

How to disable failed discrete-GPU (NVIDIA GeForce GT 650M) for 15" MacBook-Pro 10,1 (mid-2012) on High Sierra 10.13.4

POSTED BY DHAVAL DALAL IN GENERAL

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i
4 Votes

It all started when my MacBook Pro showed me black screen after waking from sleep. After that, many times I would boot straight into Black Screen, and the only sign that the machine was awake could be just tested by pressing the CAPS LOCK key (turns on the button-light) or connecting an External USB with a indicator light.

I started asking myself why would this happen? Was it due to upgrade to High Sierra 10.13.3 or was it that my machine really developed some hardware problem? I asked a friend of mine what can I do and he suggested SMC Reset followed by PRAM (NVRAM) Reset. I tried all that, but it refused to work. I got my MacBook cleaned and then it booted fine. But as soon as, I started using it, all of a sudden it would show a Black Screen, but CAPS LOCK would still glow green and so I would then reboot it again, only to Black screen. Sometimes, upon restarting the first problem message that I got was GPU panic like the one shown below:

Anonymous UUID: 32BD6DA8-14C2-38AD-E466-F3B6DDCE6F7F

Fri May 18 19:43:24 2018

*** Panic Report ***

```
panic(cpu 2 caller 0xfffff7f916c29cf): "GPU Panic: mux-regs 4 0 a0 99 0 8 se
Backtrace (CPU 2), Frame : Return Address
0xfffff81f9073a90 : 0xfffff800e66e166
0xfffff81f9073ae0 : 0xfffff800e796714
0xfffff81f9073b20 : 0xfffff800e788a00
0xfffff81f9073ba0 : 0xfffff800e620180
0xfffff81f9073bc0 : 0xfffff800e66dbdc
0xfffff81f9073cf0 : 0xfffff800e66d99c
0xfffff81f9073d50 : 0xfffff7f916c29cf
0xfffff81f9073db0 : 0xfffff7f916bf1ae
0xfffff81f9073df0 : 0xfffff7f916c2443
0xfffff81f9073e30 : 0xfffff800ec9f71c
0xfffff81f9073ea0 : 0xfffff800ec9f646
0xfffff81f9073ed0 : 0xfffff800e6a77e4
0xfffff81f9073f40 : 0xfffff800e6a7345
0xfffff81f9073fa0 : 0xfffff800e61f4f7
```

Kernel Extensions in backtrace:

```
com.apple.driver.AppleMuxControl(3.18.48)[09DFEF11-0A5B-369B-91C5-FD:
dependency: com.apple.driver.AppleGraphicsControl(3.18.48)[91D747I
dependency: com.apple.iokit.IOACPIFamily(1.4)[95DA39BB-7C39-3742-7
dependency: com.apple.iokit.IOPCIFamily(2.9)[1850E7DA-E707-3027-A:
dependency: com.apple.iokit.IOGraphicsFamily(519.15)[D5F2A20D-CAB(
dependency: com.apple.AppleGraphicsDeviceControl(3.18.48)[8949118:
```

BSD process name corresponding to current thread: kernel_task

So, I started Googling for this GPU Panic problem and found that many laptops had this issue and that many forums said it was all due to a faulty discrete GPU on the logic board. I missed the replacement program (as I was not even aware that it existed until I hit this problem) and now my machine is out of warranty (more than 51/2 years now). The machine is a 15" MBP 10,1 (mid-2012) with dual GPU system. I thought, if I could get Logic board changed, I should be okay, but in many forums many users who got that done were not still immune from that problem. It had all the possibilities of appearing once more (even after changed GPU). Secondly, Logic board replacement is an expensive affair! Last option, of course, is to get a new MPB, but I wanted to wait till the WWDC June 2018 announcement.

Anyways, I still wanted to make sure that this is indeed the same GPU problem that I was facing. So, I thought may be I should downgrade the OS X to El Capitan or Sierra and rule out my High Sierra upgrade. After checking with both the older OS X, I started getting very frequent GPU panics, like the one pasted above. With laptop in comatose mode 😊 I literally had to resuscitate it using SHIFT + OPT + COMMAND + Power (SMC reset) by counting 10 and then do a CMD+OPT+R+P+POWER (NVRAM Reset) and the wait for sometime and power up again. It all then depended on the spirit to re-enter the machine and bring it to life again :)) Many times, it had barely woken up and slipped into coma again. Then sometimes it would work for 2/3 days straight, until I don't open up any BIG IDEs like IntelliJ or any program like Chrome or Firefox that caused a switch to dGPU.

In the Apple forums, I saw people had already disabled the on-board dGPU and they had a working system with only the built-in iGPU. However, it was done for older makes (year 2011) of the MBP. I searched for my particular make with NVIDIA GeForce GT650M Graphics card. I stumbled upon 2 links:

- 1) <https://github.com/mayankk2308/purge-nvda/blob/master/purge-nvda.sh> (NVIDIA driver)
- 2) <http://www.javajirawat.com/2018/02/macbook-pro-2012-broken-gpu-work-around.html> (AMD driver)

Thanks to them and I combined both their solutions to disable the dGPU on my system.

The Steps:

I. Sanity Check (find the number of GPUs):

1.
 - You can either go to Apple Menu > About This Mac... > Overview Tab > Press System Report... Under Hardware, look for Graphics/Displays...
 - Or you can type at terminal (and it displays the same information)

```
$ system_profiler SPDisplaysDataType
```

```
Built-In GPU (Integrated GPU - iGPU): Intel HD Graphics 4000 1536 MB
```

```
...
```

```
Second GPU (Discrete GPU - dGPU): NVIDIA GeForce GT 650M
```

```
gMux Version: 3.2.19 [3.2.8]
```

```
...
```

```
Display - Color LCD Resolution - 2880 x 1800 Retina Framebuffer Depth: ;  
Metal: Supported, feature set macOS GPUFamily1 v3
```

II. In Recovery Mode, do the following (Using the Recovery Terminal Utility), do the following:

2. Boot into Recovery Mode (by holding Command+R while pressing the power button). At terminal prompt, we will disable SIP (System Integrity Protection)

```
$ csrutil disable  
System Integrity Protection now disabled.
```

3. Reboot again in Single User mode.

```
$ reboot  
$ # and then hold Command+S keyboard buttons  
$ # to boot in single user mode.
```

III. In Single User Mode, do the following:

4. Do a Hard disk Check:

```
$ /sbin/fsck -fy  
$
```

5. Mount Root file system in Read-Write (uw) mode:

```
$ /sbin/mount -uw /  
$
```

6. Create a backup directory to hold existing GeForce drivers:

```
$ mkdir /GeForce_save  
$
```

7. Move all the GeForce drivers to the backup directory:

```
$ mv /System/Library/Extensions/GeForce* /GeForce_save  
$
```

8. Delete Driver Cache

```
$ rm -rf /System/Library/Caches/com.apple.kext.caches/  
$
```

9. Force refresh of Driver cache:

```
$ touch /System/Library/Extensions  
$ kextcache -q -update-volume /  
$
```

10. Reboot again (into Recovery mode while holding Command+R)

```
$ reboot
```

IV. In Recovery Mode, do the following (Using the Recovery Terminal Utility):

11. Remove Nvda Booting GPU

```
$ nvram boot-args="nv_disable=1"
# OR append existing boot-args
$ nvram boot-args="nv_disable=1 $(nvram boot-args 2>/dev/null | cut -f 2-)"
$ nvram fa4ce28d-b62f-4c99-9cc3-6815686e30f9:gpu-power-prefs=%01%00%00%00
$
```

12. Enable SIP (System Integrity Protection)

```
$ csrutil enable
System Integrity Protection now enabled.
```

13. Reboot machine in normal mode

```
$ reboot
```

IMPORTANT NOTE:

1. By using nvram boot-args="nv_disable=1", you will lose brightness control (F1/F2 keys) and sleep mode (clamshell open/close) does not work. When the computer awakes after sleep, it shows a black display. Also, the brightness slider will no longer show up in System Prefs -> Display. However, you can adjust the backlight to a fixed value. For example, I prefer the low backlight-level. In the recovery terminal,

```
$ nvram backlight-level="\%00"
```

Various valid values in the increasing order of brightness are: 0%00, C%00, \ %00, z%00, %9f%00, %cb%00, %01%01, A%01, %8c%01, %e6%01, P%02, %d2%02, \ %03, %ff%03.

2. Once you use this patch, you won't be able to connect to external displays and project on that screen (as MacBook-Pro routes to external ports – HDMI and thunderbolt using the dGPU)
3. When the computer after sleep, it shows a black display but the machine is still running the OS. To get the screen back, I need to turn the machine off. But this means, its improper shutdown when you have processes running. One solution is that you can remote desktop into the system by using Screen Sharing or VNC. Using this you can get back into the machine, and work like usual until the process completes and then shutdown the machine. Also, while using Screen Sharing, you can project the shared screen on an external display from that client machine.

Update: After this I applied the Security Update 2018-001 and it went fine. I could boot back into my Mac and work with it just like before. I have not yet updated to High Sierra 10.13.5 yet. Once I am able to get that done as well, I'll share my findings on this post. Stay tuned!

thoughts on “How to disable failed discrete-GPU (NVIDIA GeForce GT 650M) for 15” MacBook-Pro 10,1 (mid-2012) on High Sierra 10.13.4”

1. *said:Joseph*

June 17, 2018 at 10:57 am

You are a lifesaver. I couldn't be more grateful to you for this post! Thank you! One day I was using my 2012 Retina MacBook Pro like normal, and then, right in the middle of typing a line of code, the screen flickered out to complete black. Nothing I did worked. I could restart the computer, and navigate from memory via spotlight to iTunes and hit play, and hear music play, but the screen was black the whole time. A flashlight didn't show anything being displayed whatsoever. So I went online, and tried the SMC reset and the PRAM reset, just like you, and nothing worked. Then, on a different computer, I found your article, followed it step by step with no screen, typing very carefully and giving it plenty of time between commands to complete, and voila! I have a fully functioning computer again (well, sort of, just like your notes at the end mention).

I do have a couple of fixes for people who are in the same boat:

First, I use an app called "NoSleep" that is free and keeps the Mac from sleeping when I close the lid. I set it so that it loads at startup, and prevents sleep even upon lid close, and I never have to worry about it anymore.

Display sleep settings still work, so my energy saver preferences for display sleep are set to a reasonable time, and there are no problems waking the display (because the computer never enters the sleep state — which is where the problem resurfaces). Most importantly, I set the computer to fall asleep "Never" on both battery and adapter. That is crucial.

Lastly, I set up the top right corner of my screen as a hot corner (under System Preferences/Mission Control) that puts my display to sleep. If I don't do that, NoSleep will keep the display in whatever state it is in when it's shut, despite the energy saver preferences. So if you close it while the screen is active, it will stay active while closed, including the bright apple logo on the back of the screen. If you shut it while the display is asleep, though, it will stay asleep, which is the intended behavior, in my case.

So now I just mouse up to the top right corner (I use my other corners for different things) before shutting the lid, and everything else behaves as it did before (well, except that it will use a lot more energy this way, never sleeping—but since I keep it plugged in most of the time, that's not such a big issue, it is 6 years old, after all).

(by the way, in case anyone else cares, or has to do what I did, I found you can navigate to the terminal in recovery mode—without a functioning screen—by clicking once where the mouse defaults to (before moving it after loading) then tapping left arrow twice, and down arrow three times, then hitting enter. Now you're at the command prompt.)

REPLY

2. *said:*Dhaval Dalal

June 17, 2018 at 9:11 pm

I'm glad you found this useful and Thanks Joseph for the comment and the NoSleep app. I'll give it a shot.

REPLY

◦ *said:*Deji

September 18, 2018 at 3:55 pm

Hi pls. This has been really helpful but I'm wondering how I can reverse this process. I'll have a Genius Bar appointment in a couple days and will need them to be able to diagnose the gpu issue properly. Does it matter that I have done this ? Thanks.

REPLY

3. ***said:*insanefighter**

September 3, 2018 at 5:48 pm

Hi Dhaval, the post has really helped solve my issue. Thanks a ton. Have you faced overheating issues or felt the system slows down while doing basic tasks like browsing or working on a word document ? Did you consider exploring local repairing options as it could be a GPU balling ; graphic IC or capacitor issue (similar to the tantalum capacitor for 2010 macbooks). I'm evaluating all of this and would appreciate your opinion.

REPLY

4. ***said:*Dhaval Dalal**

September 18, 2018 at 5:22 pm

As far as I know tantalum capacitor was for older 2010 macs and Graphics IC, there is no one who does that level of repairing here. But, if you happen to go that route, please share your experiences.

REPLY

5. ***said:*Dhaval Dalal**

September 18, 2018 at 5:27 pm

Hi Deji,

Not sure whether that matters, but all you need to do is remove the line – nvram boot-args="nv_disable=1" by using nvram -d boot-args. Follow the exact same steps, but where you added earlier disable, by deleting, it will remove that variable. Hopefully that should revert back to the old state.

REPLY

◦ ***said:*Deji**

September 18, 2018 at 7:40 pm

Thankss. Also trying to change the backlight level. Tried your steps to adjust Nvram. When I check nvram backlight level it gives me the right value I put in but the laptop screen is still very dim. Any help you might have would be appreciated

REPLY

6. ***said:*C B**

October 4, 2018 at 5:56 pm

Hi,

instead of moving GeForce files, move NVDA files to the created folder, that worked well on Sierra, with brightness , awake from sleep fully functional. I did not try it on High Sierra though

REPLY

7. *said:*Gabriel Carter

October 23, 2018 at 3:59 am

Great walkthrough, thank you! Seems to have saved the day for my MBPr (2012), currently running Mojave under this fix with no problems yet.

REPLY

◦ *said:***Dhaval Dalal**

October 23, 2018 at 8:37 am

Thanks for letting know that under Mojave its running fine....I'll upgrade to that

REPLY

8. *said:*Leandro Havelda

October 27, 2018 at 4:57 am

Hey, thank you for the help, but how do I reset everything back to normal?
I did everything but probably messed up somewhere and now my mac stays stuck in boot
HELP!

REPLY

9. *said:*Joe

October 30, 2018 at 9:59 am

I followed your recipe on fresh Mojave install. The result is that the MBPr (10,1) never fully boots, the progress bar stops at ~75% and sits there forever.

REPLY

◦ *said:*Joan

November 30, 2018 at 10:22 am

Same Here, but then i use this commands in recovery mode (Command + r)

in terminal


```
$ csrutil disable
$ nvram boot-args="nv_disable=1 $(nvram boot-args 2>/dev/null | cut -f 2-)"
$ nvram fa4ce28d-b62f-4c99-9cc3-6815686e30f9:gpu-power-prefs=%01%00%00%00
$ csrutil enable
$ reboot
```

Enjoy!

REPLY

- *said:*[Leo Tejeda](#)

December 19, 2018 at 12:26 am

I tried this on Mojave, stays at 75% wont boot up. Had to enable to make it work. Any suggestions?

- *said:*[Dhaval Dalal](#)

January 9, 2019 at 3:47 pm

No Idea, I've not yet upgraded to Mojave

- *said:*[Olival Júnior](#)

January 23, 2019 at 7:07 am

I did the same on my macbook pro retina 15 mid 2012 running Mojave (10.14.2) and it rendered the mac unbootable.

I tried to install High Sierra from a bootable USB stick (didn't have a Mojave installer) but the installer would halt mid process or the screen just went blank.

So I followed all the references I could get about permanently disabling the dGPU (most of them from the links quoted on the post above) but still couldn't get the High Sierra installer to work. As I'd run out of patient with MacOS I just installed Ubuntu Linux and . . . it worked! Ubuntu Linux recognized everything on the MBP hardware but the dGPU (listing the hardware just doesn't shows anything about GPU).

I tried again to install High Sierra and it failed the same way it did before. As it was impossible for me to get a Mojave USB installer I did an Internet Recovery Install so I could install the same Mac OS version that came with the MBP (Mountain Lion). And it worked!

Mountain Lion doesn't show a dGPU on the system so the nv_disable=1 on the NVRAM settings had worked ok. So it was time to try to install Mojave again.

Unfortunately an old bug prevented Mountain Lion to access the Apple Store so I had to reinstall High Sierra first from a bootable USB stick (it worked!) and after that I did manage to download and install Mojave.

Summing up: Mojave is running ok but the caveats above apply: I lost the Bright Keys (F1/F2); cannot use external monitors; and if the MBP sleeps I have to turn it off and on again. I installed the NoSleep app and did the same configurations as Joseph above and it seems to solve the problem (although the battery will suffer).

As a final measure I resized the Mojave Partition and installed Ubuntu Linux again. On Ubuntu the bright keys work fine but I still cannot use external monitors (don't know if it is the same limitation as MacOS or if I just don't know how to switch monitors on Ubuntu).

Now I have a dual boot MBP with Mojave and Ubuntu. On turning on the MBP I hold ALT and just choose the OS to boot. It was supposed to boot on GRUB and shows a list of OS but I didn't managed to do that and it really doesn't matter to me.

REPLY

10. *said:*Dmytro

December 3, 2018 at 11:18 pm

I was going step by step and after reboot in 4th step I got black screen! Please help
Macbook pro 15 mid 2012 mac OS Sierra 10.12

REPLY

◦ *said:***Dhaval Dalal**

January 9, 2019 at 3:48 pm

Not sure what to tell you....try the process again and see, if you can get it to work.

REPLY

11. *said:*Samuel

January 8, 2019 at 2:08 pm

Hello everyone!

First of all, thank you Dhaval for this guide. It saved my laptop after being crazy about all that was going wrong with it and after almost a week of trying to understand what the problem was.

I've followed the guide as is but because my laptop didn't accept the command:

```
$ nvram boot-args="nv_disable=1"
```

I used the alternative:

```
$ nvram boot-args="nv_disable=1 $(nvram boot-args 2>/dev/null | cut -f 2-)"
```

```
$ nvram fa4ce28d-b62f-4c99-9cc3-6815686e30f9:gpu-power-  
prefs=%01%00%00%00
```

and I have to report that everything is back to normal now with a couple of differences:

– Mine doesn't have any problems with when waking up/going to sleep. I can close the lid, let it sleep, of/on, awake/sleep, everything, no problem.

– Brightness buttons work as expected too. No problems either.

Maybe an explanation is that my laptop (exactly the same model as yours) didn't suffer "panics". It crashed as soon as the system needed to switch cards. Also when re-installing from an USB the system hung on the progress bar. At that point, connecting a monitor via HDMI showed that the system had loaded just fine but the laptop screen has stopped at the progress bar. Another really weird thing was that I could perfectly start my laptop from my macbook air's harddrive in "target mode" via thunderbolt and use the computer without any problems at all. But could not start from a system installed on a usb or sd card.

As it is today, if I open the activity monitor and click on Energy I can see applications using both cards so....Is the Nvidia really broken?

I don't know, still weird but everything 100% working again.

Thank you again for you efforts !! 😊

REPLY

◦ *said:***Dhaval Dalal**

January 9, 2019 at 3:45 pm

Thanks for the appreciation. I'll try what you've suggested and try to get back brightness and lid control

REPLY

◦ *said:***Olival Júnior**

January 11, 2019 at 4:13 am

Hello, Samuel

Are you using Mojave?

REPLY

◦ *said:*Samuel Jiménez

February 8, 2019 at 9:11 pm

Hi, no, sierra as in the original post.

12. *said:***Mandip Luitel**

January 8, 2019 at 9:45 pm

Worked Perfectly On my High Sierra 10.13.6.
Thanks for an awesome post Dhaval.

Cheers

REPLY

13. *said:*mike

January 9, 2019 at 2:34 am

Thank you for the detailed walk-through. Do you have any suggestions for if I cannot even get into recovery mode? I only hear a chime and see a black screen then it shuts off.

REPLY

◦ *said:***Dhaval Dalal**

January 9, 2019 at 3:46 pm

Mike, I'm sorry I would not know that.

REPLY

14. *said:*Ray

January 17, 2019 at 11:59 pm

Thank you for this as my MacBook was dead and gone – or so I thought. I have followed your walkthrough and all is ok again – apart from the wake from sleep which does not work. when it went to sleep, I could not wake it without a full re-start. I have installed amphetamine which is free and keeps the display awake all the time – even when the lid is closed – which is ok. I am running Mojave and no other apparent issues. I did try the hot corner approach to put the screen to sleep above but it would not wake and it caused the mac to crash and not re-start so I had to re-do your walkthrough just to get it to boot again!!!

Are you still working on a way to get it to wake from sleep or is that a non-starter and we should just accept what we have as the best we will have?

REPLY

◦ *said:***Dhaval Dalal**

January 18, 2019 at 9:23 am

In the comments, there is one which talks about, adjusting screen brightness and lid-wake. I've not tried it, but you can give it a shot and see for yourself. All the best!

REPLY

15. *said:*Urban

January 18, 2019 at 10:43 pm

Hello! The same problem here. I just wanted to ask why wouldn't you simply use gfxCardStatus app from <https://gfx.io> to disable GeForce in the system? Do you think it can hurt the system in any way? I have just done this and will do some testing. Regards.

REPLY

16. *said:*Ray

January 19, 2019 at 6:19 pm

Tried the above and does not work for me- the brightness is ok for me.

as a complete novice, what is the difference between your line re putting the GeForce drivers in a folder or the other proposed of putting NVDA drivers in a folder instead? – are they not the same?

My mac does still crash from time to time for no reason – is anyone else having same or is it just me?

REPLY

- *said:Ray*

January 22, 2019 at 9:06 pm

I tried the gfx app fix but it didn't stop it crashing. It seemed like the MacBook was fighting against it being there and so I moved on to the fix above in earlier post – which is much more stable and hopefully permanent .

REPLY

- *said:**Dhaval Dalal***

January 23, 2019 at 8:11 am

I had tried all that long back and this post describes a more permanent solution as compared to gfxCardStatus

- *said:Giorgio*

February 1, 2019 at 12:14 am

GfxCardStatus is not working properly on Sierra/High Sierra as MacOS overrides Gfx and forces the use of dGPU for certain application. After thorough research on the web I installed gSwitch (<https://codyschrank.github.io/gSwitch/>) which is the evolution of GfxCardStatus. gSwitch solved the problem. No need to move/delete/unload drivers. Wake/sleep and brightness control work fine.

Off course you'll need this when rebooting:

```
$ nvram fa4ce28d-b62f-4c99-9cc3-6815686e30f9:gpu-power-prefs=%01%00%00%00
```

- *said:**Jim Ying***

February 18, 2019 at 2:54 pm

Hi Giorgio

I am using the gSwitch on Mojave, It works most of time but still I've got gpu panic from time to time. Sorry for the newbie question but could you please elaborate a bit on how to do nvram setting:

```
$ nvram fa4ce28d-b62f-4c99-9cc3-6815686e30f9:gpu-power-prefs=%01%00%00%00
```

Thanks heaps!

17. *said:Jason Bourne*

February 8, 2019 at 4:38 pm

Hi There!

I make your recipe but i still find both of gpu card info under System info>Graphics&screens menu. Did it normal or i have to see only intel card info?

REPLY

18. *said:*Mandipip

February 21, 2019 at 8:41 am

Worked after upgraded to mojave too. Just make sure to boot in Recovery Mode again after update, open Terminal, and run the following command: csrutil disable it solved the issue on my mojave too.

REPLY

19. *said:*Major

March 26, 2019 at 10:19 pm

Thank all for your guidance and comments. Before discovering the various techniques to disable the dGPU I had already installed Windows10 / then Linux on my Mid 2012 Retina MBP 15 as I simply could not install MacOS to the computer because it appears to the use the dGPU as part of the installation.

I also tried to install Sierra using Target mode... the installation worked but the computer would not boot (folder with question mark).

I have moved over to a slightly older 2011 MBP which is a great little computer – just heavier and not as fast.

Anyway, does anyone have a solution to install a working version of MacOS on the Mid 2012 MBP so I can THEN follow the steps to remove the NVIDIA drivers and end up with a function, slightly restricted but powerful MBP. Note High Sierra does not install on this unit as it freezes at about 70%. Thanks again all!

REPLY

◦ *said:*Dhaval Dalal

March 27, 2019 at 2:11 pm

You create an Installer disk for High Sierra. Check out -> <https://support.apple.com/en-in/HT201372>

REPLY

20. *said:*Major

March 28, 2019 at 1:50 pm

Many thanks Dhaval,

This is not the problem – I have this and most other versions of MacOS.

The problem is that the install calls the dGPU during the installation and thus the installation fails..

I will be trying a few things this weekend so all good ideas on a postcard. 😊

REPLY

◦ *said:***Dhaval Dalal**

March 28, 2019 at 2:49 pm

You can boot using installer and then perform steps 1 to 13 but skip steps 6, 7, 8, 9. After that install your OS. Try it and hopefully that should help!

REPLY

21. *said:*Major

March 29, 2019 at 3:12 am

You are a star for helping.. but

If I boot into the High Sierra installer – start the install process – it gets only to about 15% of the way on the progress bar then stops. CAP lock still works but no further progress. I tried to connect to HDMI as another post suggested but no output

I cannot get to step one... 😞

I even tried chilling the MBP in the fridge then starting the process – then putting it back in the fridge – no go.. (I used this process in the past as part of a data recovery job – it worked..)

If I am missing something please let me know as would love to make this MBP useful WITH MacOS.

BR

REPLY

◦ *said:***Dhaval Dalal**

March 29, 2019 at 5:59 am

Yes, I understand. I have been thru' a similar episode. With the installer, you boot in to recovery mode (where you still get the command terminal) and in that mode perform the steps that I mentioned in my earlier comment (skipping a few in between).

REPLY

22. *said:*Major

March 30, 2019 at 1:24 am

simply cannot get that far... CMD+R – / connect to WIFI start process – spinning – screen lock up.. going to fridge for another beer...

REPLY

23. *said:*Mark

April 2, 2019 at 2:11 am

Hi guys,

As an update – randomly, I got further along with Recovery mode today (I cannot let this thing beat me...need to keep trying..) – this morning I launched recovery mode CMD+R, connected to WIFI and got all along to the High Sierra installer, then finally got into the terminal.

I should point out the screen resolution was super high (retina screen) and I found myself taking photos I could zoom in to read the text... old eyes I guess.

The command

“system_profiler SPDisplaysDataType” displayed the two GPU’s –

I then try “csrutil disable” and it returns “command not found”

Tried the other commands / reboot – no go

Note: this is Freshly formatted SSD Drive on a Mid 2012 MBP.

I then tried recovery mode CMD+OPTION+R, connected to WIFI and got all the way along with the Mojave installer and again into Terminal. This was real progress.

“csrutil disable” finally return a positive response

I completed the list of commands as instructed:

```
$ csrutil disable
```

```
$ nvram boot-args="nv_disable=1 $(nvram boot-args 2>/dev/null | cut -f 2-)"
```

```
$ nvram fa4ce28d-b62f-4c99-9cc3-6815686e30f9:gpu-power-prefs=%01%00%00%00
```

```
$ csrutil enable
```

```
$ reboot
```

Note I don’t think the short command (nvram boot-args="nv_disable=1") works on this computer while the longer command DID work. I did try it on one attempt without success.

BOOM... it worked. Mojave completed the installation and after a few reboots – it seemed ok. At one point the installation progress bar stopped – then after a while I could hear the text over speak kick in so rebooted into recovery and did the command sequence above again.

Of course no screen brightness control as reported and closing the lid does not put MBP to sleep but a massive result for a computer I could only run Windows OR linux on.

There were a few more steps / repeats / reboots but really happy and many thanks!

More to report when I learn more.

Br M

REPLY

April 6, 2019 at 8:39 pm

Have you tried to follow this: <https://tim.palpant.us/sysadmin/macOS/2018/09/09/nvda-gpu-wake-handler/>

REPLY

- *said:***Dhaval Dalal**

April 11, 2019 at 4:49 pm

Nope

REPLY

- *said:*Ray

April 12, 2019 at 12:32 am

I've just read that – way out of my league!

I managed Dhaval's method and worked for me – apart from brightness and sleep by closing the lid.

I installed app called Amphetamine which keeps mac awake – has worked brilliantly for the last couple of months with no gpu panics and no crashes.

If the Tim Palpant methods work to bring back wake from sleep and brightness control, can anyone provide an idiots step by step guide as to how to do it as I have no idea what he is writing about, even after looking at all the links!!

Ray

REPLY

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