

Hackintosh: MSI MAG B460 Tomahawk

Status Pass

Issues 0 open

Bootloader OpenCore

Compatible Monterey

Compatible Ventura

Version 0.8.7

Hackintosh: MSI MAG B460 Tomahawk

[Introduction](#)

[Devices](#)

[Configuration](#)

[ACPI](#)

[Booter](#)

[DeviceProperties](#)

[Kext](#)

[Misc](#)

[PlatformInfo](#)

[UEFI](#)

[Changelog](#)

[Update](#)

[History](#)

Credits

Introduction

This is my current EFI clone that I built according to my hardware. Feel free to read my content. If you have a similar build but different settings, you might consider checking this out. Before read, below is the best way to checkout the latest OpenCore guide and news.

- [Dortania](#) "Getting Started"
- Checkout latest [post](#), news and update directly from developer

***Reminder:** Since I only boot Linux and macOS, my ACPI code would be less (lack of `Else`, numerous OS `zero` and `0xFF` methods). This will result in issues with Windows. If you need help dual- or multiple-booting other operating systems, especially Windows, please get in touch with me.*

Devices

- ~~400 Series Chipset Family SATA AHCI Controller~~
- ~~6th-10th Gen Core Processor PCIe Controller (x16)~~
- ASM3241 USB 3.2 Host Controller
- ~~B460 Chipset LPC/eSPI Controller~~
- BCM4360 802.11ac Wireless Network Adapter
- ~~Cannon Lake PCH Power Management Controller~~
- ~~Comet Lake PCH-V HECI Controller~~
- Comet Lake PCH-V SMBus Host Controller
- Comet Lake PCH-V Thermal Subsystem
- Comet Lake PCH-V USB Controller
- Comet Lake PCH-V cAVS
- ~~Comet Lake PCI Express Root Port #03~~
- ~~Comet Lake PCI Express Root Port #05~~
- ~~Comet Lake PCI Express Root Port #07~~
- ~~Comet Lake PCI Express Root Port #09~~
- ~~Comet Lake PCI Express Root Port #19~~
- ~~Comet Lake PCI Express Root Port #21~~
- Comet Lake-S 6c Host Bridge/DRAM Controller
- Ethernet Connection (11) I219-V
- Intel CoffeeLake-H GT2 (UHD Graphics 630 Headless)
- Kingston A2000 NVMe SSD1
- Kingston A2000 NVMe SSD2
- Navi 10 HDMI Audio
- Navi 10 XL Downstream Port of PCI Express Switch
- ~~Navi 10 XL Upstream Port of PCI Express Switch~~
- Navi 14 Radeon RX 5500/5500M / Pro 5500M
- RTL8125 2.5GbE Controller
- VL805/806 xHCI USB 3.0 Controller
- Xeon E3-1200 v5/v6 / E3-1500 v5 / 6th/7th/8th Gen

***Note:** Device with `striketrough` mark is untouched, no acpi, kext and config.plist patch required.*

Configuration

Settings should be based on the type of CPU, motherboard, and GPU. This is a Comet Lake, B460, and AMD Navi 14 configuration via `config.plist`.

ACPI

- [SSDT-MSIB460.aml](#)

Booter

- Quirks
 - AvoidRuntimeDefrag - boolean - `Yes`
 - DevirtualiseMmio - boolean - `Yes`
 - EnableSafeModeSlide - boolean - `Yes`
 - ProvideCustomSlide - boolean - `Yes`
 - SyncRuntimePermissions - boolean - `Yes`
 - ProvideMaxSlide - number - `0`
 - ResizeAppleGpuBars - number - `-1`

***Note:** Other than above is `No`*

DeviceProperties

- **PciRoot(0x0)/Pci(0x1,0x0)/Pci(0x0,0x0)/Pci(0x0,0x0)/Pci(0x0,0x0)**
 - `@0,name to @3,name` - data - `4154592C507974686F6E`
 - `AAPL,slot-name` - data - `536C6F742D2031`
 - `ATY,EFIVersion` - data - `33312E302E3132302E32362E33`
 - `device_type` - data - `4154592C507974686F6E5061726556E74`
- **PciRoot(0x0)/Pci(0x1,0x0)/Pci(0x0,0x0)/Pci(0x0,0x0)/Pci(0x0,0x1)**

- AAPL,slot-name - data - 536C6F742D2031
- model - data - 4E6176692031302048444D4920417564696F
- **PciRoot(0x0)/Pci(0x14,0x0)**
 - acpi-wake-type - data - 01
- **PciRoot(0x0)/Pci(0x1B,0x0)/Pci(0x0,0x0)**
 - acpi-wake-type - data - 01
 - model - data
41534D6564696120546563686E6F6C6F67792041534D3332343120555342
20332E30205848434920436F6E74726F6C6C6572
- **PciRoot(0x0)/Pci(0x1C,0x4)/Pci(0x0,0x0)**
 - AAPL,slot-name - data - 536C6F742D2033
 - acpi-wake-type - data - 01
 - model - data -
564C3830352F38303620784843492055534220332E3020436F6E74726F6C
6C6572
- **PciRoot(0x0)/Pci(0x1C,0x6)/Pci(0x0,0x0)**
 - AAPL,slot-name - data - 536C6F742D2032
 - model - data -
42434D34333630203830322E3131616320576972656C657373204E657477
6F726B2041646170746572
 - name - data - 616972706F7274
- **PciRoot(0x0)/Pci(0x1F,0x3)**
 - layout-id - data - 01000000
- **PciRoot(0x0)/Pci(0x2,0x0)**
 - AAPL,ig-platform-id - data - 0300923E
 - AAPL,slot-name - data - 536C6F742D2030
 - agdpmod - data - 70696B65726100
 - device-id - data - 9B3E0000
 - enable-metal - data - `01000000
 - igfxfw - data - 02000000
 - igfxonln - data - 01000000

Kext

- Add

- ✓ AppleALC.kext
- ✓ IntelMausi.kext
- ✓ Lilu.kext
- ✓ LucyRTL8125Ethernet.kext
- ✓ SMCPProcessor.kext
- ✓ SMCSuperIO.kext
- ✓ USBMap.kext
- ✓ VirtualSMC.kext
- ✓ WhateverGreen.kext

- Patch

- Arch - string - `x86_64`
- Comment - string - `Enable SSD TRIM`
- Count - number - `0`
- Enabled - boolean - `Yes`
- Find - data - `00415050 4C452053 534400`
- Identifier - string - `com.apple.iokit.IOAHCIBlockStorage`
- Limit - number - `0`
- Replace - data - `00000000 00000000 000000`

***Note:** Others than above should remain as empty*

- Quirks

- AppleXcpmCfgLock - boolean - `Yes`
- DisableIoMapper - boolean - `Yes`
- PanicNoKextDump - boolean - `Yes`
- PowerTimeoutKernelPanic - boolean - `Yes`
- SetApfsTrimTimeout - number - `0`

***Note:** Others than shall remain as `No`*

Misc

- ConsoleAttributes - boolean - Yes
- HibernateMode - boolean - Yes
- HideAuxiliary - string - Auto
- LauncherOption - string - Full
- LauncherPath - string - Default
- PickerAttributes - number - 147
- PickerMode - string - External
- PickerVariant - string - Acidanthera\GoldenGate
- ShowPicker - boolean - Yes
- TakeoffDelay - number - 0
- Timeout - number - 5

Note: Other than above is `No`

PlatformInfo

- SMBIOS: [iMac20,1](#)

UEFI

- APFS
 - EnableJumpstart - boolean - `Yes`
 - HideVerbose - boolean - `Yes`
 - MinDate - number - `0`
 - MinVolume - number - `0`
- Drivers
 - Path - boolean - `HFSPPlus.efi`
 - Path - boolean - `OpenRuntime.efi`
 - Path - boolean - `HFSPPlus.efi`
 - Path - boolean - `ResetNvramEntry.efi`

Note: Enable - `boolean` all driver as `Yes`

- Input

- KeyForgetThreshold - number - 5
- KeySupport - boolean - Yes
- KeySupportMode - boolean - Auto
- PointerSupportMode - string - ASUS
- TimerResolution - number - 50000

Note: Other than above is No

- Output

- GopPassThrough - string - Disable
- ProvideConsoleGop - boolean - Yes
- Resolution - string - max
- TextRenderer - string - BuiltinGraphics
- UIScale - number - -1

Note: Other than above is No

- ProtocolOverrides

- FirmwareVolume - boolean - Yes

Note: Other than above is No

- Quirks

- EnableVectorAcceleration - boolean - yes
- ExitBootServicesDelay - number - 0
- RequestBootVarRouting - boolean - Yes
- ResizeGpuBars - number - -1
- TscSyncTimeout - number - 0

Note: Other than above is No

Changelog

- **OpenCore 0.8.8**

- Added Linux support to QemuBuild.command used for Duet debugging
- Added prebuilt mtoc universal binary with Apple Silicon support
- Added SD card device path support for boot device selection
- Added `.contentVisibility` to hide and disable boot entries
- Built in new secure PE/COFF loader
- Corrected OpenDuet build on Apple Silicon
- Fixed intermittent prelinking failures caused by XML corruption when kext blocking is enabled
- Fixed `Kernel` -> `Block` entries not being processed if one was skipped due to `Arch`
- Removed magic Acidanthera sequence from OpenCore files used for picker hiding
- Updated AppleKeyboardLayouts.txt from macOS 13.1
- Updated builtin firmware versions for SMBIOS and the rest
- Updated ocvalidate to allow duplicate tool if FullNvramAccess is different
- Updated underlying EDK II package to edk2-stable202211

Update

- January 28, 2023 2:02 AM
 - Certain stupid acpi code and config.plist injection is removed for stability.
 - Permanent `agdpmod=pikera` via IGPU.
 - Fix unrecognized `pci-bridge` connected to GFX0 (Navi14).
 - Clean single SSDT.
 - Better device rename via ACPI.
 - Fix USB properties. Now all 4 properties is properly inject using `USBMap.kext` and `SSDT-MSIB460.aml`.

History

- December 15, 2022 4:02 PM
 - My EFI, `MSI0.8.7` got an issue since Monterey only inject 2/4 properties (wake & sleep). `USBX` has 4 properties as usual but still inject only 2/4 properties.

✓ `kUSBSleepPowerSupply, 0x13EC`

✓ `kUSBSleepPortCurrentLimit, 0x0834`

✓ `kUSBWakePowerSupply, 0x13EC`

✓ `kUSBWakePortCurrentLimit, 0x0834`

Credits

- [Acidanthera](#) | [Dortania](#) | [dreamwhite](#)