

Mac Pro 4.1 and 5.1 (A1289) WiFi Upgrade

Installation Instructions

Thanks for purchasing a Mac Pro WiFi and BTUpgrade Kit please follow the instructions below to install your adapter, if you have any issues or questions please contact <u>Support</u> or check the <u>FAQs</u>

Please carefully read the Compatibility Guide before starting installation

Time

The installation of the adapter is involved, and could take at up to 1.5 Hrs.

Preparation

Make sure you have a clean well lit workspace and have taken the appropriate anti-static precautions. Please read all the instructions carefully before proceeding.

You will need:

- WiFi Upgrade Kit (you should have the adapter, PCle Bracket, BT extension Cable, BT antenna cable and PCs Bracket)
- Suitable 12+6 WiFi Card (BCM94360CD/BCM943602CDP)
- · This guide, preferably on another device

*** If you are providing your own BCM943602CDP complete the modification guide <u>HERE</u> first it will make fitting the antenna cables easier ***

You will need the following tools:

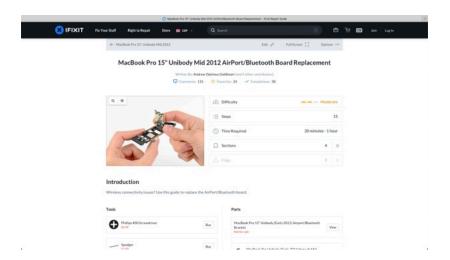
- Plastic Spudger
- T9 (2.5mm)
- Phillips No.1
- Electrical Tape / Kapton Tape
- Optional 6.5mm/7mm drill
- Pliers

It is always good practice to back up your data and make sure your machine has been shut down properly before you start any work. This is a DIY unsupported modification to your Mac Pro that you are undertaking at your own risk and intriguing industries will take no responsibly for any damage or data loss

The Mac Pro 4.1 and 5.1 are virtually identical and none of the differences will affect the installation of the adapter

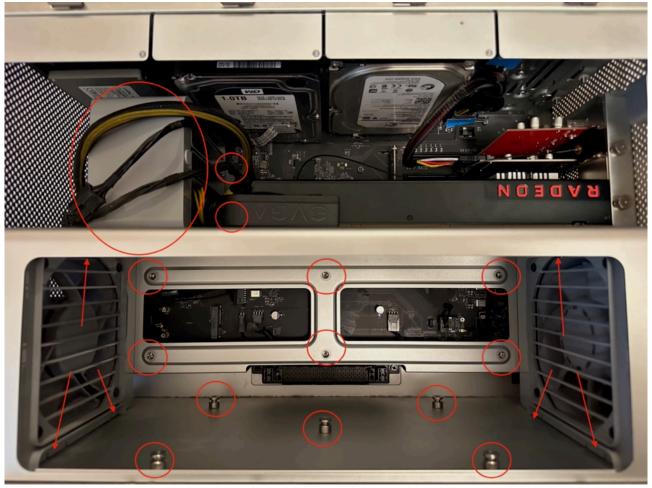
1. Prepare the Mac Pro by removing the Processor tray

Follow the great <u>iFixit instructions</u> to remove the bottom case and wifi card and cage. You can also use Apples official service documentation available <u>here</u> see page 120 for the processor tray and page 137 for the WiFi card.



2. (Optional) Remove the Processor Cage

Removing the processor Cage will make it easier to access the antenna connections if you are having trouble. Apples official service documentation are available here on page 149.



3. Install the BT Antenna extension cable

The external BT antenna greatly improves the BT performance on the Mac Pro it can be fitted to a free PCle Slot, or added to an existing card by drilling a 6.5mm/7mm hole in the cards PCle Bracket. Route the antenna cable through the case to the WiFi card avoid it being pinched or trapped by the PCle cards or case





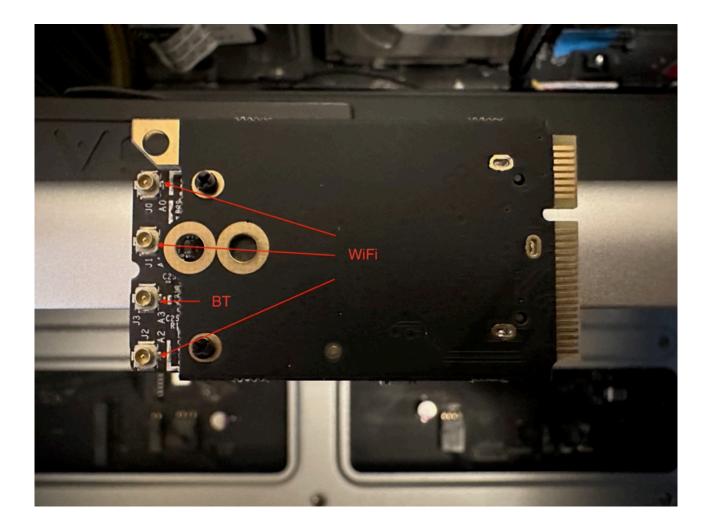
4. (Optional) Install WiFi Card into the Adaptor

If you are providing your own WiFi card install it now into the adaptor.

5. Connect the antenna cables

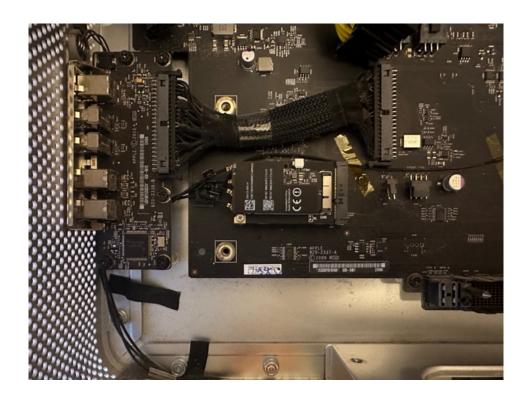
***These are fragile please be careful! Try not to pull or bend at the conectors ***

Carefully connect the antenna cable, by aligning them and pushing down firmly. With the card turned over with the antenna connectors facing up and the Mini PCle to the right the top 2 and bottom connectors are for the WiFi antennas the order of the ins unimportant. The remaining connector the 3rd one down is the BT antenna connector. (It helps to ensure the twist of the antenna cable is such that when the card is turned over they are not trying to disconnect themselves)



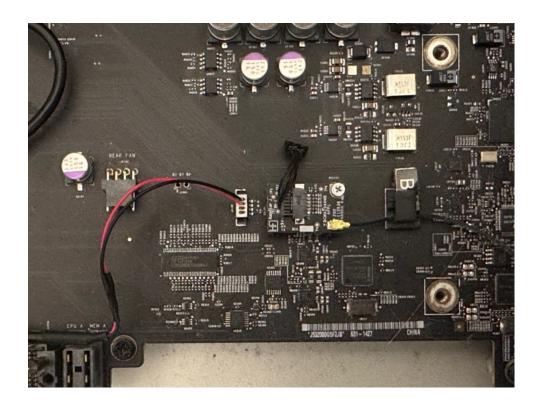


6. Install the WiFi Card and AdaptorNow turn the card over carefully so as not to disconnect the antenna cables install the WiFi Card and Adaptor in the Mini PCIe slot and secure with a single screw.



7. Connect the BT extension Cable

With the adapter installed take the BT extension cable and connect it to the WiFi Card run the cable to the BT Card and disconnect the existing cable and replace it with the new one. The original card and antenna can stay in place.





8. Reassemble the Mac Pro

Reassemble the Mac Pro using the <u>iFixit Guide</u> in reverse. Be very careful that the antenna cables are not squashed.

9. Test the card

Before testing be sure to Reset the Pram and Reset the SMC

You should be able to now connect via WiFi and Bluetooth as normal with the new features available with the card of your choice. Depending on the OS you are using and car you may have to re run any patchers like OCLP BT availability may require a warm re-boot after switching OS versions.

There is a small chance that you will have software issues because this will vary by OS etc they are out of the scope of this guide if so please contact <u>Support</u> and we will do our best to help you

Troubleshooting Links

MacRumors 5.1 WiFi Upgrade Thread

Continuity System Requirements

Apple Watch Unlocking

Handoff Support

Continuity Activation Tool

Pram Reset

SMC Reset

Change Log

v1 - Initial version