Macstorm Lenovo M700 Tiny MacOS Ventura – how to create   installation USB stick and how to install macOS on an SSD drive.

The Bios settings of the Lenovo M700 Tiny computer are very important and should be changed as follows (enter BIOS by pressing F1 shortly after the computer starts)

1. Startup setup
   CSM support – disabled

   Boot Mode - UEFI ONLY

   Startup primary drive - set Your startup pendrive/drive

2. . Devices

   Video Setup/IDG

   Pre Allocated Memory Size – 64 MB

   Total Graphics Memory - Max

3. Network setup

   Boot agent - disabled

4. Secure
   Secure Boot - disabled

Download the necessary files from our server.

Files are packed as ZIP and protected by a special password, which you receive immediately after purchase. By default, files are downloaded to the "download" folder.

Creating a Ventura installation USB stick with Paragon Backup Recovery 2013

This flash drive is used to install macOS Ventura exactly as it is on your original Mac.

You can do this on a **computer with Windows 7 , 8 or 10**, so you do not need a mac for this. Of course macOS Ventura /Monterey will only work on an Lenovo M700 Tiny computer.
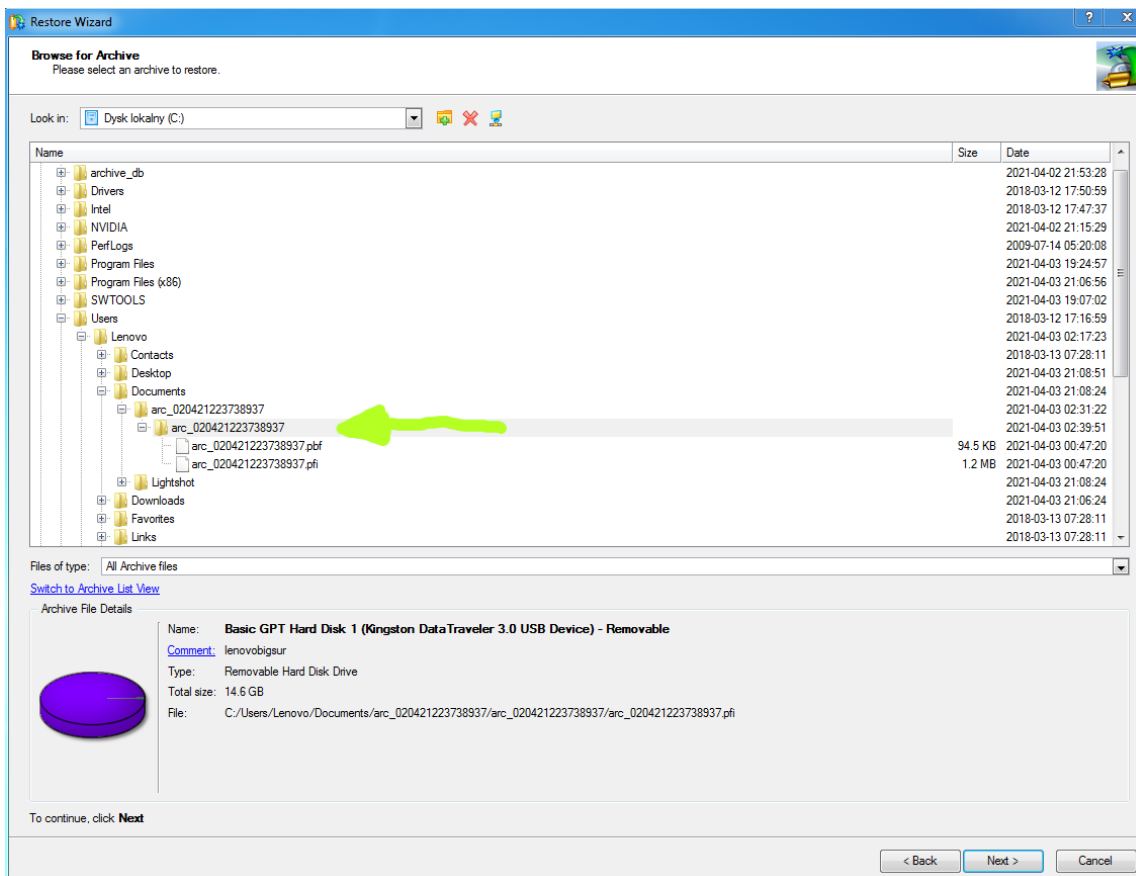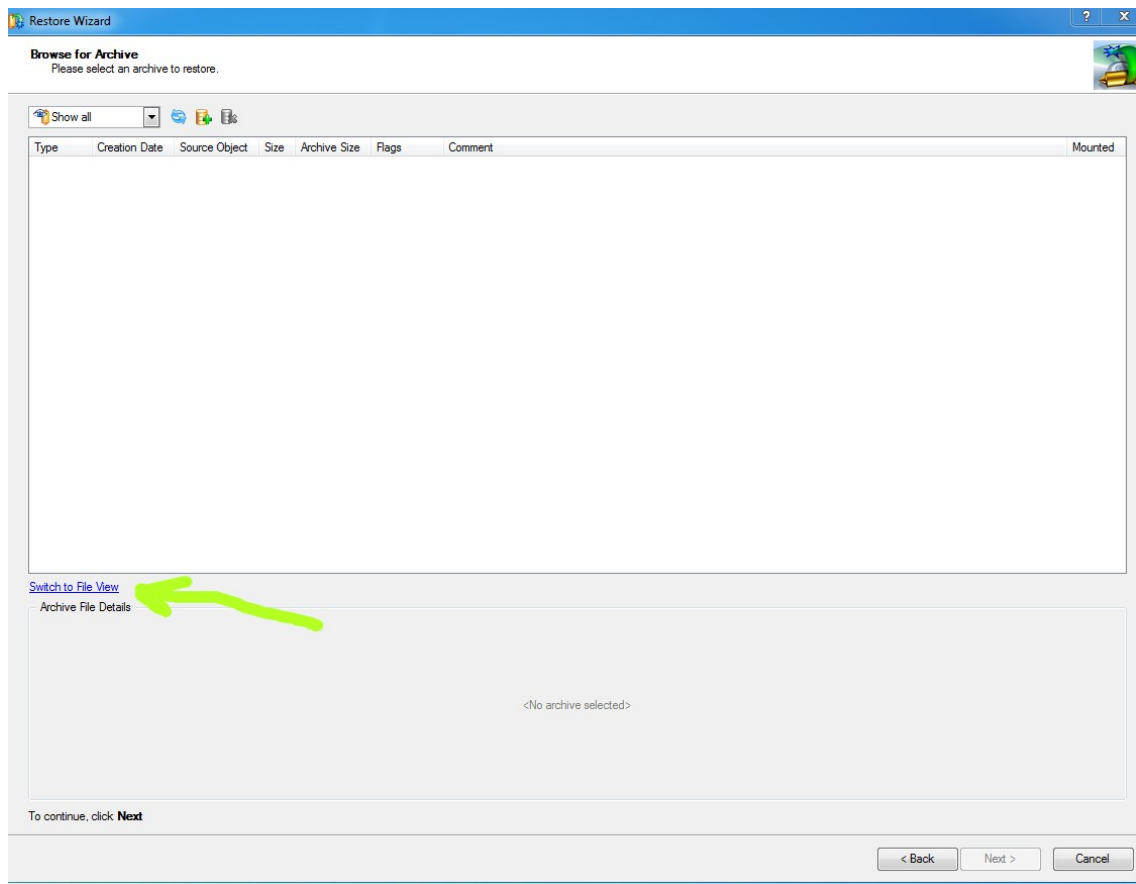
The software we will use is **Paragon Backup Recovery 2013**. The program (free version) is included in the files along with the serial number. We need to install it on a Windows computer.
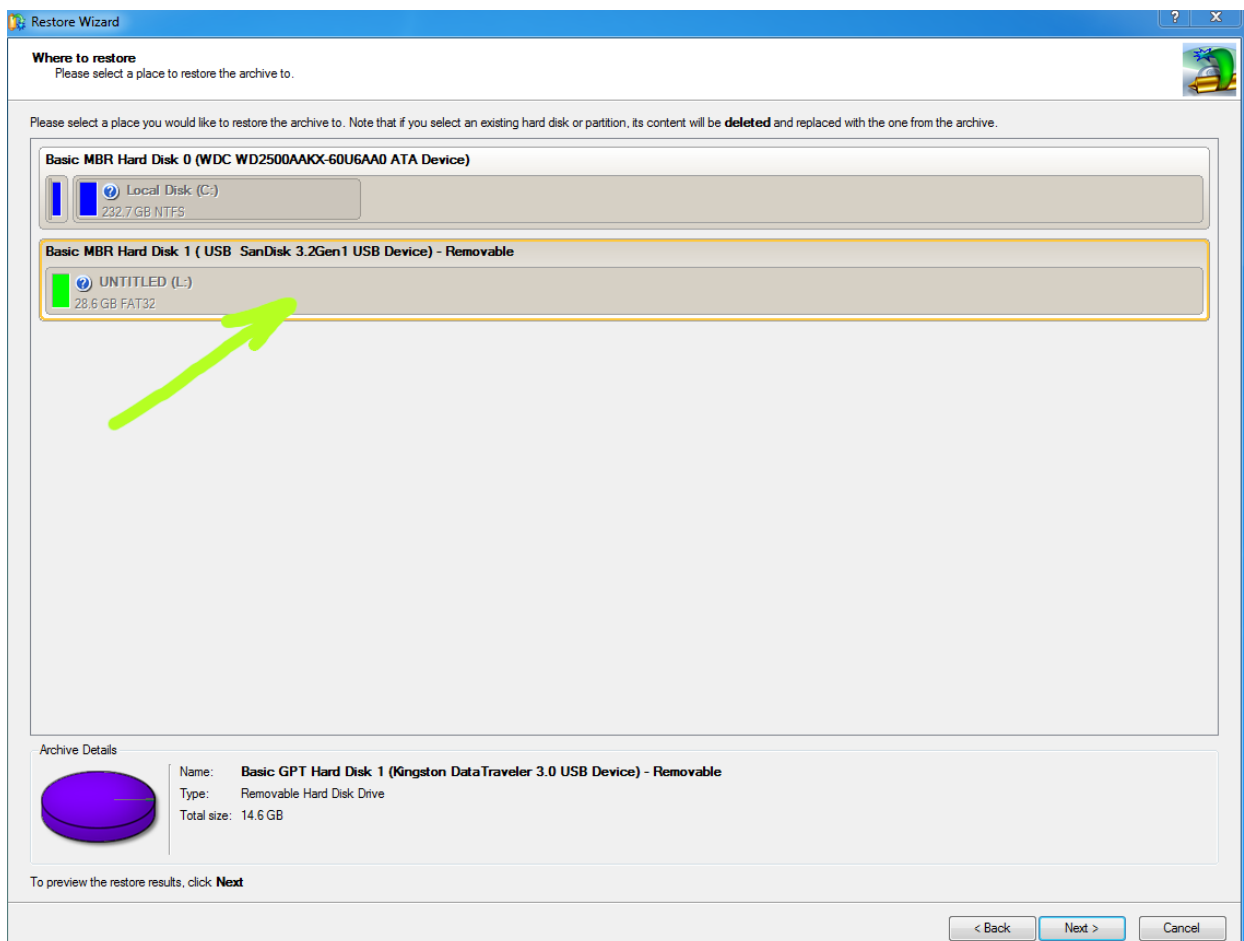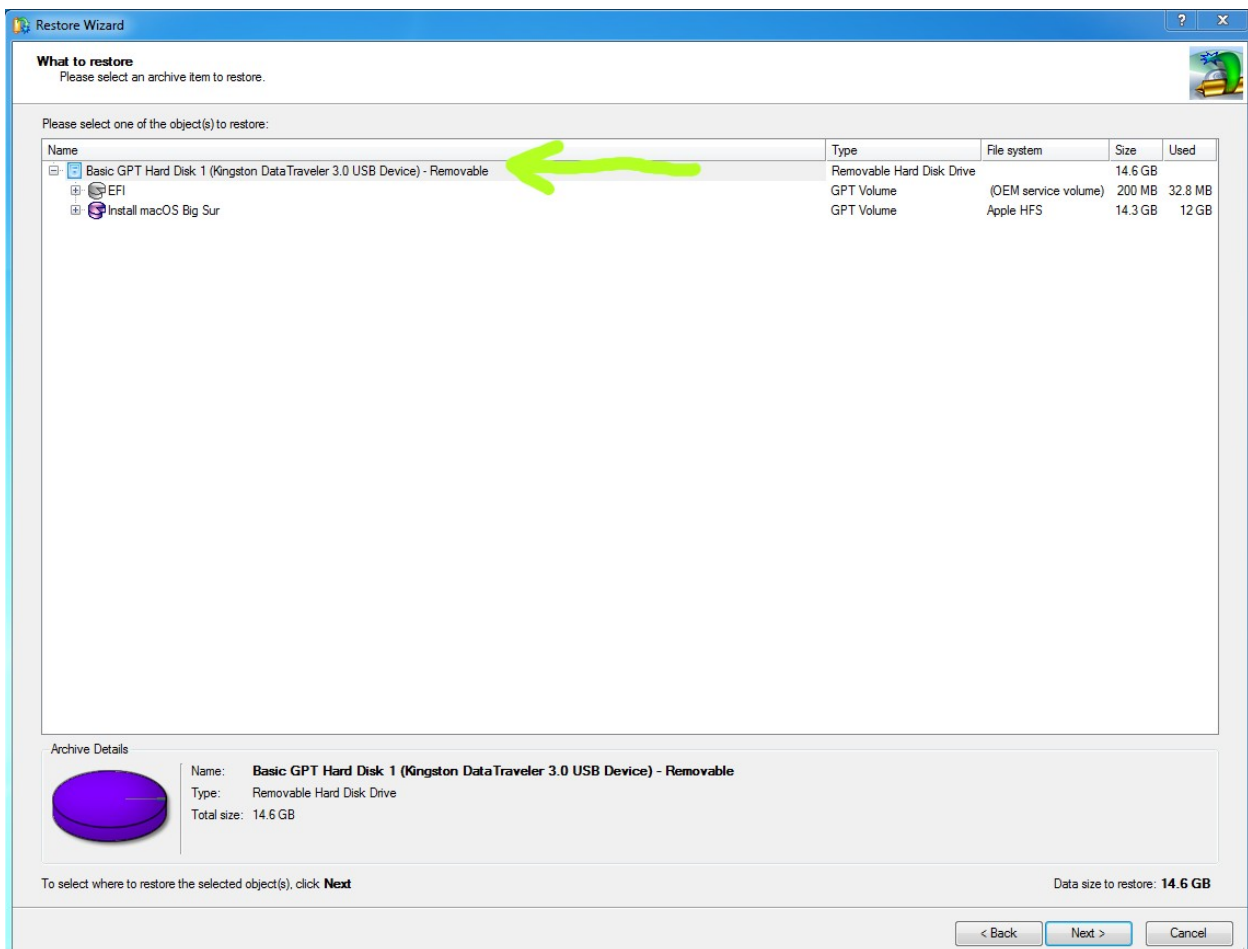
The files you will need are located in the downloaded 'ARC directory'. This is an exact digital copy of the installation USB stick. Recommended capacity of the memory stick is **minimum 16 GB**. The flash drive can be formatted in NTFS or FAT but with an MBR sector. The program automatically installs apple **HPFS partitions and a hidden EFI partition**. It is important to select the "arc" directory when "pointing" to a file for recovery, then two partitions will be recovered - apple HFS and EFI.
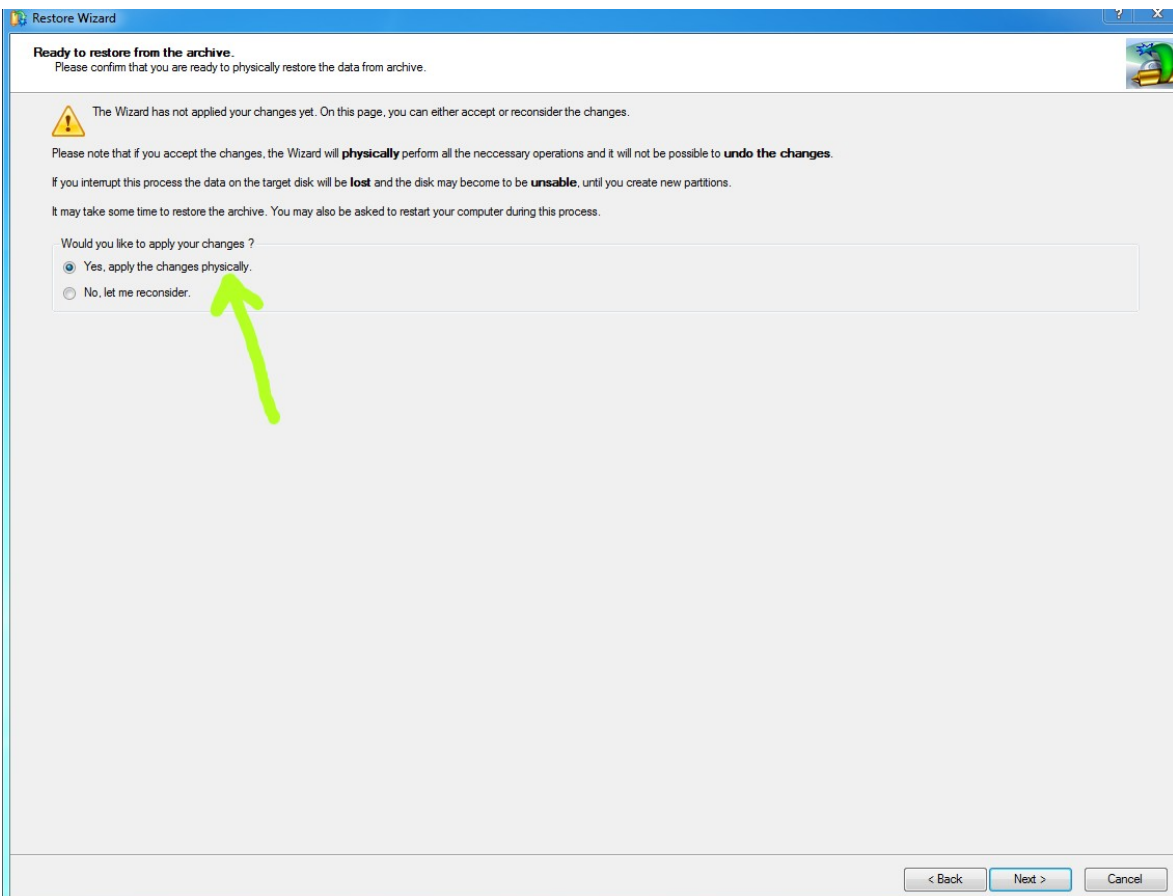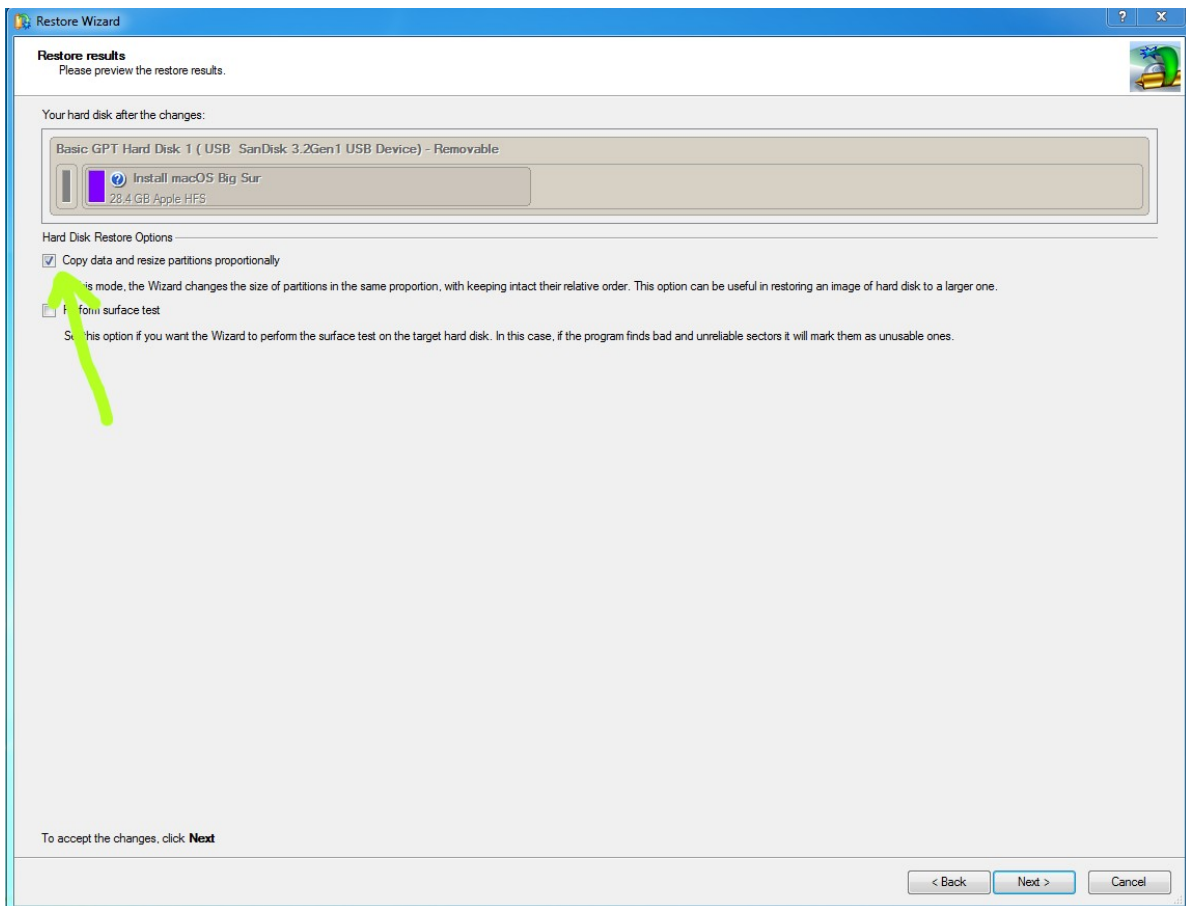
Selecting separate files results in recovery of, for example, one partition and not the entire flash drive. Likewise, then select "Basic GPT Hard disk..." and not the individual "Install macos BigSur" or EFI partitions.
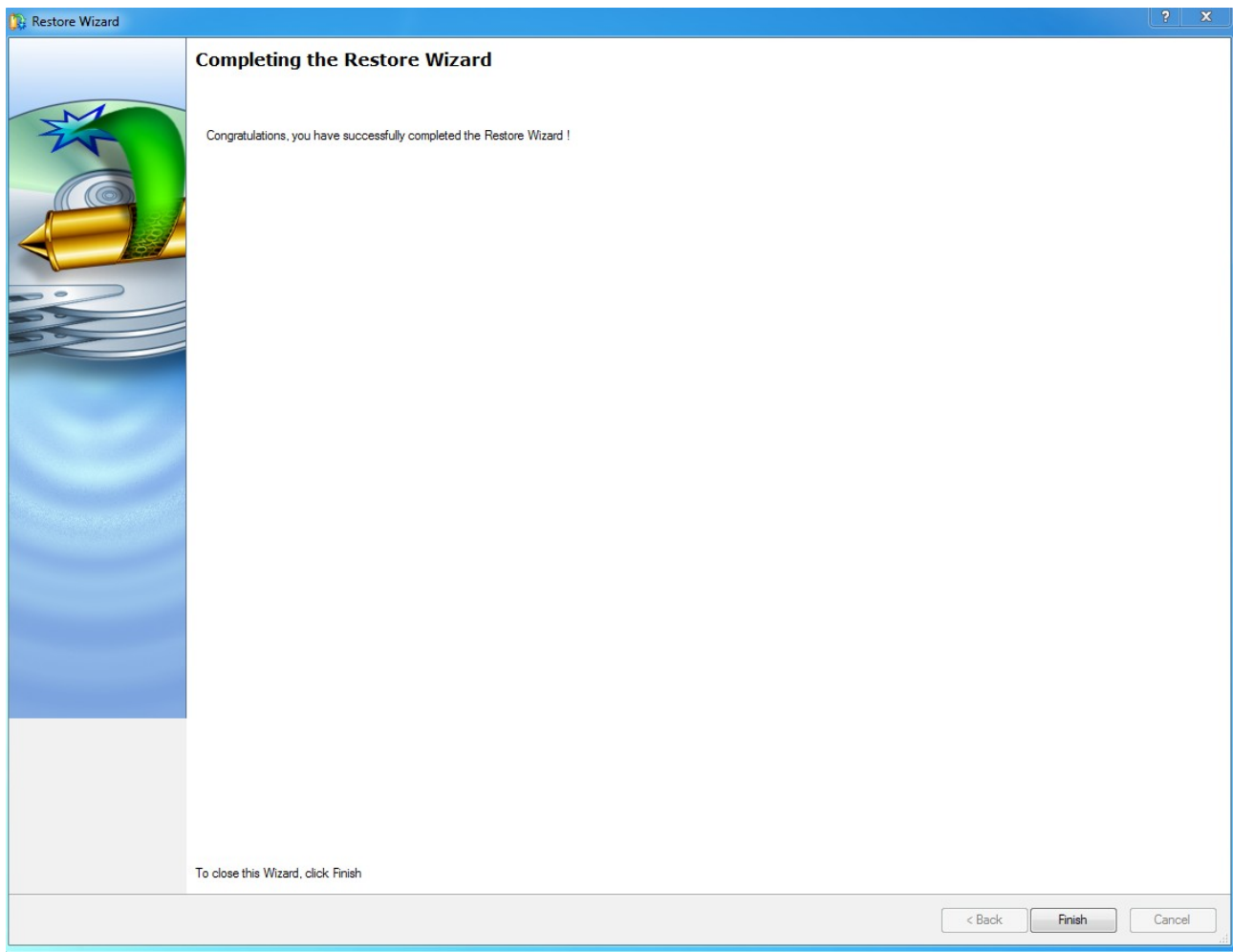
Below is a **step-by-step guide** to what to do and how to do it:

Restore Wizard

Restore results
Please preview the restore results.

Your hard disk after the changes:

Basic GPT Hard Disk 1 (USB SanDisk 3.2Gen1 USB Device) - Removable

Install macOS Big Sur
28.4 GB Apple HFS

Hard Disk Restore Options

☑ Copy data and resize partitions proportionally

...is mode, the Wizard changes the size of partitions in the same proportion, with keeping intact their relative order. This option can be useful in restoring an image of hard disk to a larger one.

☐ ...form surface test

S...this option if you want the Wizard to perform the surface test on the target hard disk. In this case, if the program finds bad and unreliable sectors it will mark them as unusable ones.

To accept the changes, click **Next**

< Back   Next >   Cancel

Restore Wizard

Ready to restore from the archive.
Please confirm that you are ready to physically restore the data from archive.

⚠ The Wizard has not applied your changes yet. On this page, you can either accept or reconsider the changes.

Please note that if you accept the changes, the Wizard will **physically** perform all the neccessary operations and it will not be possible to **undo the changes**.

If you interrupt this process the data on the target disk will be **lost** and the disk may become to be **unsable**, until you create new partitions.

It may take some time to restore the archive. You may also be asked to restart your computer during this process.

Would you like to apply your changes ?
◉ Yes, apply the changes physically.
◯ No, let me reconsider.

< Back   Next >   Cancel

Installing macOS Ventura or Monterey with a flash drive

With the pendrive prepared in this way, set the bios to boot from the pendrive.

Note that it must be an EFI partition of the pendrive and not the pendrive itself, the system can boot only from EFI partition.
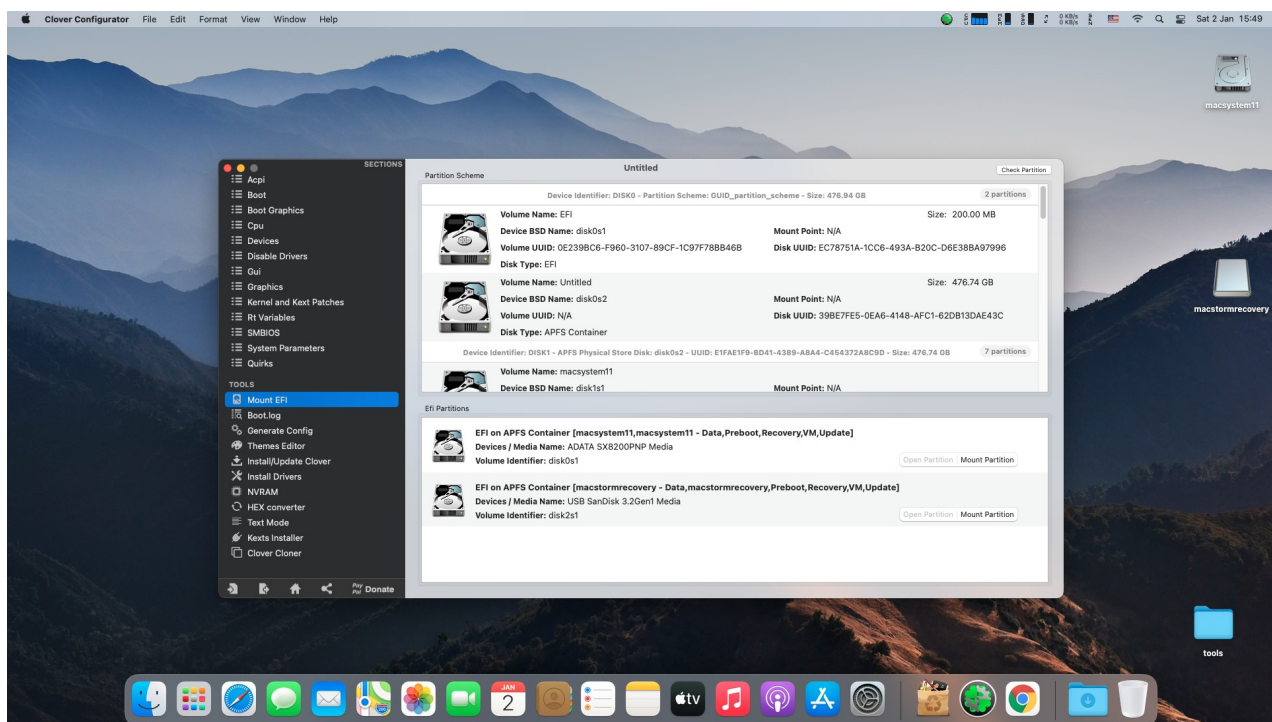
After starting the icon "Install macOS Ventura (or Monterey) " appears. Click on it and the installation of the system begins as on the original Mac. The installation runs in several stages, after each stage there is a restart. After the restart we always start from a new icon "Install OS". When the installation is finished a new icon "Macsystem...name" will appear. This means that the system was installed on the SSD. During the installation it is sometimes necessary to restart the computer, when the pendrive is not detected.

Just because we have BigSur/Monterey installed on an SSD does not mean that we can boot from it. For now, we can boot from the EFI partition of the pendrive and then boot from the disk. To

make your SSD/M2 fully bootable, you will need to copy the EFI partitions from your flash drive to your SSD/M2.

Temporary macos password is „12345”

Copy EFI partition from pendrive to SSD drive

MacOS won't run on a PC without a proper bootloader and dozens of settings, drivers, patches, etc. This is all contained in a hidden EFI partition. This is where the "engine" that starts macOS Ventura/Monterey and lets you enjoy it on your Intel NUC. So we need to **copy the EFI partition from the flash drive to the EFI partition of the SSD**. We use the clover.app for this (it's in the files) which we just need to transfer to the application and run . The application gives us access to hidden EFI partition on pendrive and target SSD.

Click on Tools/Mount EFI
Search destination SSD and click on „Mount partition" Open EFI partition by click on „Open

partition" Search pendrive and click on „Mount partition"
Open EFI partition „Open partition"

Now copy the downloaded EFI directory from the EFI/pen drive to the EFI/SSD drive you can simply use the finder for this. Note it is important that there is an EFI directory on the EFI partition and other files in it. If there is no EFI directory the bootloader will not load

EFI partition must contain EFI folder .
It is almost over. But now we must copy legacy bootloader to SSD drive.