



OpenCore

Reference Manual (0.6.~~1~~.2)

[2020.09.11]

- GSTT — GoptStop
- HDA — AudioDxe
- KKT — KeyTester
- MMDD — MmapDump
- OCPAVP — PavpProvision
- OCRST — ResetSystem
- OCUI — OpenCanopy
- OC — OpenCore main
- VMOPT — VerifyMemOpt

Libraries:

- AAPL — OcDebugLogLib, Apple EfiBoot logging
- OCABC — OcAfterBootCompatLib
- OCAE — OcAppleEventLib
- OCAK — OcAppleKernelLib
- OCAU — OcAudioLib
- OCAV — OcAppleImageVerificationLib
- OCA — OcAcpiLib
- OCBP — OcAppleBootPolicyLib
- OCB — OcBootManagementLib
- OCCL — OcAppleChunkListLib
- OCCPU — OcCpuLib
- OCC — OcConsoleLib
- [OCDC — OcDriverConnectionLib](#)
- OCDH — OcDataHubLib
- OCDI — OcAppleDiskImageLib
- ~~OCFSQ — OcFileLib, UnblockFs quirk~~
- OCFS — OcFileLib
- OCFV — OcFirmwareVolumeLib
- OCHS — OcHashServicesLib
- OCIA4 — OcAppleImg4Lib
- OCIC — OcImageConversionLib
- OCII — OcInputLib
- OCJS — OcApfsLib
- OCKM — OcAppleKeyMapLib
- OCL — OcDebugLogLib
- OCMCO — OcMachoLib
- OCME — OcHeciLib
- OCMM — OcMemoryLib
- OCPI — OcFileLib, partition info
- OCPNG — OcPngLib
- OCRAM — OcAppleRamDiskLib
- OCRTC — OcRtcLib
- OCSB — OcAppleSecureBootLib
- OCSMB — OcSmbiosLib
- OCSMC — OcSmcLib
- OCST — OcStorageLib
- OCS — OcSerializedLib
- OCTPL — OcTemplateLib
- OCUC — OcUnicodeCollationLib
- OCUT — OcAppleUserInterfaceThemeLib
- OCXML — OcXmlLib

8.5 Security Properties

1. AllowNvramReset
Type: plist boolean
Failsafe: false

- **TryOverwrite** — **Overwrite** if new size is \leq than the page-aligned original and there are no issues with legacy region unlock. **Create** otherwise. Has issues with some firmwares.
- **Create** — Replace the tables with newly allocated `EfiReservedMemoryType` at `AllocateMaxAddress` without any fallbacks.
- **Overwrite** — Overwrite existing `gEfiSmbiosTableGuid` and `gEfiSmbiosTable3Guid` data if it fits new size. Abort with unspecified state otherwise.
- **Custom** — Write SMBIOS tables (`gEfiSmbios(3)TableGuid`) to `gOcCustomSmbios(3)TableGuid` to workaround firmwares overwriting SMBIOS contents at `ExitBootServices`. Otherwise equivalent to **Create**. Requires patching `AppleSmbios.kext` and `AppleACPIPlatform.kext` to read from another GUID: "EB9D2D31" - "EB9D2D35" (in ASCII), done automatically by `CustomSMBIOSGuid` quirk.

Note: A side effect of using **Custom** approach is making SMBIOS updates exclusive to macOS, avoiding a collision with existing Windows activation and custom OEM software but potentially breaking Apple-specific tools.

6. Generic

Type: plist dictionary

Description: Update all fields. This section is read only when **Automatic** is active.

7. DataHub

Type: plist dictionary

Optional: When **Automatic** is true

Description: Update Data Hub fields. This section is read only when **Automatic** is not active.

8. PlatformNVRAM

Type: plist dictionary

Optional: When **Automatic** is true

Description: Update platform NVRAM fields. This section is read only when **Automatic** is not active.

9. SMBIOS

Type: plist dictionary

Optional: When **Automatic** is true

Description: Update SMBIOS fields. This section is read only when **Automatic** is not active.

10.2 Generic Properties

1. SpoofVendor

Type: plist boolean

Failsafe: false

Description: Sets SMBIOS vendor fields to **Acidanthera**.

It is dangerous to use Apple in SMBIOS vendor fields for reasons given in **SystemManufacturer** description. However, certain firmwares may not provide valid values otherwise, which could break some software.

2. AdviseWindows

Type: plist boolean

Failsafe: false

Description: Forces Windows support in **FirmwareFeatures**.

Added bits to **FirmwareFeatures**:

- **FW_FEATURE_SUPPORTS_CSM_LEGACY_MODE** (0x1) - Without this bit it is not possible to reboot to Windows installed on a drive with EFI partition being not the first partition on the disk.
- **FW_FEATURE_SUPPORTS_UEFI_WINDOWS_BOOT** (0x20000000) - Without this bit it is not possible to reboot to Windows installed on a drive with EFI partition being the first partition on the disk.

3. ProcessorType Type: plist integer

Failsafe: Automatic

Description: Refer to SMBIOS ProcessorType.

4. SystemProductName

Type: plist string

Failsafe: MacPro6,1

Description: Refer to SMBIOS SystemProductName.