Macbook Pro Early 2011, 8,2 07/23/2019

Install Mojave + dGPU disable + CAT on Mojave

- 15in. Macbook Pro Early 2011, 8,2
- Updated AirPort card: Broadcom BCM94331PCIEBT4CAX
- MacOS: 10.14.6 Mojave.
- Clean Mojave install, using dosdude1 Unsupported Macs Mojave Installer.
- Do not install dosdude1 Wi-Fi/Bluetooth patches.
- Do not install dosdude1 USBOHCI patch.

AMDRadeon GPU Disable (EFI software only method):

https://luispuerto.net/blog/2017/12/11/disconnecting-the-dgpu-in-a-late-2011-macbook-pro-third-way/

- o ***IMPORTANT: DO NOT use dosdude1 dGPU disabler app!***
- o Reset PRAM & SMC
- o Disable SIP
- o Use EFI method to alter nvram prefs to disable dGPU.
- o Use script/loginhook method to unload/load AMDRadeonX3000.kext before/after boot. Use `pmset -a gpuswitch 1` in loginhook to keep dGPU from switching.

- o Modify AMD6000Controller.kext to make CFG_FB_LIMIT=**3**
  `<key>CFG_FB_LIMIT</key><integer>3</integer>`

Continuity Activation Tool Install:

- o All Wi-Fi / Bluetooth Kexts should be Mojave unaltered originals.
- o Wi-Fi and Bluetooth should already be working as expected without Continuity.
- o Install latest CAT *BETA* as normal. (Make sure you are using ONLY the latest CAT Beta!)
- o Once you reboot, CAT will say it is active, but is likely not really working.

1.) In terminal get your board ID number:

```
ioreg -l | grep "board-id" | awk -F\" '{print $4}'
```

Ex: MBP2011 Board ID: Mac-94245A3940C91C80

2.) Set SystemParameters.plist flag to "true":

```
sudo nano /System/Library/Frameworks/IOBluetooth.framework/Versions/A/Resources/SystemParameters.plist
```

- Search (Ctrl+w) for Board ID (paste your Board ID in the search field and hit enter).
- Change flag from "false" to "true"
- Ctrl+w (write changes), then Ctrl+X (to exit nano).

3.) Set BoardID in AirportBrcm4360.kext & AirportBrcmNIC.kext:

```
sudo -E perl -pi -e "s/\Mac-00BE6ED71E35EB86/\Mac-94245A3940C91C80/"
/System/Library/Extensions/IO80211Family.kext/Contents/PlugIns/AirPortBrcm4360.kext/Contents/MacOS/AirPortBrcm4360

sudo -E perl -pi -e "s/\Mac-00BE6ED71E35EB86/Mac-94245A3940C91C80/"
/System/Library/Extensions/IO80211Family.kext/Contents/PlugIns/AirPortBrcmNIC.kext/Contents/MacOS/AirPortBrcmNIC
```

4.) Restart, CAT should be working after you reboot!

Continuity Alternative Method:

1.) Install Lilu.kext & BT4LEContinuityFixup.kext to System/Library/Extensions/

2.) After getting boardID, (See above), then run:

```
sudo /usr/libexec/PlistBuddy -c "Set Mac-94245A3940C91C80:ContinuitySupport true"
/System/Library/Frameworks/IOBluetooth.framework/Versions/A/Resources/SystemParameters.plist
```

Note:

I don't take any credit for the "R&D" of the above "solution".   There are many other folks who have CRITICALLY contributed by figuring out the nuts & bolts and sharing their findings. Thank you all!   Also, it seems to me that in the end, none of this would even be possible without dosdude1's excellent contributions for "Unsupported Macs". THANK YOU dosdude1!

So, all I've done is to collate everything I've learned into a process "document" summary, which I wanted to make and keep for myself.   Hopefully, other folks will find this useful as well.

There was a lot of trial and error associated with making this work for my Macbook Pro Early 2011 (8,2) with a defective AMD dGPU.   If the dGPU had NOT gone bad, I probably would've stayed on High Sierra. But since it needed to be disabled anyway, I decided I may as well try to upgrade to Mojave.

I can confirm that with the process above, I was able to achieve my goals and Mojave is working fabulously! My dGPU diode temp is typically between 4-12C, indicating dGPU is indeed disabled.   My Backlight keys work as they should, and I have no sleep/wake issues.   Additionally, (and even prior to dGPU failure), I was seeing battery drain issues on High Sierra, getting around 2.5hrs of battery life…even after repeated SMC/PRAM resets and battery calibrations.   After this process, my battery life is now back within normal expectations, and I'm getting 5-7hrs of battery life.

Continuity (via CAT) was working great previously on this Macbook Pro in High Sierra. I was surprised when it didn't work with Mojave, but thanks to the awesome folks in the forum, I was able to get it working via the process outlined above.   It is now working great, and I'm sure I won't be able to live now without Mojave Camera Continuity!

Thanks again everybody for your invaluable work.   Now I can hold off on buying a new MBP for a while longer!!!

Regards,

Finbarr Cnaipe, 07/23/2019