Welcome to Windows3280’s OpenCore Setup Guide!

This guide will help you to setup OpenCore for using it on hard drive, install MacOS on PC and and use Windows with it.

Requirements:

1. Download OpenCorePkg from GitHub

* Debug is used to fix errors very easy
* Release doesn’t have any debug info, but loads faster

1. Download ProperTree and GenSMBIOS
2. Download OcBinaryData
3. Download Lilu, VirtualSMC, SMCProcessor, SMCSuperIo, WhateverGreen and other kexts.
4. Get info about needed ACPI files from Dortania’s Getting Started with ACPI used with your CPU
5. Go to Device Manager and learn your hardware
6. Download OpenCore Legacy Patcher (if you have Nvidia graphics)
7. An odd hour
8. 16GB+ USB drive
9. Download BootDiskUtility
10. Get MiniTool Partition Wizard
11. Download MountEFI

Chapter I. Getting started

Unzip OpenCorePkg and copy EFI folder from IA32 if you are x32, or x64 on x64 platform to your desktop. Launch BDU and go to config, set Clover version to “Not Install”.

Close config and go to DL center, then choose your macOS version. After downloading, format USB and restore \*.hfs file to other partition. Launch Patition Wizard and change letter for 200mb partition on USB. Apply and format to FAT32 partition. Copy EFI to USB drive and go to next chapter.

Chapter II. Gathering files

See the table from Getting started with ACPI to see which tables you need, then you have to copy binaries from OpenCorePkg\Docs\AcpiSamples\Binaries to EFI\OC\ACPI.

Then, go to <https://dortania.github.io/builds/> and download Lilu, VirtualSMC, SMCProcessor, SMCSuperIO, WhateverGreen, an Ethernet kext, a WI-FI kext (for laptops), PS/2 kexts (if needed), AppleALC (to get onboard sound controllers) and more. Drop them into EFI\OC\Kexts.

Now we will clean up. Delete all drivers in EFI\OC\Drivers except:

OpenRuntime.efi NEEDED

OpenCanopy.efi NEEDED GUI driver

OpenUsbKbDxe.efi Legacy-required Boot from Legacy BIOS

OpenPartitionDxe.efi Legacy-required Needed to boot recovery on OS X 10.7 through 10.9

HfsPlus.efi (grab from ocbinarydata) NEEDED Needed to see and boot HFS+ partitions

If you have an old CPU or Legacy BIOS, use HfsPlusLegacy.efi.

If you have an x32 CPU, use HfsPlusLegacy.efi-like HfsPlus32.efi

ResetNvramEntry.efi Optional Used to reset NVRAM

Then we will clean up tools folder. Delete all tools, but you can keep OpenShell.efi to start UEFI Shell for easy debugging.

Now, we will delete Resources folder in EFI folder.

We will copy Resources from ocbinarydata to EFI folder.

Then we will drop kexts into the Kexts folder. To copy a kext, copy “Something.kext” folder to EFI\OC\Kexts.

To get next file, called “config.plist”, go to next chapter.

Chapter III. Setting up config.plist

First, unzip ProperTree, and start ProperTree.bat for Windows or ProperTree.command for macOS.

Open your OpenCorePkg, select Docs and grab “Sample.plist”. Drop it into EFI\OC\ folder and rename sample into a “config.plist”.

Open config in ProperTree and do an “OC Clean Snapshot” using Ctrl\Cmd + Shift + R or select it in “File” menu.

You will see your SSDTs. Click right mouse button on “Root” and click “Collapse Children”.

Go to Misc\Boot and set HideAuxiliary to false, set PickerMode to External, PickerAttributes to 17, go to Misc\Debug, set AppleDebug, ApplePanic and DisableWatchDog to true. Go to Misc\Security, set ScanPolicy to 0, BlacklistAppleUpdate to true, set Vault to Optional, set SecureBootModel to Disabled (if you have Nvidia graphics). Do not touch other keys.

Go to NVRAM, go to third key and add these boot args:

Keepsyms=1 amfi\_get\_out\_of\_my\_way=0x1 nvda\_drv\_vrl=1 ngfxcompat=1 ngfxgl=1 rootless=0

(ngfx and nvda keys for Nvidia graphics)

Set csr-active-config to 030A0000 and save config.plist.

Launch GenSMBIOS like with ProperTree.

Write 1 and press enter.

Write 2 and press enter, drag config.plist from EFI\OC to the terminal.

Write 3, then write iMac18,1 and press enter.

Write 4, press enter.

Write 5, press enter.

Chapter IV. Installing macOS

Boot from USB and select macOS Base System. If you booted to the recoveryOS, go to Disk Utility. Click arrow in the top of the window. Click “Show all devices”.

Click right mouse button on your drive or a partition, erase the disk to APFS format. After formatting, close disk utility, and select Install macOS. Click “Continue”, select your disk and when installing move the mouse or install will abort. When restarted, go to boot menu, and select USB drive. Select macOS Installer and wait 30 minutes. When it rebooted again, select USB and boot your drive.

Chapter V. The last steps

Setup your system and launch MountEFI, go to “NO NAME” disk and copy EFI folder from USB to new partition.