



OpenCore

Reference Manual (0.9.~~2~~.3)

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Note 3: For this patch to be correctly applied, **Override** must be enabled with all keys properly set in **Custom**, under section **Misc->Serial**.

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** and **iGPU is enabled and** more than 16 GB memory is installed. On some systems, this quirk is only needed when iGPU is enabled.

Note 1: This quirk requires a native **DMAR** table that does not contain **Reserved Memory Regions** or a substitute **SSDT-DMAR.aml** in which **Reserved Memory Regions** have been removed.

Note 2: This option is not needed on AMD systems.

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.