

# WhateverGreen - Fix für alle Grafikkarten (AMD/Intel & Nvidia)

**Beitrag von „griven“ vom 28. Juli 2017, 01:30**

[@vit9696](#) hat es wieder getan und bringt mit WhateverGreen einen Fix für eigentlich alle bekannten Probleme mit AMD/ATI Grafikkarten unter OS-X.

WhateverGreen beseitigt folgende Probleme:

- Boot to black Screen (HD7XXX, R9-XXXX und RX Serie)
- Wake to black Screen (HD6XXX, HD7XXX, R9-XXXX und RX Serie)

Damit WhateverGreen richtig funktioniert müssen einige Voraussetzungen geschaffen werden denn WhateverGreen funktioniert nur in einem reinen UEFI Umfeld daher muss sowohl die Grafikkarte selbst als auch das Bios ein Abschalten des CSM Mode unterstützen (Grafikkarte benötigt ein UEFI GOP Bios und im Bios muss der CSM Mode auf never eingestellt werden) zudem müssen alle Injects und Framebuffer Vorgaben entfernt werden. Da WhateverGreen noch recht neu ist gibt es hier nicht den Kext selbst zum Download sondern "nur" einen Verweis auf die Github Seite von vit9696 es geht also hier entlang: <https://github.com/vit9696/WhateverGreen>

**EDIT von al6042:**

## **ACHTUNG**

Seit der Version 1.2.0 vom Whatevergreen, ist dieser für alle Grafikkarten (AMD, Intel & Nvidia einzusetzen.

Die aktuellste Version liegt [im Post vom 20.07.2018](#).

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**Beitrag von „al6042“ vom 6. April 2018, 12:56**

Hier mal, zum schnellen DL, die aktuellste Version 1.1.7...

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## Beitrag von „Noir0SX“ vom 20. Juli 2018, 10:35

### v1.2.0

- v1.2.0 Merged GPU kexts into one (AMD, Intel, NVIDIA) including H/W acceleration (Shiki)
- Added binary and structural Intel framebuffer patches (thx to headkaze)
- Added Intel CFL support
- Fixed certain AMD multimonitor issues
- Enabled 10.14 support by default

<https://github.com/acidanthera/WhateverGreen>

Braucht Lilu <https://github.com/acidanthera/Lilu>

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## Beitrag von „anonymous\_writer“ vom 26. Juli 2018, 08:52

### v1.2.1

- > Added -wegnoegpu boot-arg and disable-external-gpu IGPU property to kill external GPU
- > Fixed IGPU framebuffer patches (requires Lilu 1.2.6)
- > Fixed -shikioff not working (note, -liluuseroff may be more handy)
- > Fixed loading on 10.8 and 10.9
- > Fixed device property reading for AMD CAIL overrides
- > Recovered GuC loading for internal usage (do NOT use, causes freezes and crashes)
- > Disabled HDMI 2.0 by default, use -cdfon boot-arg or enable-hdmi20 IGPU/GFX0 property to enable

Für diesen Kext wird min [Lilu.kext](#) V1.2.6 benötigt.

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## Beitrag von „Noir0SX“ vom 11. September 2018, 13:33

### **v1.2.2**

- Added framebuffer-conX-alldata IGPU patch support
  - Fixed automatic frame selection with `-wegnoegpu boot-arg` or `disable-external-gpu` IGPU property (Lilu 1.2.7 or newer)
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## **Beitrag von „Noir0SX“ vom 30. Oktober 2018, 16:22**

### **v1.2.4**

- Added platform list dumping to `ioreg` (at `IOService:/IOResources/WhateverGreen`), debug build only with `-igfxfbdump`
  - Fixed 10.14.1 IGPU KBL/CFL support without external GPU
  - Fixed warning about legacy processors (e.g. Xeon)
  - Fixed the support for providing custom names on `Radeon RX` models
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## **Beitrag von „Noir0SX“ vom 2. Januar 2019, 15:03**

### **v1.2.6**

- Added `applbkl=0` boot argument to temporarily disable `AppleBacklight` patching code
  - Fixed AMD Verde CAIL injection logic
  - Fixed breaking backlight on Apple hardware, on laptops with AMD GPUs, and on 10.11 or earlier
  - Changed CFL backlight patches to enable by default on CFL drivers only (avoids issues with faux "KBL" 8xxx CPUs)
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## **Beitrag von „Noir0SX“ vom 22. März 2019, 14:32**

### **v1.2.7**

- Added more IGPU device-ids to detected list

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## Beitrag von „Noir0SX“ vom 20. April 2019, 10:26

### v.1.2.8

- Added KBL graphics kernel panic workaround on 10.14.4+
- Added IGPU DPDCD link incompatible rate patch (thanks [@firewolf](#))

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## Beitrag von „Noir0SX“ vom 24. Mai 2019, 17:25

### v1.2.9

- Added AMD Radeon VII to detected list
- Disabled automatic framebuffer usage on Polaris GPUs
- Added `preserve-names` device property to preserve current GPU names
- Added `AppleVPA` patching support, replaces `NoVPAjpeg.kext` (thx CMMChris and uglyjoe)

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## Beitrag von „Noir0SX“ vom 3. Juli 2019, 15:50

### v1.3.0

- Fixed custom connector support for Radeon GPUs, thx [@lwfitzgerald](#)
- Added `disable-gfx-submit` property to back `ngfxsubmit=0` boot argument
- Added GuC firmware loading patch for latest SKL+ drivers
- Allow loading on 10.15 without `-lilubetaall`
- Disabled NVIDIA performance fix on 10.15, as it now is built-in
- Enable HDMI 2.0 patches on 10.14+ (Use at own risk in case of undiscovered change)
- Added CFL graphics kernel panic workaround on 10.14.4+
- Added infinite loop fix when calculating dividers for Intel HDMI connections on SKL, KBL and CFL platforms.
- Added driver support for onboard LSPCON chips to enable DisplayPort to HDMI 2.0 output on Intel IGPUs (by [@0xFireWolf](#))

## **Beitrag von „Noir0SX“ vom 11. August 2019, 14:46**

### **v1.3.1**

- Fixed an issue that LSPCON driver fails to set the mode after the adapter power is off, i.e. sleep/wake up cycle.
  - Unified release archive names
  - Enforce complete IGPU modeset on Kaby Lake and newer (overridable by igfxcmsfbs bootarg or complete-modeset-framebuffers device property)
  - Disable VRAM testing on AMD GPUs on 10.14.4+ (based on vladie's patch)
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## **Beitrag von „Noir0SX“ vom 7. September 2019, 15:48**

### **v1.3.2**

- Added more GPUs for detection
  - Enable IGPU graphics kernel panic workaround on 10.14.4+ on SKL
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## **Beitrag von „Noir0SX“ vom 8. Oktober 2019, 16:45**

### **v1.3.3**

- Rework backlight panel info injection to fix Mac issues
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## **Beitrag von „Noir0SX“ vom 31. Oktober 2019, 12:27**

### **v1.3.4**

- Added support for disabled AppleGraphicsDevicePolicy in AMD drivers on 10.15.1
  - Added basic support for `-radcfg` and `-radgl` on AMD Navi GPUs
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## Beitrag von „Noir0SX“ vom 3. Dezember 2019, 05:22

### v1.3.5

- **Added Lilu 1.4.0 support, which is now the minimum supported version**
  - Dropped legacy boot arguments (-shikigva, -shikifps)
  - Fixed handling agdpmod GPU property (in IGPUs and in conjunction with boot-arg)
  - Added -wegtree boot argument to force device renaming
  - Fixed FairPlay DRM playback patches on 10.15
  - Added shikigva and shiki-id aliases in IORegistry
  - Added applbkl aliases to IORegistry (data, 32-bit)
  - Added applbkl-name and applbkl-data IORegistry data keys to provide custom backlight data
  - Fixed applying CoreFP patches on Apple firmware, when they are not needed
  - Added shikigva=16 (repurposed) property to use AMD hardware DRM decoder in select apps
  - Added shikigva=128 (repurposed) property to use hardware decoder for FairPlay 1.0 (can be used as shikigva=144)
  - Do not disable DRM patches when shikigva is used even on Apple hardware for MacPro5,1 support
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## Beitrag von „Noir0SX“ vom 13. Januar 2020, 17:21

### v1.3.6

- Enabled CoreLSKD streaming patches by default for AMD hardware DRM on Ivy Bridge
  - Repurposed 64 bit for FP 2.x streaming hardware accelerated streaming patches (can be used as shikigva=80)
  - Fixed accelerator name update logic for X4xxx kexts
  - Fixed Verde IOGVACodec injection to make hardware video decoder work
  - Enable software TV+ decoding on all CPUs without IGPU (shikigva=256)
  - Added HEVC capabilities to AMD6 decoders for all GPUs (disabled by -radnogva or disable-gva-support)
  - Added HW decoder device-id spoofing via -radcodec boot-arg, by [@osy86](#)
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## Beitrag von „Noir0SX“ vom 2. März 2020, 18:17

### v1.3.7

- Improved the maximum link rate fix: Now correct the value read from extended DPCD as well. (by [@OxFireWolf](#))
  - Improved firmware loading handling on 10.15.4 (may fix booting issues on KBL+)
  - Improved support for Comet Lake IGPU (thx [@stormbirds](#))
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## Beitrag von „Noir0SX“ vom 6. April 2020, 15:24

### v1.3.8

- Added `igfxfw=2` boot argument and `igfxfw` IGPU property to load Apple GuC firmware
  - Added `igfxpavp=1` boot argument (and `igfxpavp` property) to force enable PAVP output
  - Added `igfxfcms=1` boot argument (and `complete-modeset` property) on Skylake and Apple
  - Improved performance with Lilu 1.4.3 APIs
  - Added `-igfxfbdbg` boot argument to debug IGPU framebuffer (debug builds only)
  - Added `igfxagdc=0` boot argument and `disable-agdc` IGPU property to disable AGDC
  - Added `igfxonln=1` boot argument and `force-online` IGPU property force online status for all displays
  - Added `igfxonlnfbs=MASK` boot argument and `force-online-framebuffers` IGPU property to override display status
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## Beitrag von „Noir0SX“ vom 4. Mai 2020, 15:47

### v1.3.9

- Added `igfxdumpdelay` boot argument to delay `-igfxdump` in ms
  - Partially fix ICL framebuffer patching
  - Add support to injecting `Force_Load_FalconSMUFW` from OpenCore
  - Disabled automatic enabling of GVA for Polaris on 10.13 and lower
  - Replaced `-radnogva` argument with `radgva=0/1` to force GVA for Polaris
  - Added `wegtree=1` boot argument (`rebuild-device-tree` property) to force device renaming on Apple FW
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## Beitrag von „Noir0SX“ vom 1. Juni 2020, 16:32

### v1.4.0

- Added 0x3EA6, 0x8A53, 0x9BC4, 0x9BC5, 0x9BC8 IGPU device-id
  - Fixed framebuffer-conX-alldata patching regression
  - Added disable-hdmi-patches device property alias to -igfxnohdmi
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## Beitrag von „Noir0SX“ vom 3. August 2020, 17:17

### v1.4.1

- Added igfxmetal=1 boot argument (and enable-metal property) to enable Metal on offline IGPU
  - Fixed applying patches on CometLake IGPUs, thx [@apocolipse](#)
  - Added constants required for 11.0 update
  - Added the use of RPS control for all the command streamers on IGPU (disabled via igfxnorpsc=1)
  - Add -igfxvesa to disable Intel Graphics acceleration.
  - Fix black screen on igfx since 10.15.5
  - Add workaround for rare force wake timeout panics on Intel KBL and CFL.
  - Add Intel Westmere graphics support.
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## Beitrag von „Raptortosh“ vom 9. April 2021, 10:14

### v1.4.9

- Added per-GPU disabling API: inject disable-gpu to disable
  - Added per-GPU disabling kernel version specification: inject disable-gpu-min / disable-gpu-max to select kernel version to disable (inclusive range)
  - Added IGPU disabling API: inject disable-gpu to disable or use -wegnoigpu boot argument
  - Optimised Rocket Lake startup as IGPU is unsupported
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## Beitrag von „Raptortosh“ vom 7. Juni 2021, 18:04

### v1.5.0

- Fixed AMD WX-4170 name for 67E0 device id
- Added NVIDIA driver error logging with `-ngfxdbg`