Install vmare workstation pro

https://www.vmware.com/products/desktop-hypervisor/workstation-and-fusion

vmware settings

Edit > Preferences > USB > Connect the device to the foreground virtual machine.

The usb mode will be switched several times during the dfu process, be sure to keep the mac device connected to the system in the VM!



Get vmware image

After purchasing DFUKit, you will receive a download e-mail, click on the link to download

🎉 Thank you for purchasing from our store! You can download your purchased files below.

	M4-SSD DFUKit
	Download any file up to 5 time(s)
DFU KI	License key: 295QA5AQ
	DFUKit vmware image v20250228

If you have any questions, don't hesitate to contact our team.

Thanks, M4-SSD team

Unzip and open ovf file

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Setting Share folder

Setting an share folder for this vm so that you can share the ipsw file from Winodws folder.

The name of the shared folder in the tutorial uses **macos**, the windows file path holds the downloaded ipsw file.

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DFUKit use

During the DFU process, the usb mode of mac mini will be switched several times, at this time, windows pc will be recognized as a **different usb device**, all need to be manually **connected** to the virtual machine

Start the virtual machine and login

User name: **m4-ssd** system password: **m4-ssd.com** Enter license code from m4-ssd



To direct input to this VM, click inside or press Ctrl+G.

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Ensure that the network is working properly and the activation is successful



To direct input to this VM, click inside or press Ctrl+G.

mount the shared folder

sudo vmhgfs-fuse .host:/ /mnt/hgfs -o allow_other
ls /mnt/hgfs/macos/

macos is the shared directory we set up earlier, at this point you can see that there is already a **pre**downloaded ipsw file in the directory



Connect the DFU Mode Mac mini

Put the Macmini with the replacement SSD module into DFU mode and plug it into the pc.

Sometimes the macmini in dfu state will not be inserted into the VM and you need to manually click to connect to the VM



Verify that the dfu mode mac is unplugged from the host and inserted into the virtual machine



```
To direct input to this VM, click inside or press Ctrl+G.
```

Start DFU

sudo dfukit -e /mnt/hgfs/macos/UniversalMac_15.3.1_24D70_Restore.ipsw



DFUKit detects a DFU-mode mac and goes to work!



Connect the Apple Debug USB mode mac mini to virtual machine

The mac mini will go into Apple Debug USB mode and must be quickly clicked to connect to the virtual machine



Enter YES to continue



Connect the Apple Mobile Device (Recovery Mode) mac mini to virtual machine

The mac mini will go into Apple Mobile Device (Recovery Mode) and must be quickly clicked to connect to the virtual machine



The previous operation leaves very little time for the user to operate, and if too much time passes it

will report an error and quit

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If that fails, unplug the Mac mini power cable and try again in dfu mode.

Usually after failing once or twice you will have the experience of being able to quickly click on the usb icon and successfully dfu



Normally when this is displayed this DFU mode Mac mini should display the Apple Logo.

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	Personalizing IMG4 component PMP Sending PMP (870689 butes)	
	Extracting 044–60100–075.dmg.trustcache (Firmware/044–60100–075.dmg.trustcache) Personalizing IMG4 component RestoreTrustCache	
	Sending RestoreTrustCache (21462 bytes) Extracting SmartIOFirmware_ASCv7.im4p (Firmware/SmartIOFirmware_ASCv7.im4p)	
	Personalizing IMG4 component SIO Sending SIO (1164069 bytes)	
	Extracting iBootData.j773s.RELEASE.im4p (Firmware/all_flash/iBootData.j773s.RELEASE.im4p) Personalizing IMG4 component iBootData	
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Connect the Apple Mac to virtual machine

Notice that the usb mode of the mac mini at the bottom right of vmware switches to an Apple Mac device, click Connect to Virtual Machine.



Waiting for completion

At this time to see the constant repetition of the various progress bars, the monitor will also already have dfu progress display, wait for dfu can be completed.

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All work done, enjoy your mac mini!

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