BIOS update steps

Important safety tips

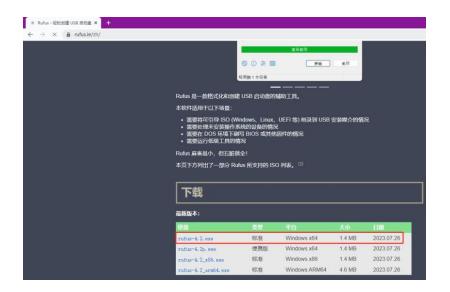
The BIOS update process is risky, and improper operation may cause the device to fail to boot. Make sure that:

Do not power off or restart the device during the update process

Double-check your device model and BIOS version

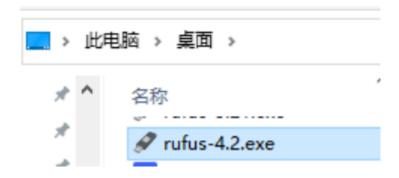
Back up important data before you do it

- 1. Prepare a blank USB flash drive. If there is data in the USB flash drive, please save the data in advance. Creating a bootable USB flash drive will format the USB flash drive.
- 2. Download the software from Rufus official website: https://rufus.ie, or you can get the tool through our technical support.



- 3. Insert a blank USB drive, find the Rufus software you just downloaded, and double-click to open it.
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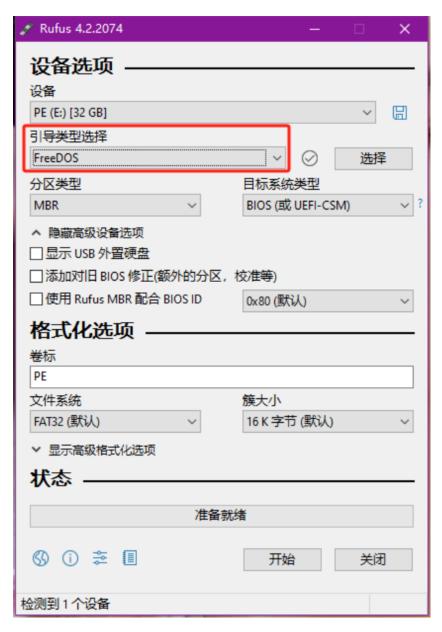
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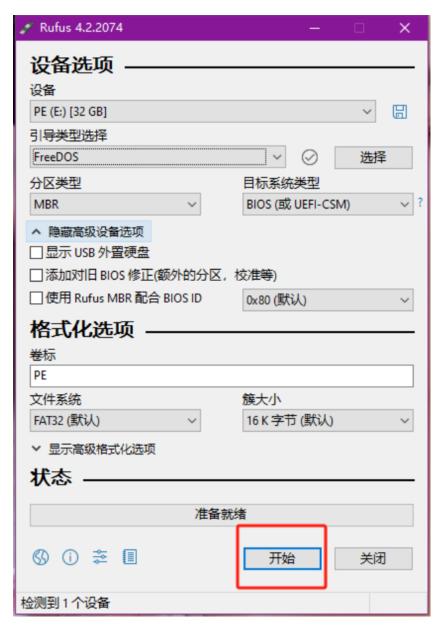
4. Select **USB** drive as the device.

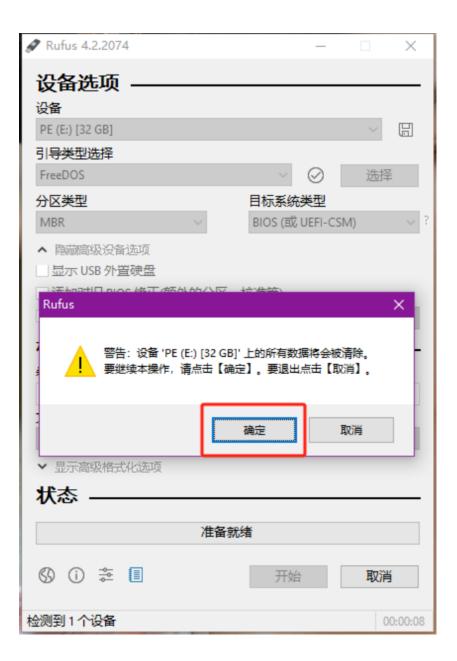


5. Select FreeDOS as the boot type.

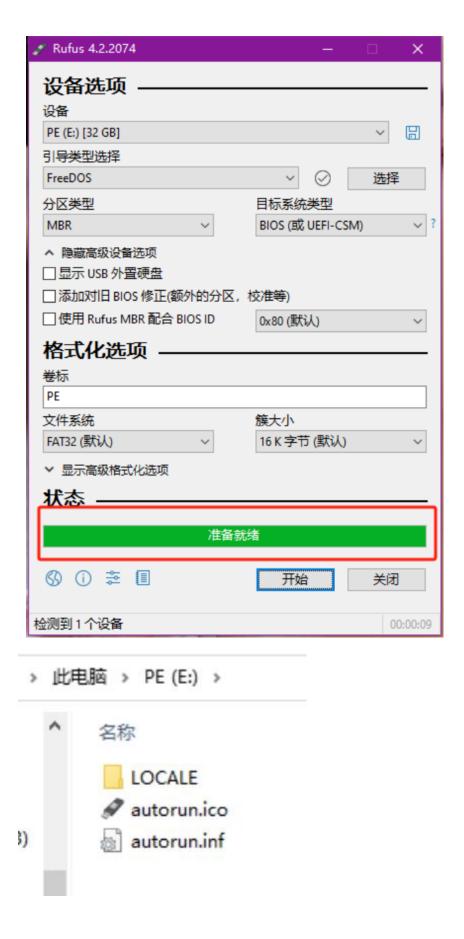


6. Click to **start** production, click **OK** in the pop-up warning box to continue, and then wait for production to be completed.





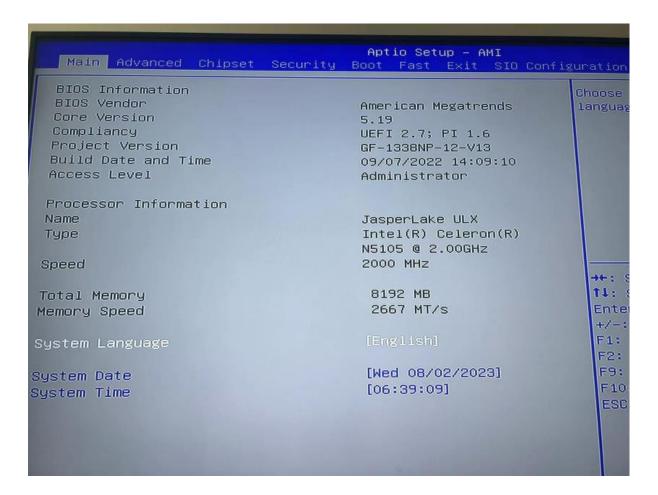
7. Wait for the **status** progress bar below to turn green to indicate completion and open the created USB flash drive with 3 files (LOCALE/autorun.ico/autorun.inf) indicating that the production is successful.



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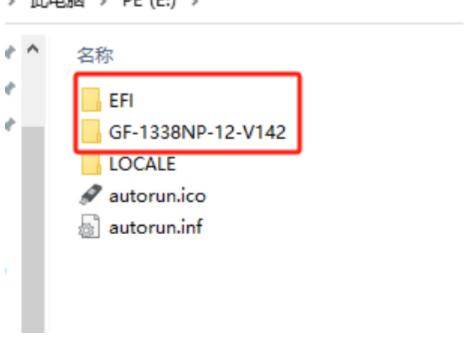
8. Contact us to get the latest BIOS file and boot file, take N5105 as an example, the BIOS name is 1338NP-12, and the BIOS version before flashing is as shown below.

Note: Please provide the information on the main page of the BIOS interface, or through the purchase order to ensure that it matches the motherboard model, to avoid using the wrong BIOS file to cause system failure or failure to boot.



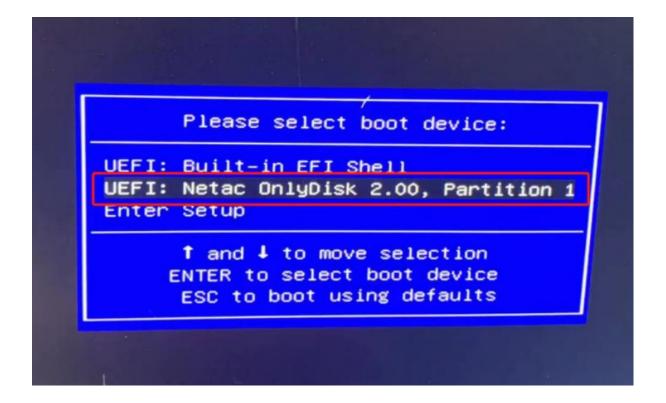
9. The following is the new version of the BIOS file and boot file, obtain these 2 files through our technology, extract the obtained 2 files, and copy the obtained files to the root directory of the U disk that has been made FreeDOS, as shown in the figure.





10. Plug the doubling device into the U disk, wired keyboard, monitor, plug in the power supply and power on, press the "F11" button to bring up the quick start menu list after the device starts, and select the U disk startup item through the directional keys "↑" and "↓", for example: UEFI: XXX (U disk name), press the "F11" button to select.

Note: You can open the BIOS file and look at the batch file to determine if it is UEFI or traditional boot, if you have 1.nsh you need UEFI boot to flash BIOS, if you have 1.bat you need traditional boot to flash BIOS, please note the difference! Here we take the UEFI startup as an example:



Enter cd.. Press the enter key to return to the previous level of directory, and then enter 1s (lowercase LS) to list the list of files under the USB boot disk, then you will see the BIOS folder and boot folder that you just copied to the USB flash drive, as shown below:

Note: If the device is connected to the hard disk, you may not be able to see the USB flash drive here, you can enter fs1: to switch and then enter Is to see if these 2 folders appear, if the device is connected to more than one, please follow the analogy fs1:fs2:...... Until you can see these 2 folders.

```
fs0:\EFI> cd ...
fs0:\> 1s
Directory of: fs0:\
                                    16,384
  09/24/23 03:21p <DIR>
                                        96
                                            AUTOEXEC.BAT
  09/24/23 03:21p
                                       190
  09/24/23 03:21p
09/24/23 03:21p
                                            autorun.inf
                                    34,494
                                            autorun, ico
                                    16,384
  04/24/23 03:31p <DIR>
                                    16,384
  05/17/23 05:23p <DIR>
                           34,780 bytes
           3 File(s)
           3 Dir(s)
fs0:\> _
```

12. Enter cd GF-1338NP-12-V142 (BIOS file name) into the folder, then enter command 1, press the enter key to execute, and the device will automatically restart 2-3 times, which is normal.

Note: Please be cautious during the update process to avoid shutting down, powering off, pressing the keyboard, or plugging and unplugging USB devices to avoid causing the system to turn on.

```
fs0:\> cd GF-1338NP-12-V142
fs0:\GF-1338NP-12-V142> 1s
Directory of: fs0:\GF-1338NP-12-V142
  09/24/23
            03:37p <DIR>
                                   16,384
  09/24/23
            03:37p <DIR>
  04/20/23
            03:42p
                              16,777,216
                                           1.bin
  12/13/22
            02:05p
                                       12
                                           1.nsh
  10/19/22
             04:59p
                                      57
                                          error.log
  01/13/22
             10:27a
                               2,728,064
                                           Fpt.efi
           4 File(s)
                      19,505,349 bytes
           2 Dir(s)
fs0:\GF-1338NP-12-V142> 1_
```

13. When the following figure appears, the update is complete, please press the "Ctrl"+"Alt"+"Delete" buttons at the same time to restart the device.

```
- Programming Flash [0x00B5000] 4KB of 4KB - 100 percent complete.
- Erasing Flash Block [0x0EC000] - 100 percent complete.
- Programming Flash [0x00E0000] 204KB of 204KB - 100 percent complete.
- Processing Flash memory block 3924 from 4095.
- Erasing Flash Block [0xF55000] - 100 percent complete.
- Programming Flash (0x0F55000] - 100 percent complete.
- Programming Flash memory block 3941 from 4095.
- Erasing Flash Block (0xF66000] - 100 percent complete.
- Programming Flash (0x0F66000] - 100 percent complete.
- Programming Flash memory block 3965 from 4095.
- Erasing Flash Block (0xF7E000] - 100 percent complete.
- Programming Flash (0x0F7E000) - 100 percent complete.
- Programming Flash (0x0F7E000) - 100 percent complete.
- Programming Flash (0x1000000) - 4KB of 4KB - 100 percent complete.
- Programming Flash (0x1000000) - 4KB of 4KB - 100 percent complete.
- Programming Flash (0x1000000) - 4KB of 4KB - 100 percent complete.
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- Programming Flash (0x1000000) - 4KB of 4KB - 100 percent complete.
```

14. After completion, enter the BIOS interface to confirm whether the update is successful, and check the BIOS version and update date.

