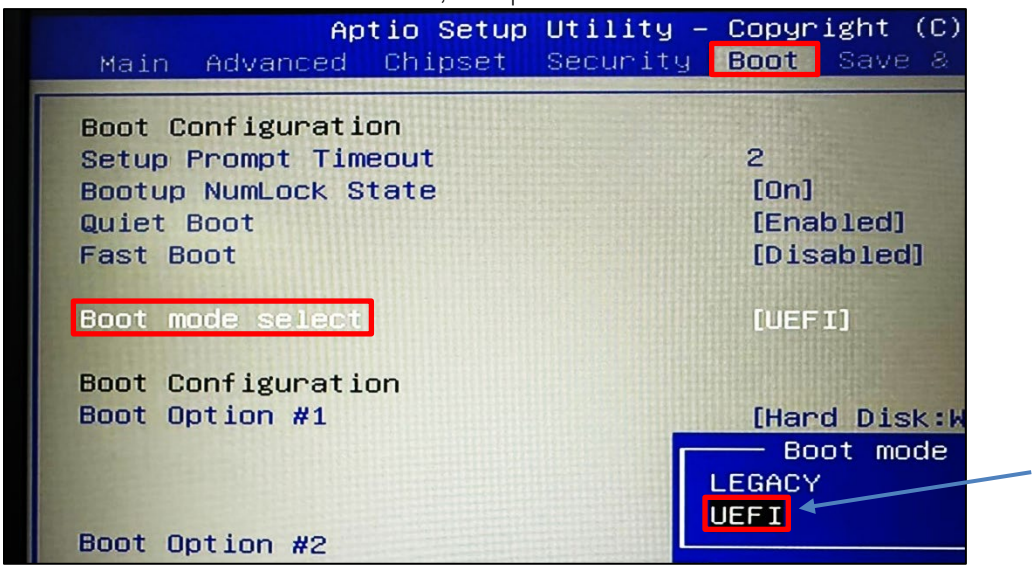


Name	Date modified	Type
1Unlock.nsh	30-Oct-24 11:28 AM	NSH File
2pSPI.nsh	30-Oct-24 11:28 AM	NSH File
3Lock.nsh	30-Oct-24 11:28 AM	NSH File
4MEManuf.nsh	30-Oct-24 11:28 AM	NSH File
5Closemnf.nsh	30-Oct-24 11:28 AM	NSH File
6EOL.nsh	30-Oct-24 11:28 AM	NSH File
7FWCheck.nsh	30-Oct-24 11:28 AM	NSH File
fparts	30-Oct-24 11:14 AM	Text Document
Fpt.efi	30-Oct-24 11:14 AM	EFI File
FwCheck.efi	30-Oct-24 11:14 AM	EFI File
M9038A_KS090_Consumer_QM370.BIN	30-Oct-24 11:27 AM	BIN File
MeLock.efi	30-Oct-24 11:14 AM	EFI File
MEManuf.efi	30-Oct-24 11:14 AM	EFI File
MeUnlock.efi	30-Oct-24 11:14 AM	EFI File
vsccommn.bin	30-Oct-24 11:14 AM	BIN File

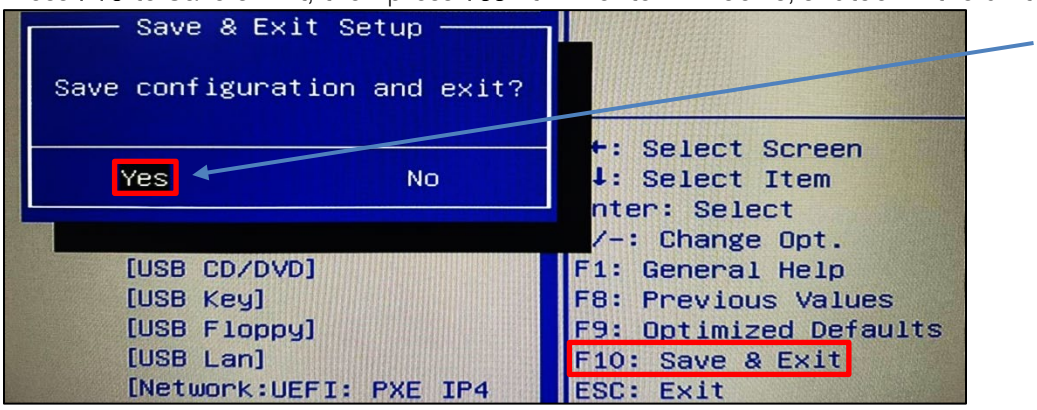
3) Drag and drop the files to the bootable USB flash drive that you had created at **Step B**. The screen should now look like this.



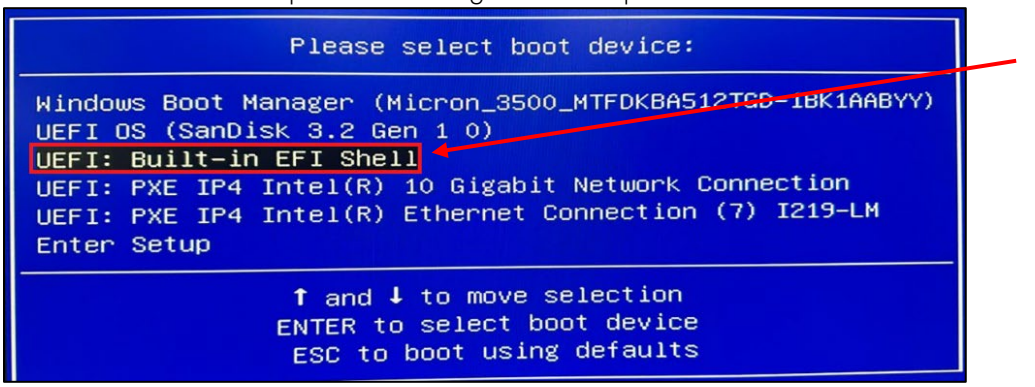
4) With the USB flash drive plugged into the M9038A, reboot and press **Del** during the boot up screen. Proceed to **Boot** > **Boot mode select** > **UEFI**, and press **Enter**.



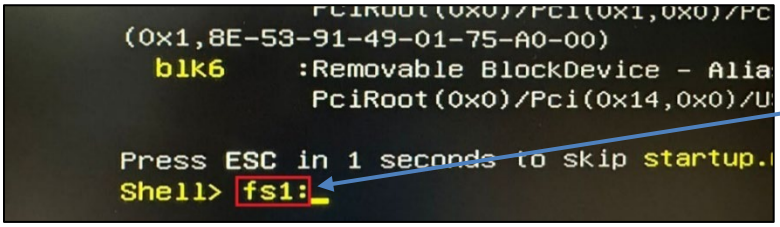
5) Press **F10** to Save & Exit, then press **Yes**. It will enter Windows, shutdown the unit.



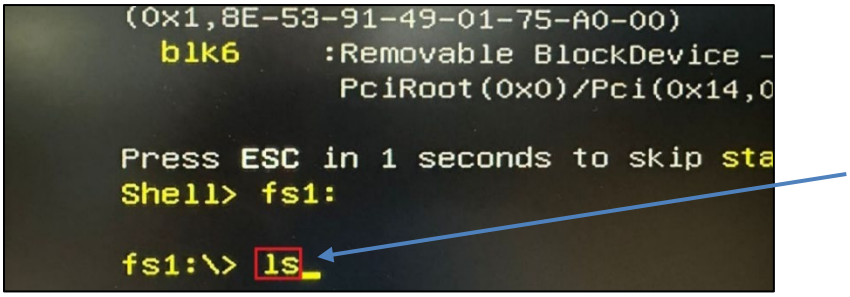
6) **Power on** the unit and press **F7** during the boot up screen. Choose **UEFI: Built-in EFI Shell**, then **Enter**.



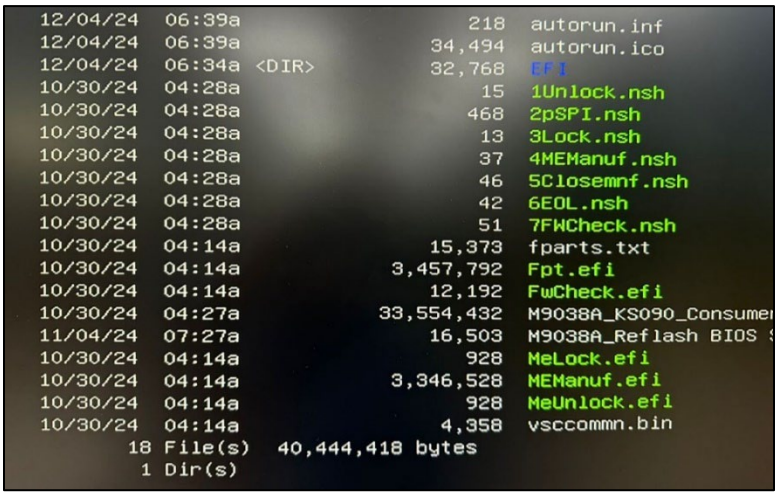
7) Under Shell> enter command **fs1:**, then **Enter**.



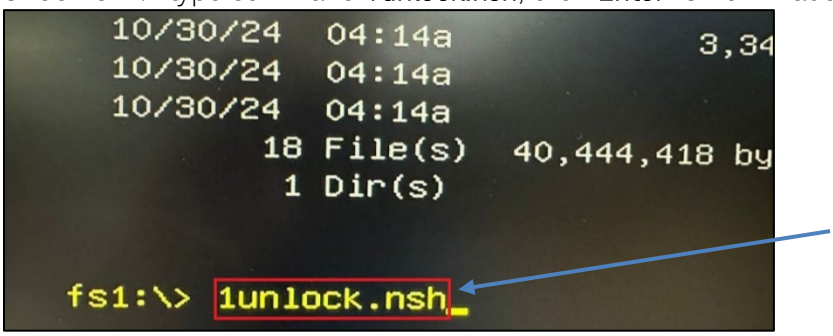
8) Under fs1:\> enter command **ls**, then **Enter**.



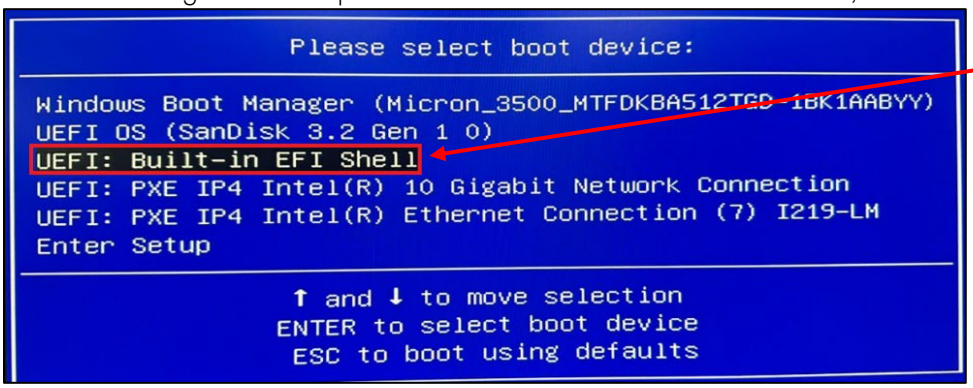
9) This will check the files inside the bootable USB flash drive. The screen should now look like this.



10) Under fs1:\> type command **1unlock.nsh**, then **Enter**. Unit will auto reboot.

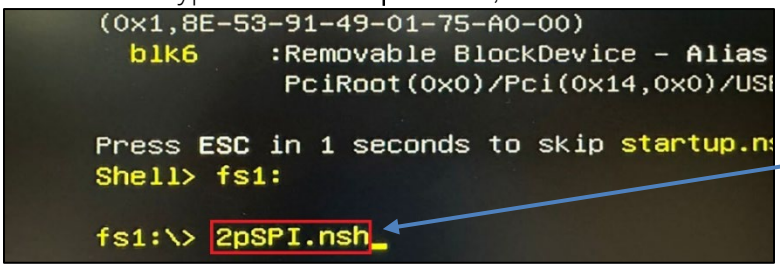


11) Press **F7** during the boot up screen. Choose **UEFI: Built-in EFI Shell**, then **Enter**.



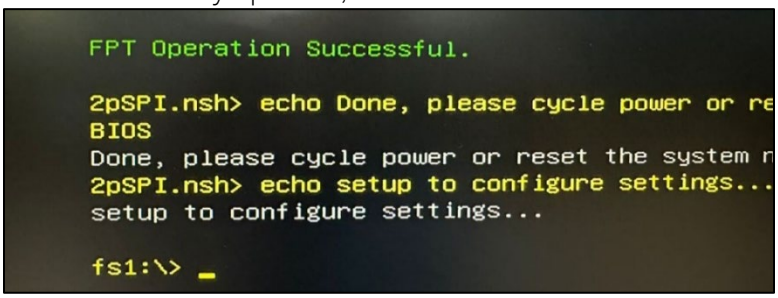
12) Under Shell> type command **fs1:**, then **Enter**.

13) Under fs1:\> type command **2pSPI.nsh**, then **Enter**.



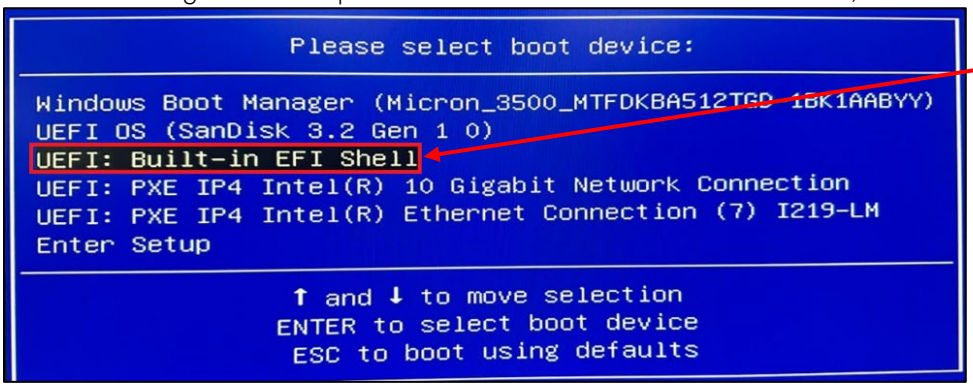
14) Press **Enter** again to continue.

15) Once successfully updated, the screen should now look like this.



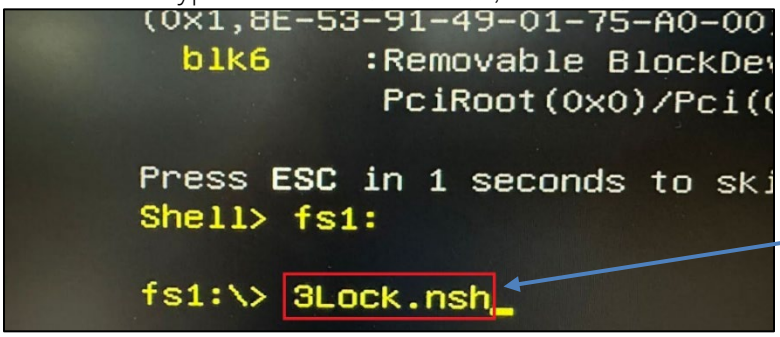
16) Press the power button to **shut down** the unit and then **power on** the unit again.

17) Press **F7** during the boot up screen. Choose **UEFI: Built-in EFI Shell**, then **Enter**.

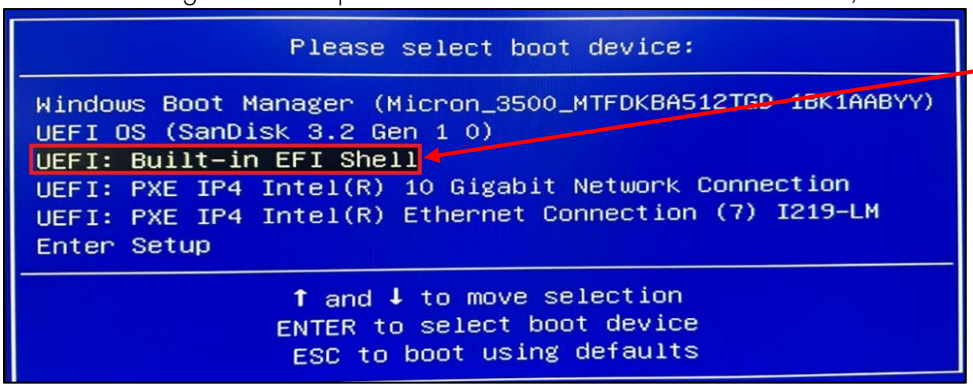


18) Under Shell> type command **fs1:**, then **Enter**.

19) Under fs1:\> type command **3Lock.nsh**, then **Enter**. Unit will auto reboot.

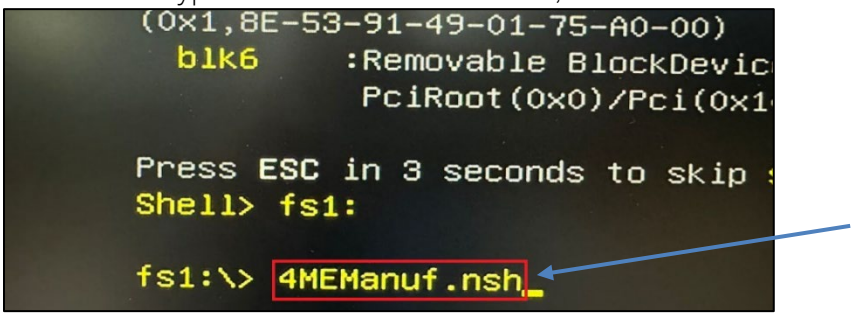


20) Press **F7** during the boot up screen. Choose **UEFI: Built-in EFI Shell**, then **Enter**.

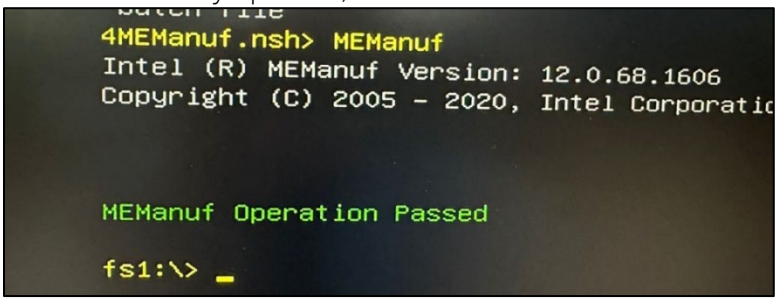


21) Under Shell> type command **fs1:**, then **Enter**.

22) Under fs1:\> type command **4MEManuf.nsh**, then **Enter**.

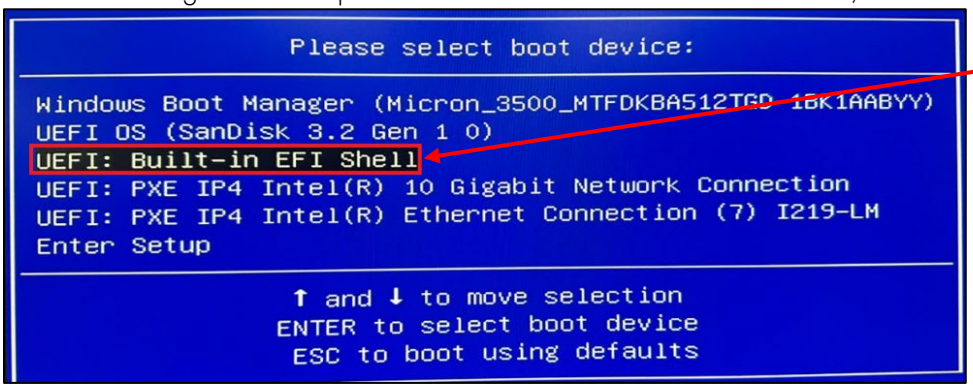


23) Once successfully updated, the screen should now look like this.



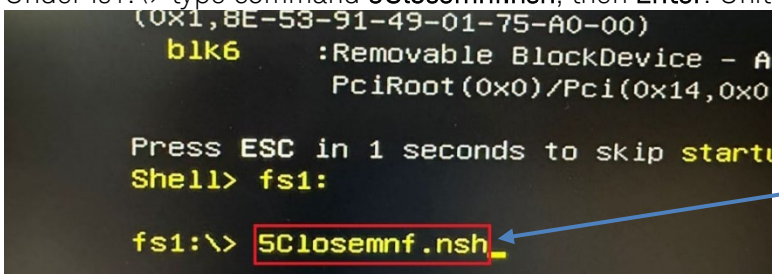
24) Press the power button to **shut down** the unit and then **power on** the unit again.

25) Press **F7** during the boot up screen. Choose **UEFI: Built-in EFI Shell**, then **Enter**.

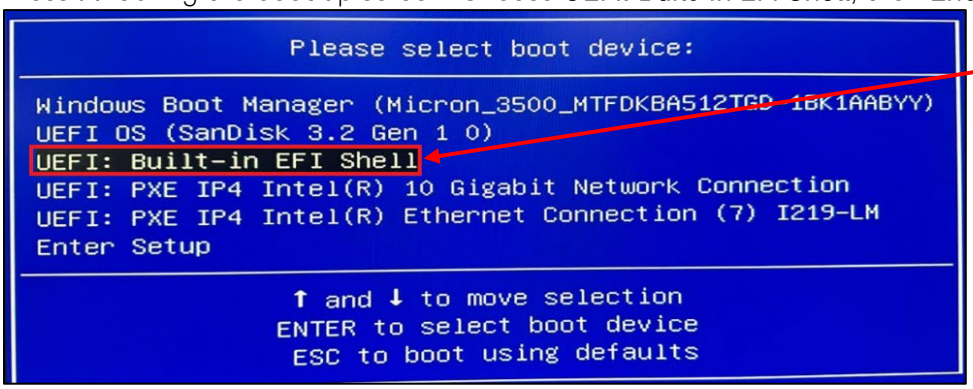


26) Under Shell> type command **fs1:**, then **Enter**.

27) Under fs1:\> type command 5Closemnf.nsh, then Enter. Unit will auto reboot.

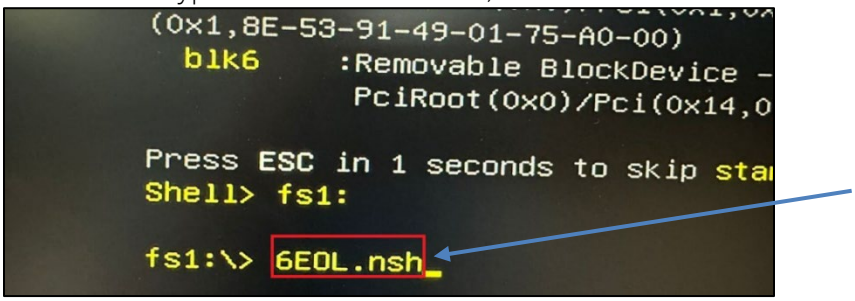


28) Press F7 during the boot up screen. Choose UEFI: Built-in EFI Shell, then Enter.



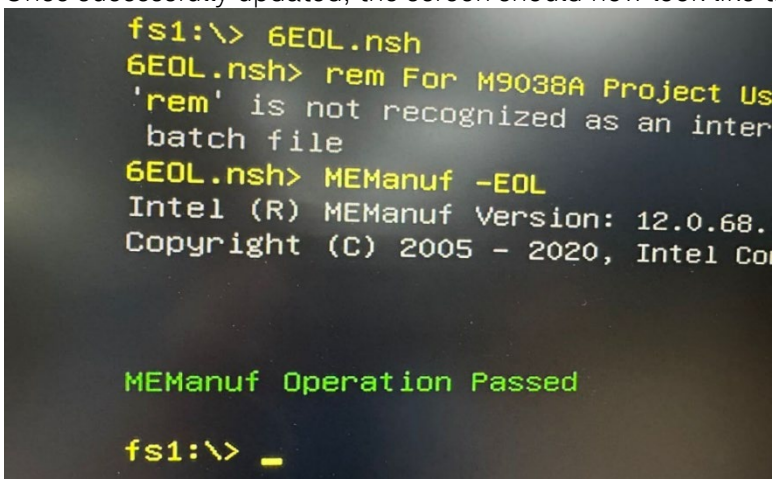
29) Under Shell> type command fs1:, then Enter.

30) Under fs1:\> type command 6EOL.nsh, then Enter.



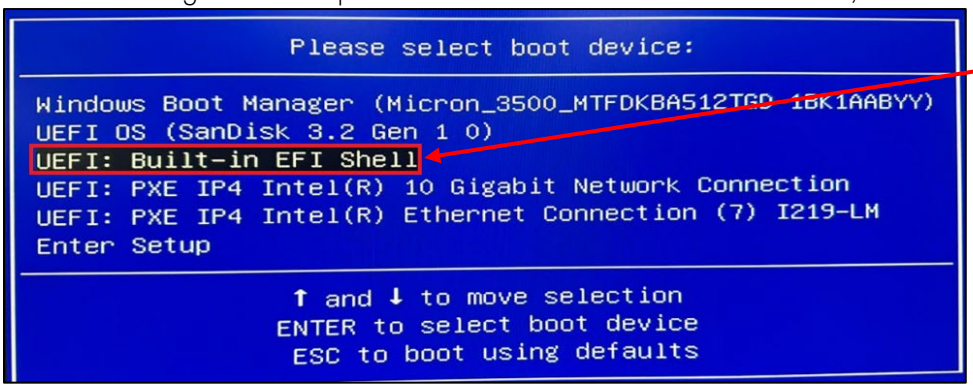
31) Press Enter again to continue.

32) Once successfully updated, the screen should now look like this.



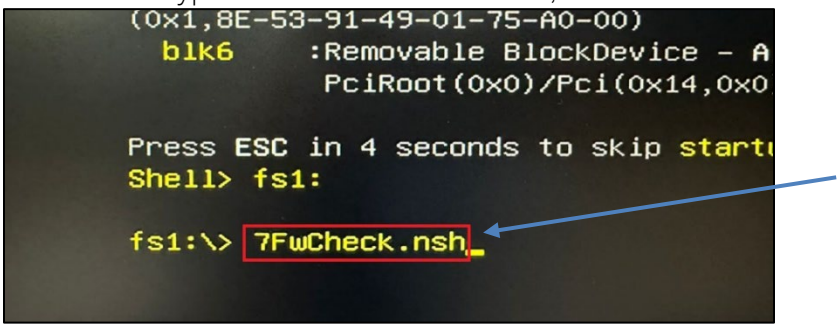
33) Press the power button to shut down the unit and then power on the unit again.

34) Press F7 during the boot up screen. Choose UEFI: Built-in EFI Shell, then Enter.

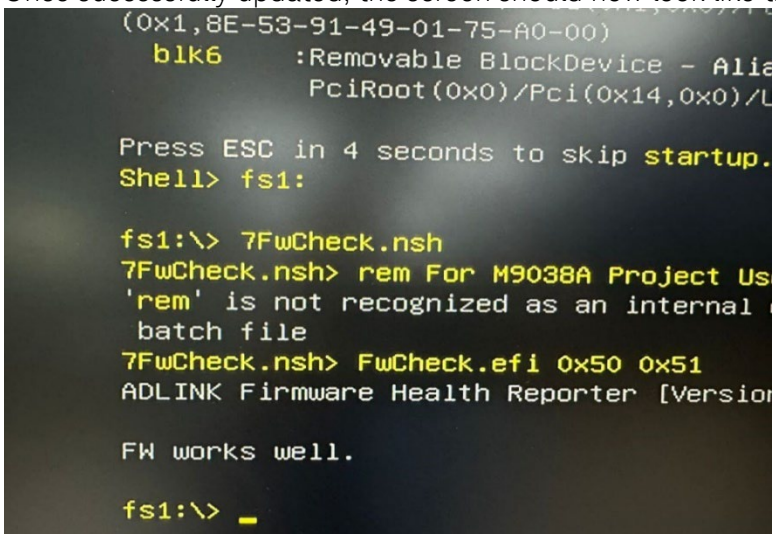


35) Under Shell> type command fs1:, then Enter.

36) Under fs1:\> type command 7FwCheck.nsh, then Enter.



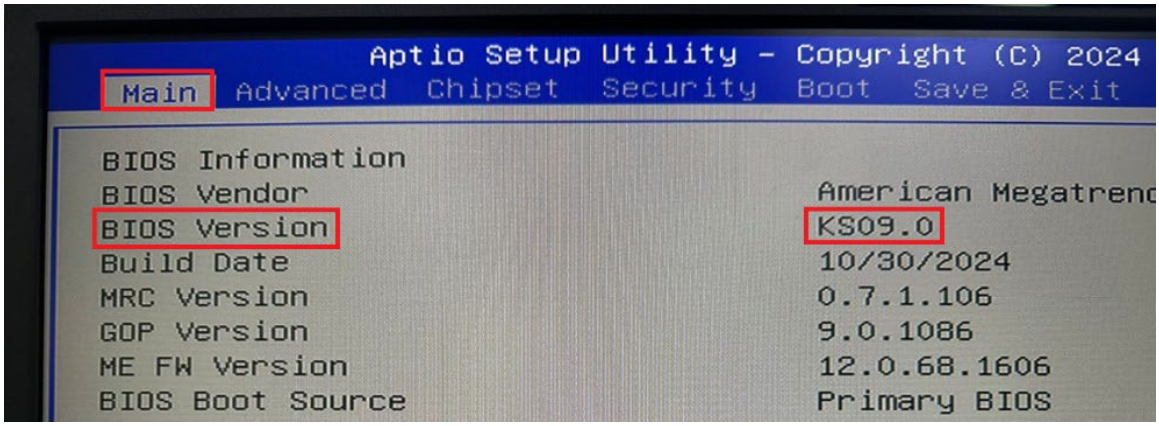
37) Once successfully updated, the screen should now look like this.



38) Press the power button to shut down the unit.

Verify BIOS Version

1) Restart M9038A.
2) When the M9038A beeps, press the DEL key several times to enter the Setup Menu.
3) Ensure that the BIOS version is the correct BIOS version. Example below shows KS08.



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