

# OpenCore Bootloader aktuelle und ältere Versionen

Beitrag von „Raptortosh“ vom 22. August 2022, 20:03

- v0.8.3
- Added ext4 file system driver
- Added support for macOS 13 DP3 Kernel Collection
- Added --force-device option to AudioDxe, allowing UEFI audio on HDA controllers which misreport themselves as non-HDA audio devices
- Provided optional unsafe fast file logging (suitable only for firmware with a fully compliant FAT32 driver)
- Fixed incorrect OSBundleLibraries\_x86\_64 handling during cacheless injection
- Changed RsaTool not to link against system ssl on macOS
- Fixed crash during cacheless injection when kext blocking is enabled
- Removed default codec connection delay from AudioDxe
- Added optional --codec-setup-delay argument to AudioDxe
- Changed units of Audio -> SetupDelay from microseconds to milliseconds (divide previous value by 1000 if using this setting)
- Fixed incorrect FAT binary slice being selected under macOS 10.4.11 when performing a cacheless boot
- Fixed rare assertion caused by label animation initialisation in OpenCanopy
- Added --show-csr option for Toggle [SIP](#) boot menu entry
- Added macOS 10.4 and 10.5 support to AllowRelocationBlock Booter quirk
- Added CPU cache info injection for macOS 10.4 to ProvideCurrentCpuInfo quirk
- Added emulated NVRAM driver for use separately from OpenDuet
- Added support for NVRAM reset and set default boot entry when using emulated NVRAM
- Upgraded emulated NVRAM logout script to allow unsupervised installation of recent macOS OTA updates
- Added Driver -> LoadEarly for drivers which need to be loaded before NVRAM init