

# NuCF PDS Installation Guide

Howdy! Thank you for purchasing my NuCF card! – zigzagjoe :)

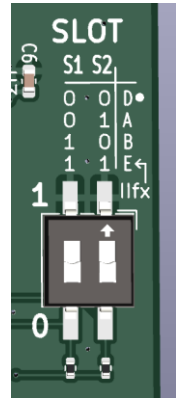
To install the card, follow these instructions carefully. **Please take care:** I am not responsible if you accidentally injure yourself or cause damage to your computer during the installation process. If you are at all uncomfortable with these procedures, please seek a qualified individual to assist you with the installation process.

## PDS Card Installation



**Turn off and unplug your computer for at least 5 minutes before disassembling it.  
Do not touch the SE/30 analog board or CRT as it may remain charged after power is removed.**

- Set the DIP switches on the rear of the NuCF card appropriately for the type of machine.
  - SE30 / IIsi:** Slot **D, A, B** are supported. Default is **D** to avoid card conflicts.
  - Ilfx:** Use Slot **E**, it is the *only* valid setting for Ilfx.
- Plug your CF card into the slot on the NuCF card. CF Label faces away from the PCB.
- Open the computer
  - SE30:** Remove plastic programmer's switch, if present. Using a long Torx T-15 screwdriver, remove the 2 screws near the IO area and 2 screws under the handle, then remove the rear of the case.
  - IIsi / Ilfx:** Release the top cover using the latches on the rear.
- Ilfx:** Remove any NuBus card already installed in the NuBus slot next to the PDS slot.
- Seat the card **carefully** into the PDS slot on the motherboard. It should seat smoothly with some force.
  - Ensure the logic board is entirely forward in the chassis rails if the card does not seem to be seating correctly. Check that no pins have become bent and nothing is stuck in your PDS slot.
- Reinstall the case / cover as appropriate.



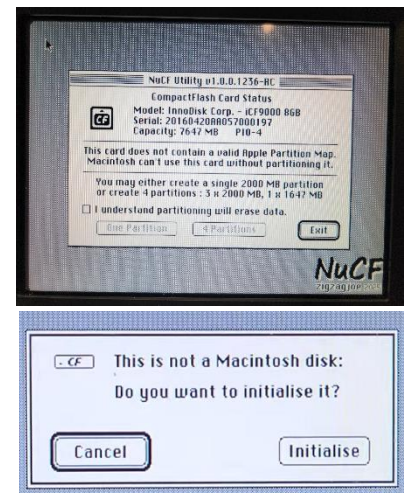
## Stacking cards

You may stack an additional card on the NuCF card in IIsi / SE30. The slot must only be used for PDS cards, it is not a cache connector. You may need to bend the chassis supports away from additional cards in the SE/30.

**Please note:** Most systems should be able to support two cards, however, any additional cards are not guaranteed to work and can cause system instability / inability to boot.

## CF Card Initialization & Partitioning

- Turn on the computer with a bootable SCSI device or floppy.
- The NuCF Utility should appear automatically after the memory test if the card is uninitialized.
  - If you see a crossed out CF icon in the bottom left corner of the screen, or no icon at all, go to the troubleshooting section.
- Partition the card, then exit. The system will continue booting.
- When the finder appears, follow the prompts to initialize the new volume(s). Your new volume(s) with CF icons will appear on the desktop.
- Drag & drop the contents of your boot device to one of the new volumes.
- Restart the system, and it will boot from the CF Card. You may remove your original boot device.



## Notes

**Do not hot plug the CompactFlash card!** This **WILL** cause data loss and may damage the NuCF card or your computer. Always turn the computer off first!

**Migration from a SCSI emulator image is best accomplished by copying the files within Mac OS.** However, you may “dd” or use Win32DiskImager to directly write a .hda file to the CF card using a CF-to-USB adapter if you choose. Partitions will be used as set up within the disk image; unused CF card space will be wasted.

**Maximum size per partition is 2000 MB. This is a limitation of Mac OS < 7.5.** For users of System 7.5+, hold **Option+C+F** at boot to change the partitioning limitation to 4000MB. This only affects the NuCF Utility, not Mac OS. You must never boot an earlier version of Mac OS or it **will** corrupt a volume >2000MB!

## Troubleshooting



- The CF Icon shown to the right will appear in the bottom left when the CF driver loads.
  - If the icon is crossed out, something is wrong with the CF card or the NuCF card.
  - You may invoke the NuCF utility by holding the **C+F** keys at boot for more detail.
- If the CF icon does not appear, the NuCF card will not be bootable.
  - Using 'Startup Disk' or 'System Picker' to select a non-CF volume will prevent booting from the NuCF card until the CF volume is reselected using 'Startup Disk'. The NuCF Utility will also be inaccessible if the card is not bootable.
  - **The CF card may be used for normal storage without the card being bootable.**
  - The NuCF card will automatically configure the startup device the first time it is installed.
  - You may perform a PRAM reset (**Command+Option+P+R** at boot) to restore the card's bootability.
- Booting from the CF can be temporarily disabled by holding Shift+Option during boot.
  - Hold these keys until the mac begins booting from another bootable device.
  - The CF driver will still load later unless you hold keys until the Finder appears.
- If the CF icon does not appear at all even after PRAM reset, you may have a card conflict.
  - Try a different slot ID or removing additional cards until you find which card is causing the issue.
  - Using Tattletech, you can determine if Mac OS detects the card at all.

## Compatibility

- Mac System 6 – 8 is supported. A/UX is currently not supported, nor is NetBSD.
- A CF card supporting PIO-4 speeds is required. Any card of a useful capacity should meet this requirement.
- Tested CF cards: InnoDisk ICF9000 (recommended), Sandisk Extreme, Transcend CF300, WD SiliconDrive
- Tested to work with my Booster 2.0, Carrera 040, DiimoCache, 30Video, Asante MacCon, SEthernet/30

## Reporting issues

I've done the best I can to test this card thoroughly, but bugs are always possible. Please report any issues through this github repository. **Additional documentation is located here.** Updated firmware and flashing utilities will be posted as well, and please feel free to ask questions.

<https://github.com/ZigZagJoe/NuCF-Support>



**Happy Macing!! :)**