



# OpenCore

Reference Manual (0.9.~~1~~.2)

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*Note 4:* This patch is for PMIO support and is therefore not applied if `UseMmio` under section `Misc->Serial->Custom` is false. For MMIO, there are boot arguments `pcie_mmio_uart=ADDRESS` and `mmio_uart=ADDRESS` that allow the kernel to use MMIO for serial port access.

*Note 5:* The serial baud rate must be correctly set in both `BaudRate` under section `Misc->Serial->Custom` and via `serialbaud=VALUE` boot argument, both of which should match against each other. The default baud rate is 115200.

6. `CustomSMBIOSGuid`

**Type:** plist boolean

**Failsafe:** false

**Requirement:** 10.4

**Description:** Performs GUID patching for `UpdateSMBIOSMode Custom` mode. Usually relevant for Dell laptops.

7. `DisableIoMapper`

**Type:** plist boolean

**Failsafe:** false

**Requirement:** 10.8 (not required for older)

**Description:** Disables `IoMapper` support in XNU (VT-d), which may conflict with the firmware implementation.

*Note 1:* This option is a preferred alternative to deleting `DMAR` ACPI table and disabling VT-d in firmware preferences, which does not obstruct VT-d support in other systems in case they need this.

*Note 2:* Misconfigured IOMMU in the firmware may result in broken devices such as ethernet or Wi-Fi adapters. For instance, an ethernet adapter may cycle in link-up link-down state infinitely and a Wi-Fi adapter may fail to discover networks. Gigabyte is one of the most common OEMs with these issues.

8. `DisableIoMapperMapping`

**Type:** plist boolean

**Failsafe:** false

**Requirement:** 13.3 (not required for older)

**Description:** Disables mapping PCI bridge device memory in IOMMU (VT-d).

*Note 1:* This option resolves compatibility issues with Wi-Fi, Ethernet and Thunderbolt devices when `AppleVTD` is enabled on systems where the native `DMAR` table contains one or more `Reserved Memory Regions`.

*Note 2:* This option is not needed on AMD systems or any Intel system where the native `DMAR` table does not contain any `Reserved Memory Regions`.

9. `DisableLinkeditJettison`

**Type:** plist boolean

**Failsafe:** false

**Requirement:** 11

**Description:** Disables `__LINKEDIT` jettison code.

This option lets `Lilu.kext`, and possibly other `kexts`, function in macOS Big Sur at their best performance levels without requiring the `keepsyms=1` boot argument.

10. `DisableRtcChecksum`

**Type:** plist boolean

**Failsafe:** false

**Requirement:** 10.4

**Description:** Disables primary checksum (0x58-0x59) writing in `AppleRTC`.

*Note 1:* This option will not protect other areas from being overwritten, see `RTCMemoryFixup` kernel extension if this is desired.

*Note 2:* This option will not protect areas from being overwritten at firmware stage (e.g. macOS bootloader), see `AppleRtcRam` protocol description if this is desired.

11. `ExtendBTFeatureFlags`

**Type:** plist boolean

**Failsafe:** false