

AX88179/AX88178A macOS Driver Installation Guide

Revision 2.20
Nov. 30th, 2017

Revision History

Revision	Date	Description
1.00	2012/09/10	Initial release.
2.00	2014/02/25	<ol style="list-style-type: none">1. Modified to support macOS 10.9 driver installer.2. Modified some descriptions in Section 1.3. Replaced Section 4-1 "Driver Installation Failure on macOS 10.8 Issue" with new Section 4-1 "How to identify the Vendor ID and Product ID of your USB dongle?".4. Added Section 4-2 and Section 4-3.5. Removed "Appendix A. AX88179/AX88178A Script Files" section.
2.01	2014/06/10	<ol style="list-style-type: none">1. Modified some descriptions in Section 2.
2.10	2016/11/08	<ol style="list-style-type: none">1. Modified some descriptions and pictures to meet the latest macOS driver installer.2. Added Section 4-3.
2.20	2017/11/30	<ol style="list-style-type: none">1. Updated all descriptions to use unique "macOS" wording.2. Added more information in Section 4-3.3. Added Section 4-5 "How to configure AX88179/178A macOS driver VLAN setting?".

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1. Introduction

This document contains the installation and uninstallation information of AX88179/AX88178A macOS 10.6 to 10.8 driver and macOS 10.9 and above driver.

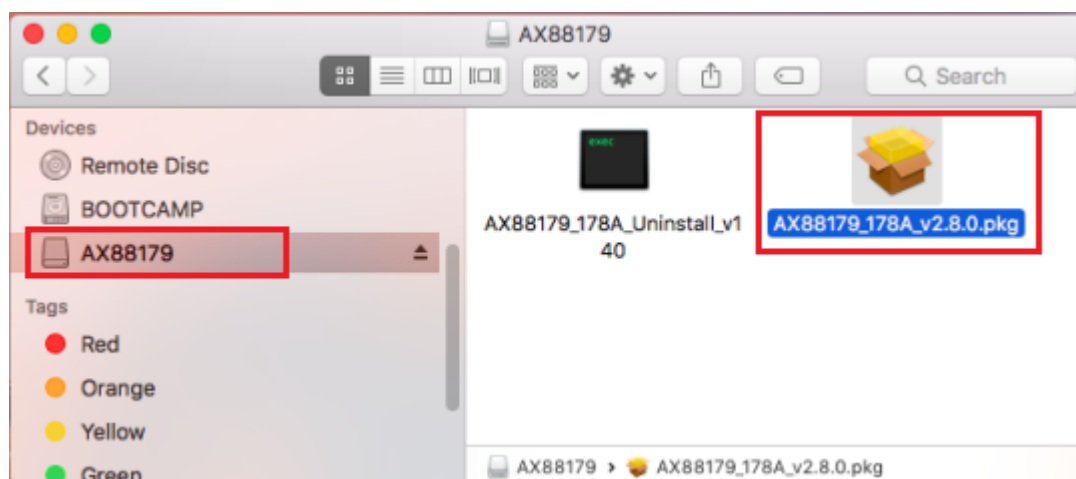
Some USB to LAN dongles have manufacturers' own VID/PID. If ASIX's standard driver couldn't work fine with your USB-to-LAN dongle, please contact the support guys of your USB-to-LAN dongle manufacturer to get proper driver directly.

2. Driver Installation Procedures

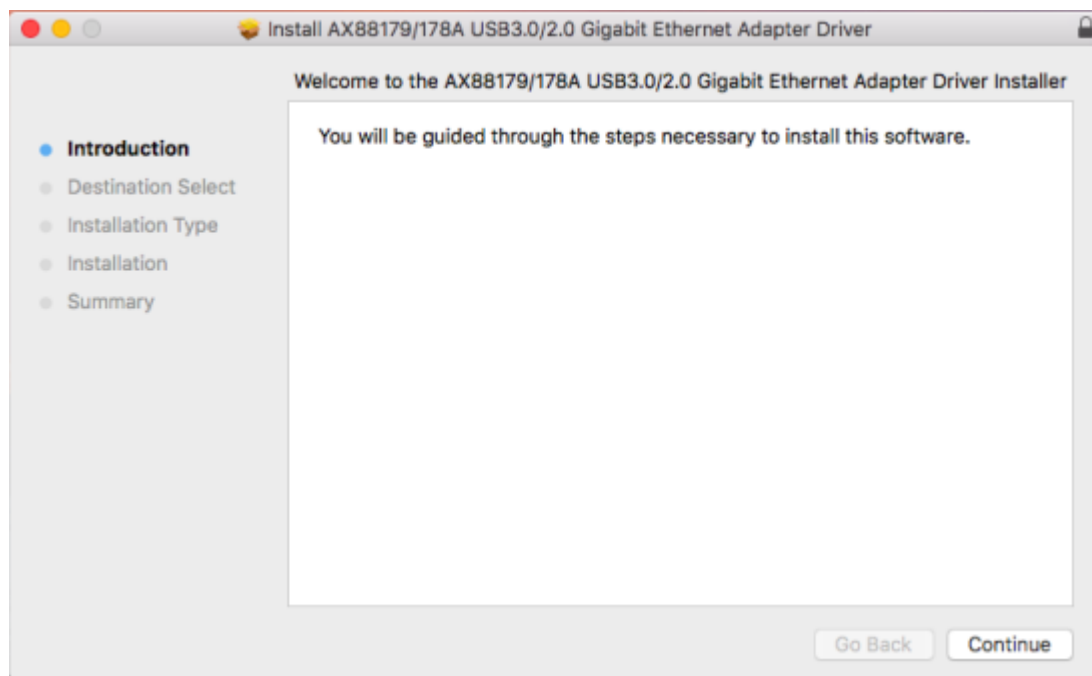
The AX88179/AX88178A macOS driver installation package is "**AX88179_178A.dmg**".

The following is an example of ASIX's AX88179/AX88178A macOS driver installation procedures.

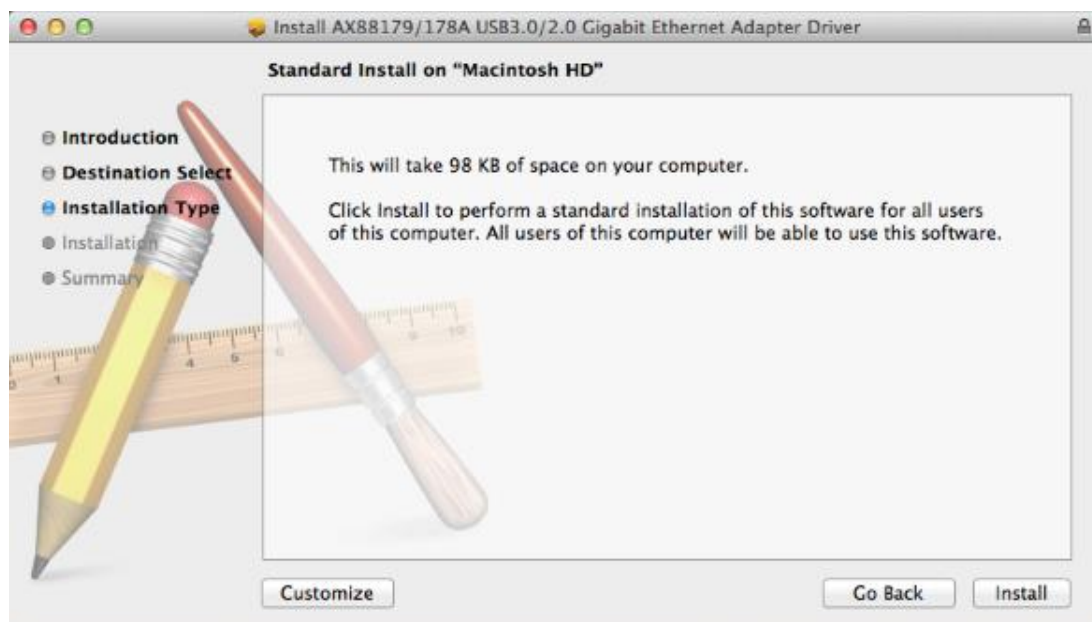
Step 1: Click the "**AX88179_178A.dmg**", the following "AX88179" virtual disk will be appeared on the Desktop of your macOS system. (This "AX88179" virtual disk will be auto-removed after rebooting macOS system.)



Step 2: Click the “**AX88179_178A_vx.x.x.pkg**” (“x.x.x” is driver installer revision number), the following driver setup dialog will appear. Click the [Continue] button to start the installation operation and follow the instructions to continue the installation.



Step 3: Click the [Install] button to continue the installation operation. You might need to enter your user/password during the driver installation.



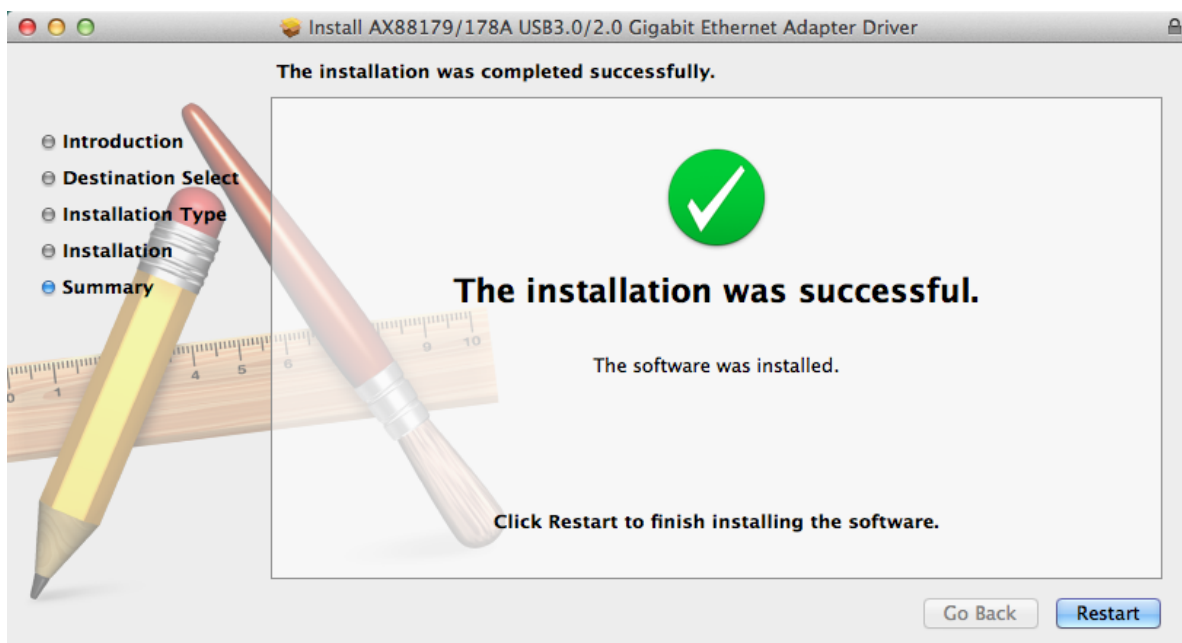
Step 4: You might need to enter your user/password during the driver installation.



Step 5: Click the [Continue Installation] button to continue the installation operation.

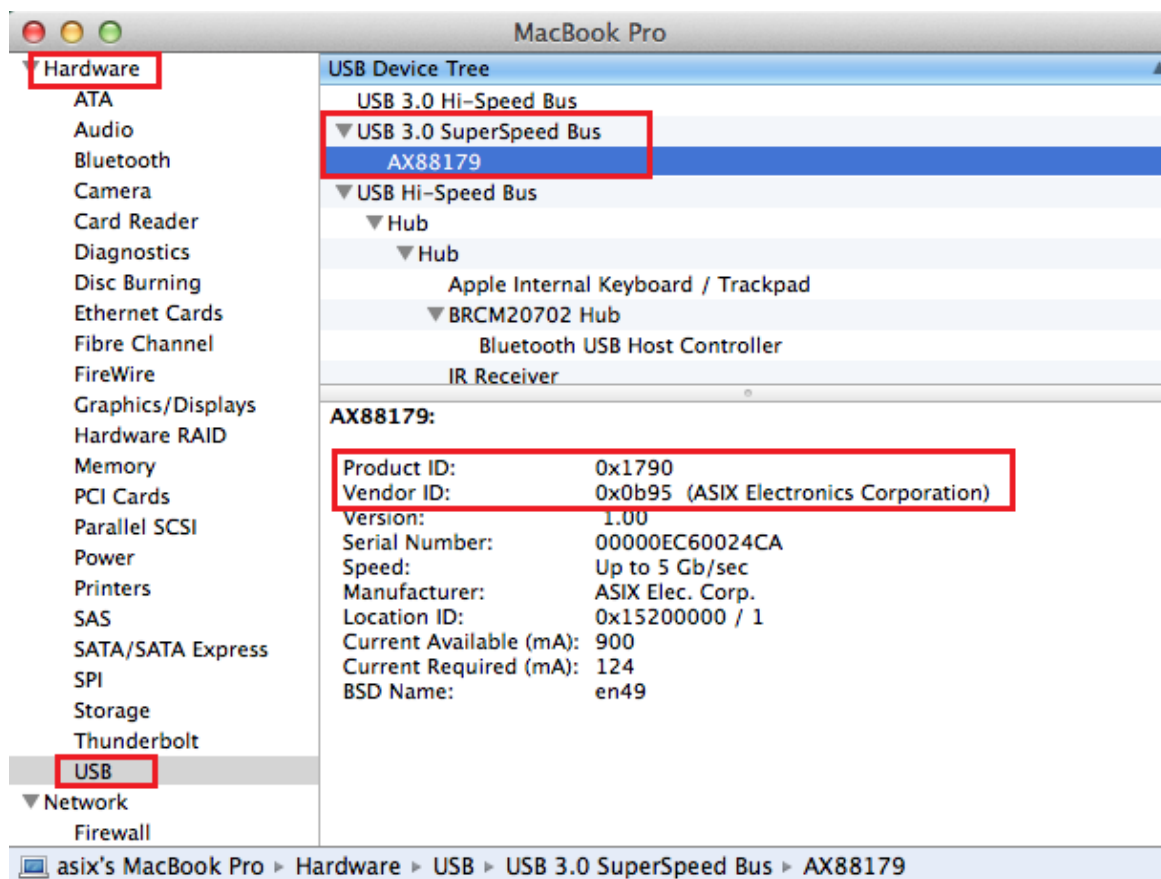


Step 6: Click the [Restart] button to restart macOS system to take effect the revised driver installation.



Step 7: After booting up your macOS system, plug your AX88179/AX88178A USB dongle onto the USB port of your macOS system and refer to the following information to double check if your USB dongle had been identified properly by macOS system and the AX88179/AX88178A macOS driver was installed correctly or not.

(1) You can check the Vendor/Product ID information of your USB dongle from here.

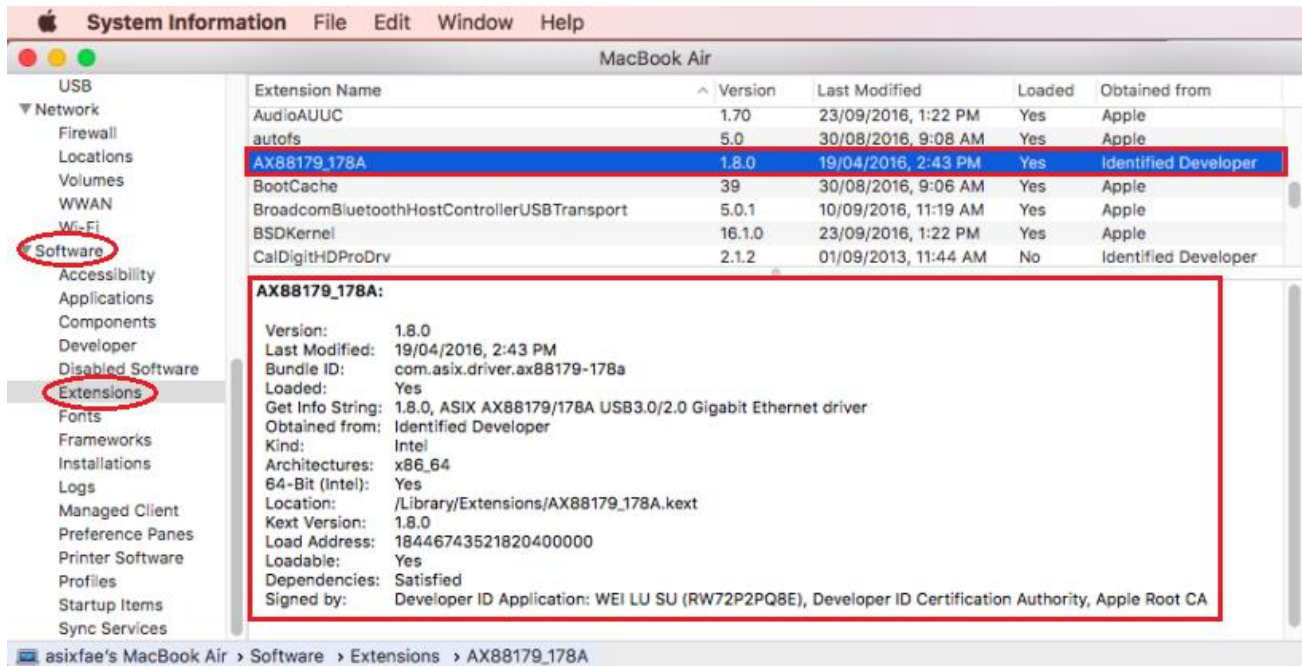


- (2) You can check the installed AX88179/AX88178A macOS driver version information by running the “kextstat” command or from the “Software -> Extensions” console as below figure.

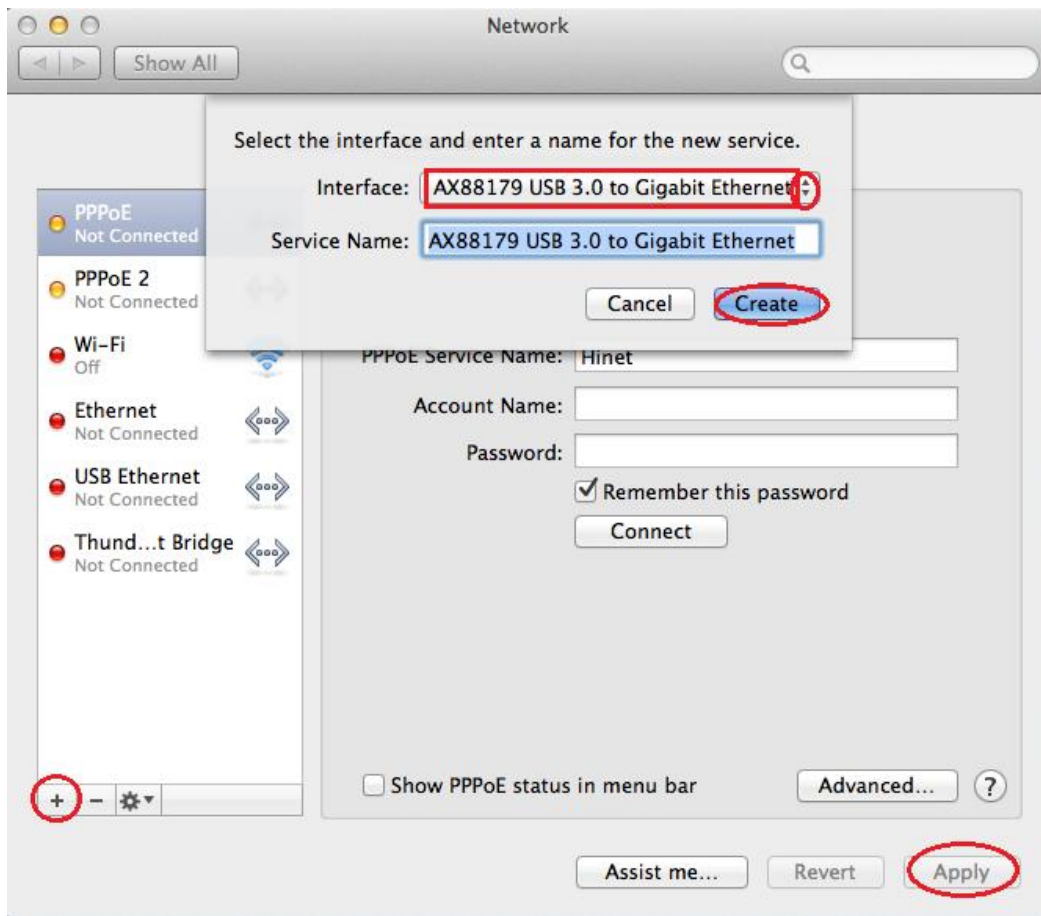
Tsengteki-MacBook-Air:~ allan\$ **kextstat**

Index Refs Address Size Wired Name (Version) <Linked Against>

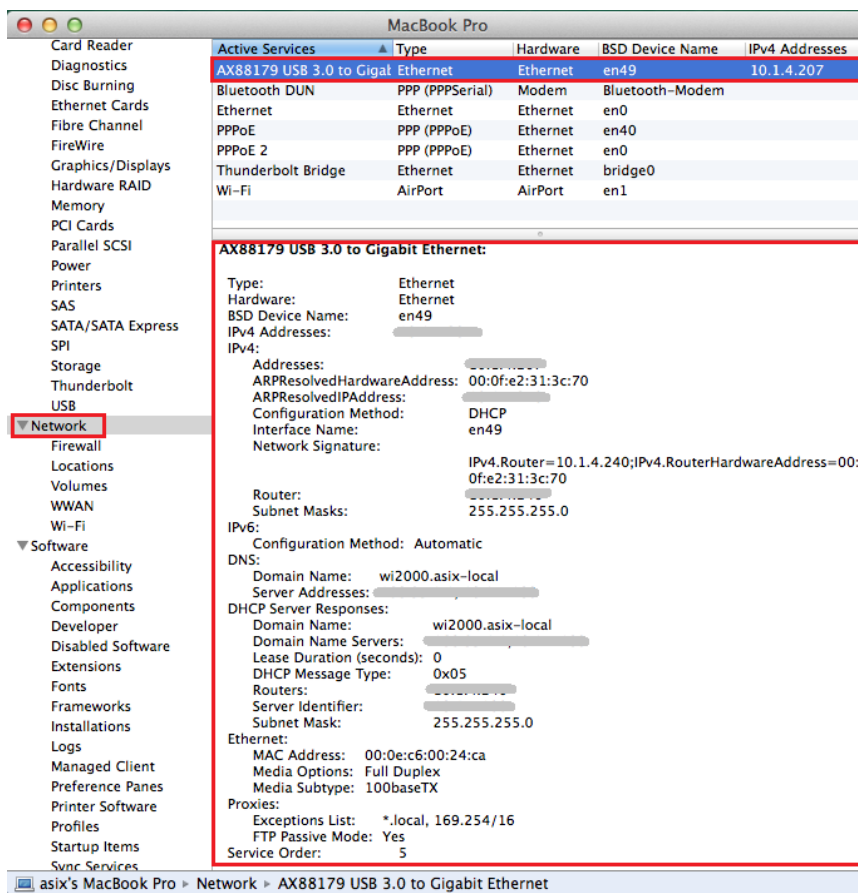
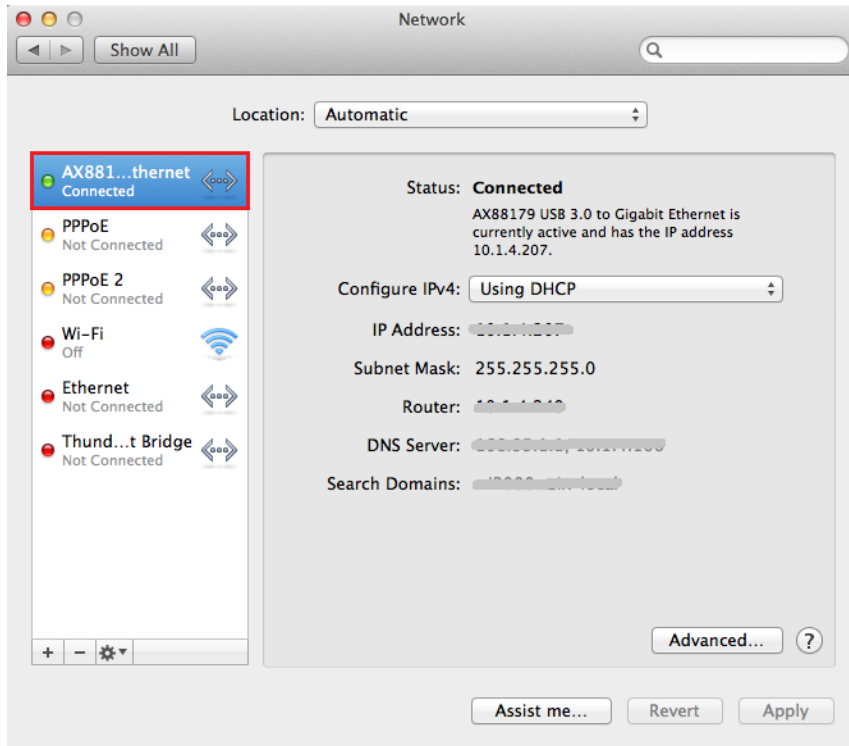
```
.....
 142  0 0xfffff7f80d88000 0x9000  0x9000  com.asix.driver.ax88179-178a (1.8.0) 18E125DD-F66C-31C1-
8C66-552F9CE8F501 <50 40 7 5 4 3 1>
.....
```



Step 8: Please refer to below figure to add a new “AX88179 USB 3.0 to Gigabit Ethernet” network interface and then press the [Apply] button to take effect the new network interface.



Step 9: The new “AX88179 USB 3.0 to Gigabit Ethernet” driver should be ready now.

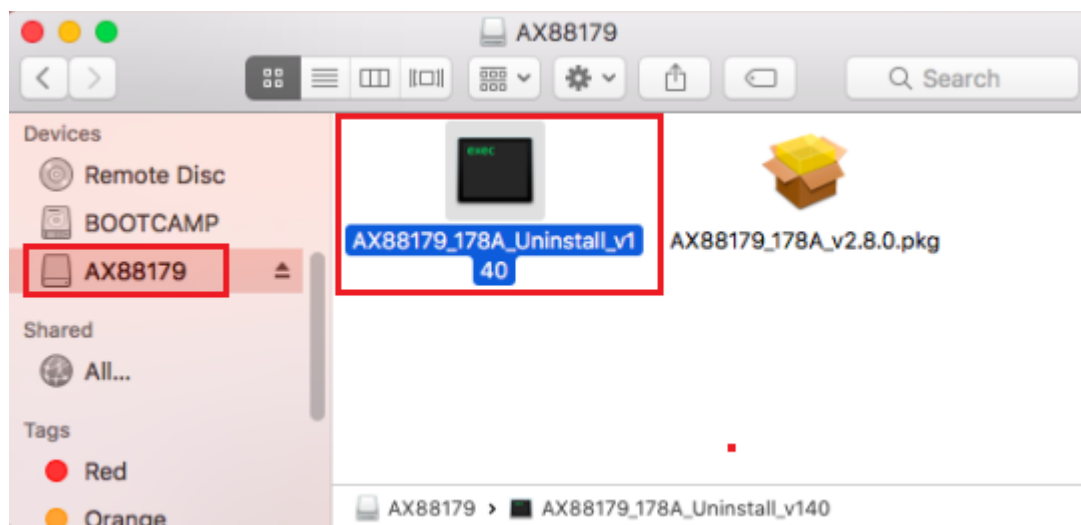


3. Driver Uninstallation Procedures

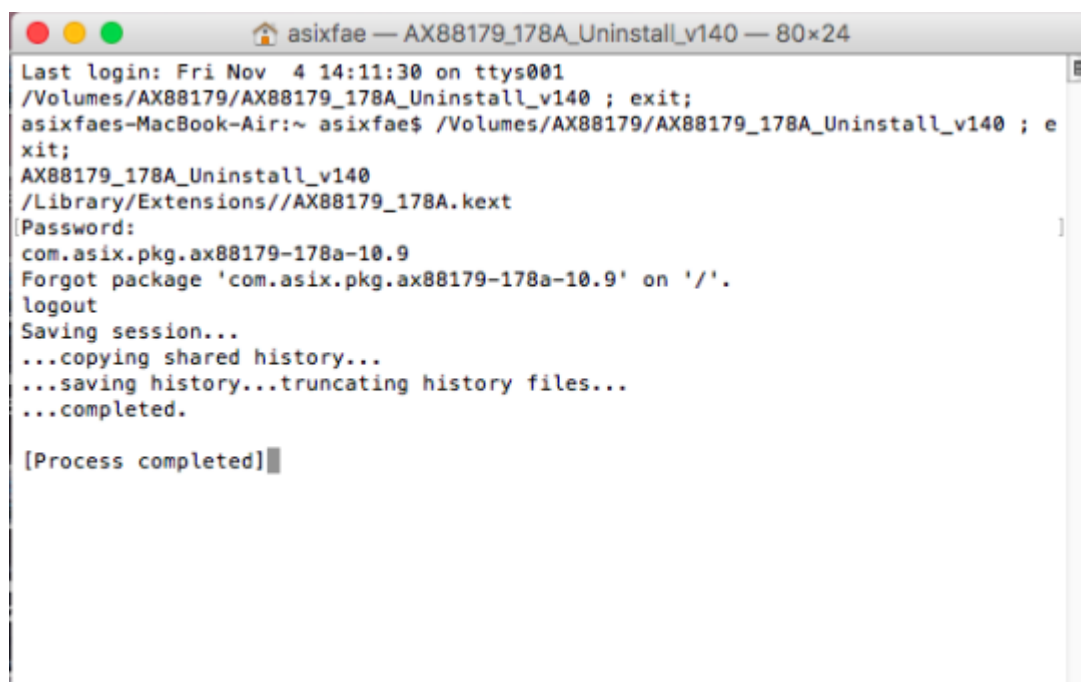
The AX88179/AX88178A macOS driver uninstallation utility is “**AX88179_178A_uninstall_vxxx**” (xxx is the revision number of the driver uninstaller utility).

The following is an example of AX88179/AX88178A macOS driver uninstallation procedures.

Step 1: Click the “**AX88179_178A.dmg**”, the following “AX88179” virtual disk will be appeared on the Desktop of your macOS system. (This “AX88179” virtual disk will be auto-removed after rebooting macOS system.)



Step 2: Click the “**AX88179_178A_uninstall_vxxx**” utility (xxx is the revision number of the driver uninstaller utility) to uninstall AX88179/AX88178A macOS driver.
(You might need to enter your user password to finish the driver uninstallation operation)



4. Troubleshooting

(The figures in this section are examples for your reference)

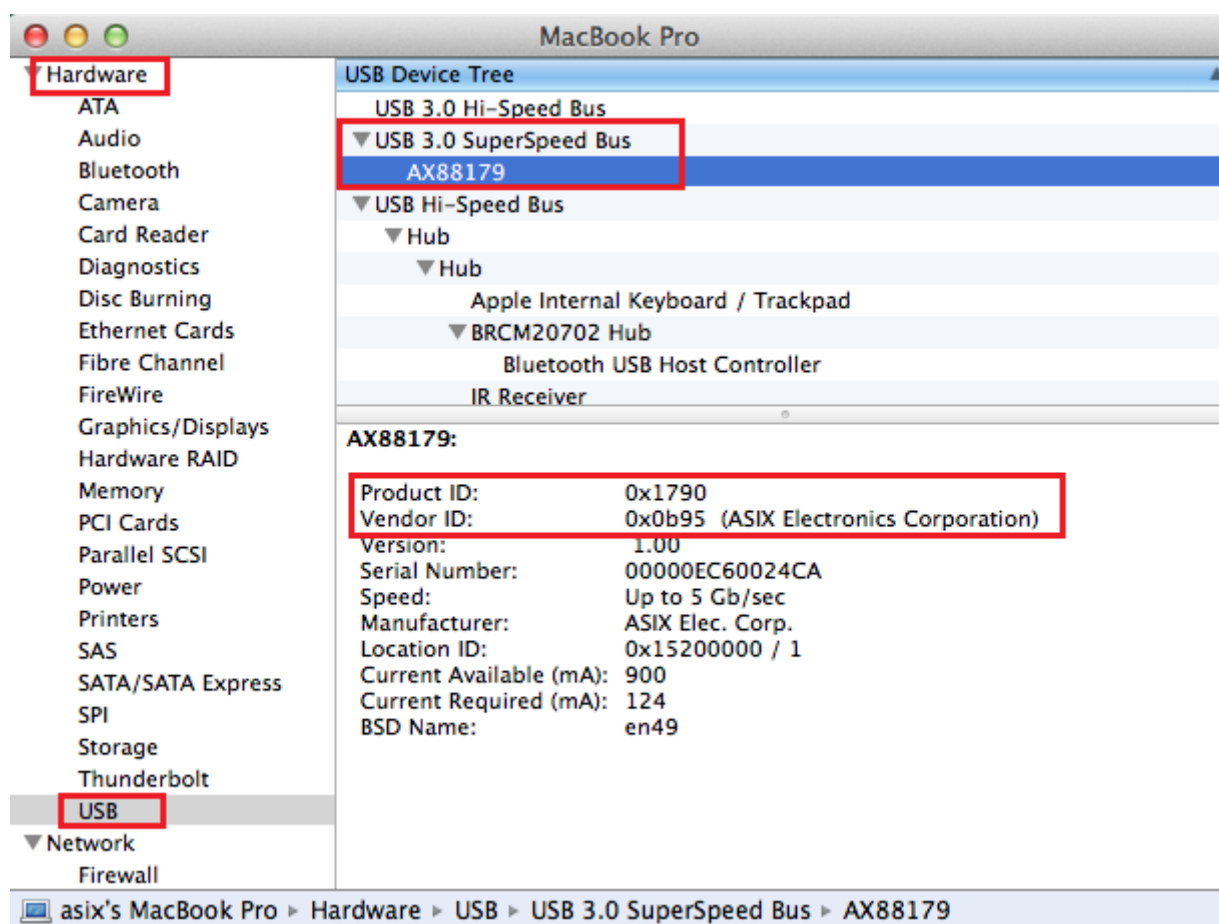
Please refer to Section 2 & 4 to provide us the captured driver installation screens step-by-step and run “sudo dmesg” command to get the driver debug messages for further investigation if you have any problems on AX88179/AX88178A macOS driver installation.

4-1. How to identify the Vendor ID and Product ID of your USB dongle?

Please refer to below picture to make sure if the Vendor ID and Product ID of your USB dongle are ASIX's default values or not? If no, please contact the manufacturer of your USB dongle to get a proper driver directly.

The following are the AX88179/AX88178A default VID/PID.

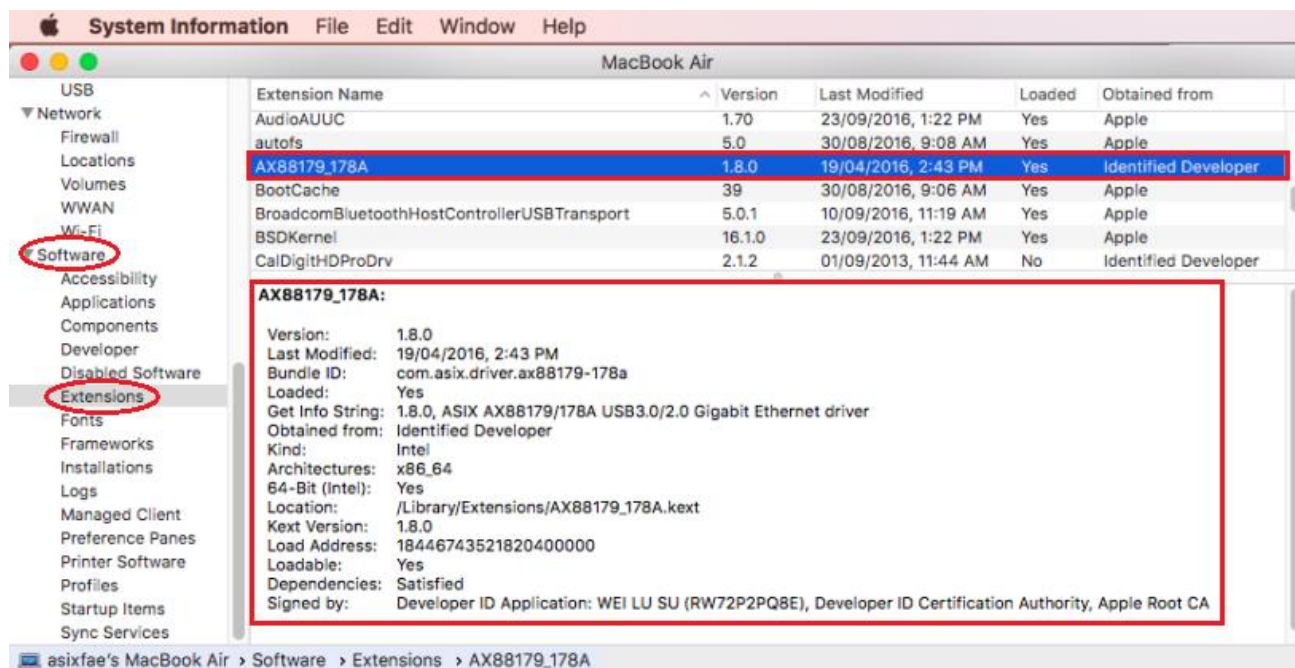
ASIX Product	ASIX Vendor ID	Product ID
AX88179	0B95h	1790h
AX88178A	0B95h	178Ah



Note: If you cannot find your AX88179/AX88178A device under the USB Device Tree, your AX88179/AX88178A dongle might have some potential hardware compatibility issues on your target platform. Please contact the manufacturer support guys of your suspected AX88179/AX88178A dongle to isolate your issues.

4-2. How to identify the installed macOS driver revision?

Please refer to below picture to identify the driver revision of the installed AX88179/AX88178A macOS driver.



Or run the “**kextstat**” or “**sudo dmesg**” commands in the Terminal console to identify the driver revision of the installed AX88179/AX88178A macOS driver.

```
asixs-MacBook-Pro:~ allan$ kextstat
Index Refs Address      Size   Wired   Name (Version) <Linked Against>
142  0 0xfffff7f80d88000 0x9000 0x9000  com.asix.driver.ax88179-178a (1.8.0) 18E125DD-F66C-31C1-8C66-552F9CE8F501 <50 40 7 5 4 3 1>
```

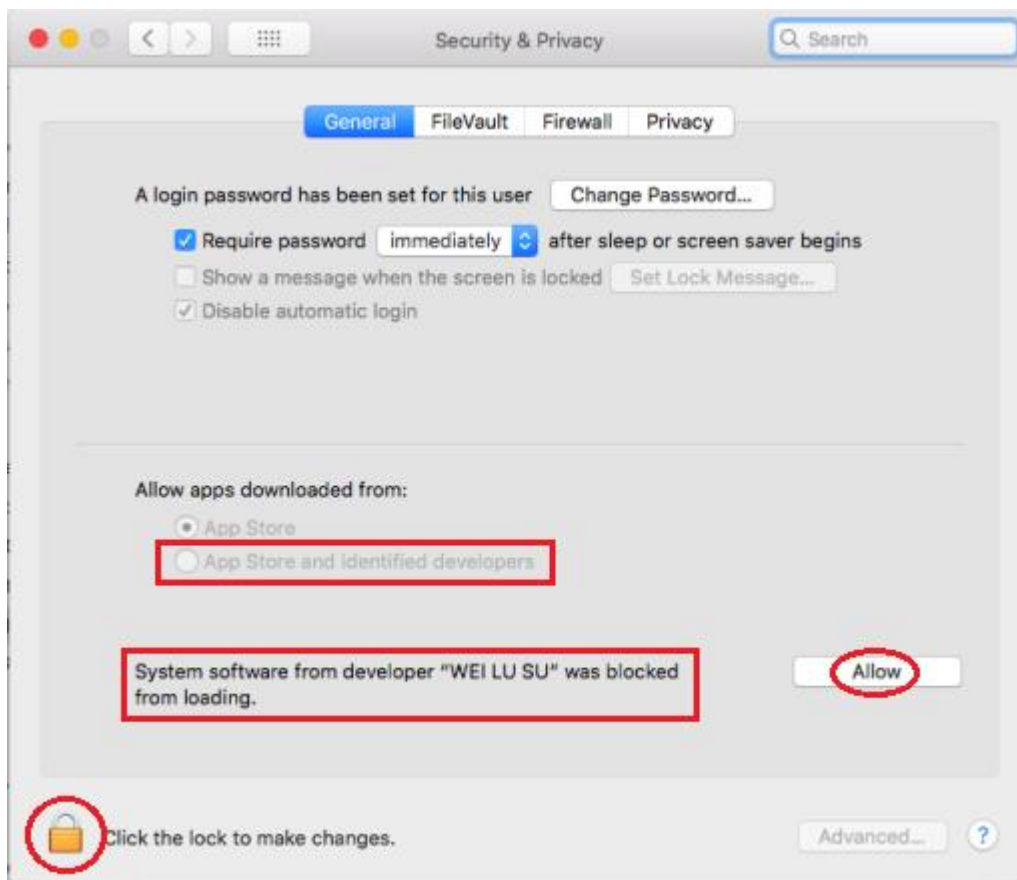
```
asixs-MacBook-Pro:~ allan$ sudo dmesg
...
AX88179: start - Version number 1.8.0
AX88179: start - Input buffers 4, Output buffers 8
AX88179: enable - Exit
AX88179: monitorLinkStatus - Link is down.
AX88179: monitorLinkStatus - Link down
AX88179: monitorLinkStatus - Link is up at 100 Mbps - Full Duplex (PHY regs 5,6:0xc1e1,0x000d)
...
```


4-3. How to isolate driver failure issues after upgrading macOS system?

Please refer to below procedures to isolate the driver failure issues after upgrading macOS system.

1. Please refer to Section 3 to uninstall clearly the previous revision AX88179/AX88178A macOS driver firstly.
2. Please refer to Section 2 to install the latest AX88179/AX88178A macOS driver to see if the driver can work fine now or not?
3. If you saw below error message during running AX88179/AX88178A macOS driver installer, please refer to below figures to press **"Allow"** button to allow ASIX AX88179/AX88178A macOS driver to be loaded on macOS 10.13 or above system. You can refer to below URL for details. If you don't want to see this error message any more, you can set the "Allow apps downloaded from" option on the "Security & Privacy" console to **"App Store and identifier developers"** as below figure.

https://developer.apple.com/library/content/technotes/tn2459/_index.html#/apple_ref/doc/uid/DTS40017658

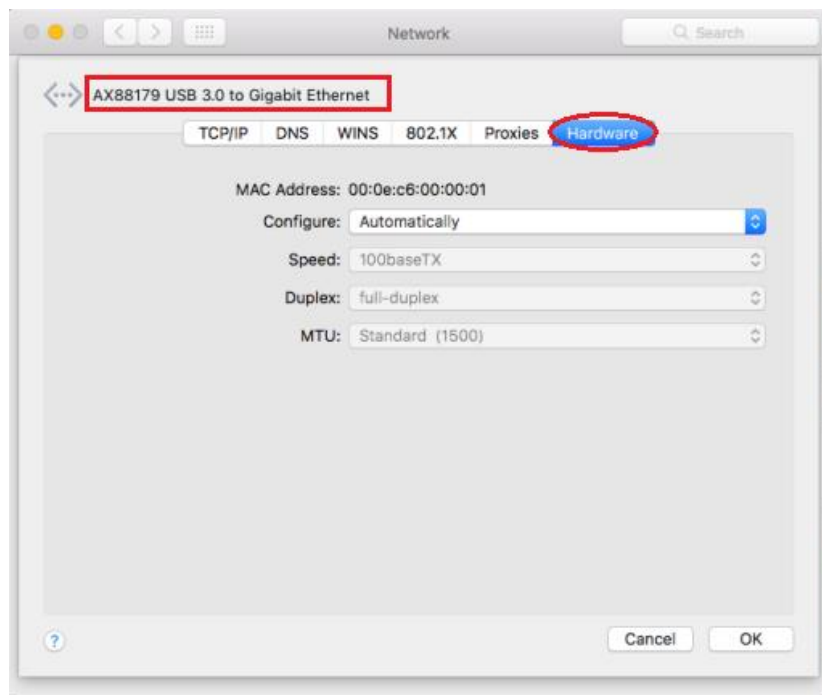
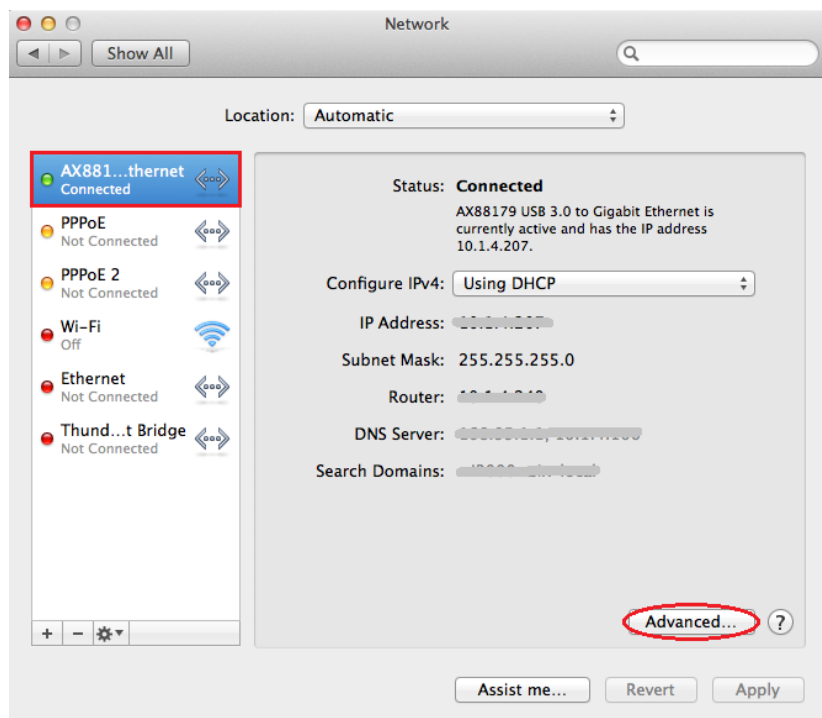


4. If you still have problems, please unplug/re-plug your AX88179/AX88178A dongle to see if it can improve your issues or not?
5. If you still have problems, please refer to Section 4-1 to make sure if your issues are caused by potential hardware compatibility issues on your suspected AX88179/AX88178A dongle or not? If yes, please contact the manufacturer support guys of your suspected AX88179/AX88178A dongle to isolate your issues,
6. If you still have problems, please refer to Section 2 & 4 to provide ASIX support (support@asix.com.tw) the captured driver installation screens step-by-step and run “**sudo dmesg**” command to get the driver debug messages for further investigation.

4-4. How to configure AX88179/178A macOS driver parameters?

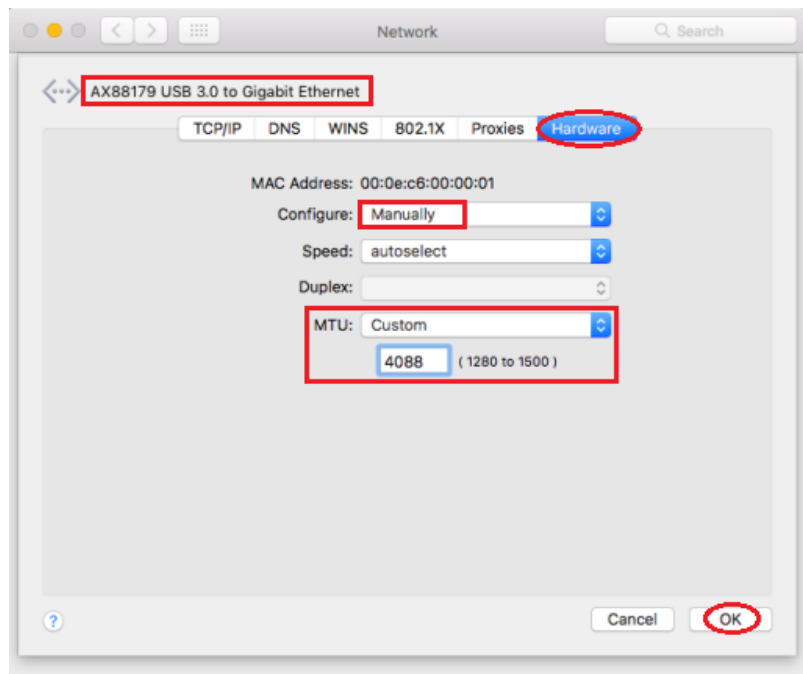
Note that in most of cases, users need not to modify the driver parameters.

Press the “**Advanced...**” button and select the “**Hardware**” tab to configure AX88179/AX88178A macOS driver parameters if necessary.



The AX88179/AX88178A macOS driver supports the Jumbo Packet Size up to 4088 bytes.

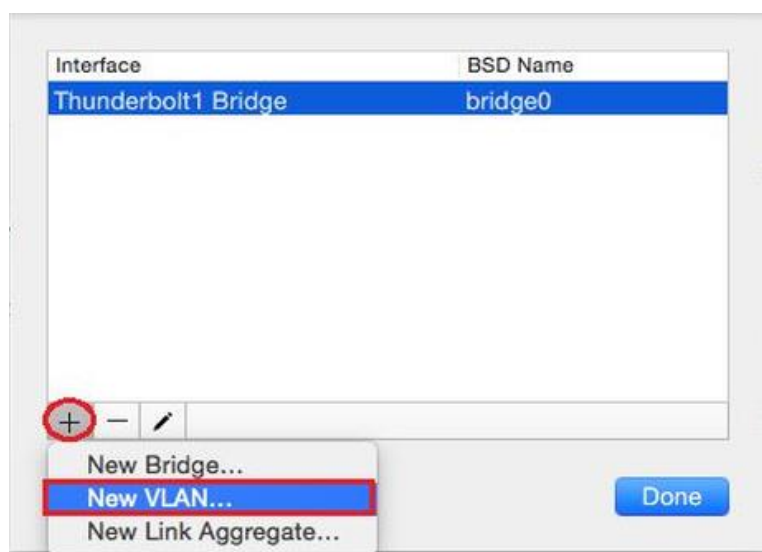
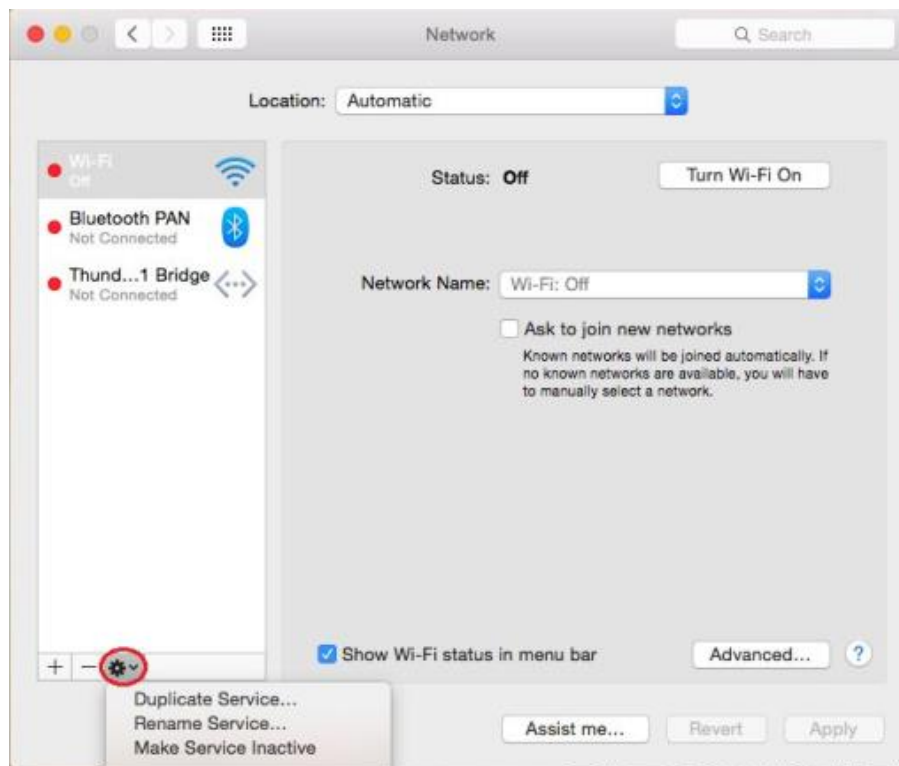
Please refer to below picture to set the Jumbo Packet Size to 4088 bytes if necessary.



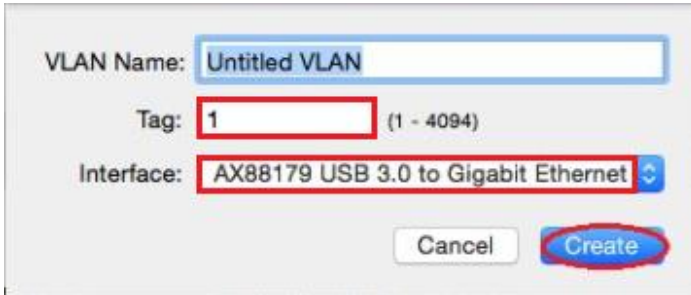
4-5. How to configure AX88179/178A macOS driver VLAN setting?

This section indicates how to configure AX88179/AX88178A macOS driver VLAN function.

1. Please refer to below figures to create a new VLAN interface.



2. Select AX88179/AX88178A driver interface and set a proper VLAN ID for the new VLAN interface.



VLAN Name:

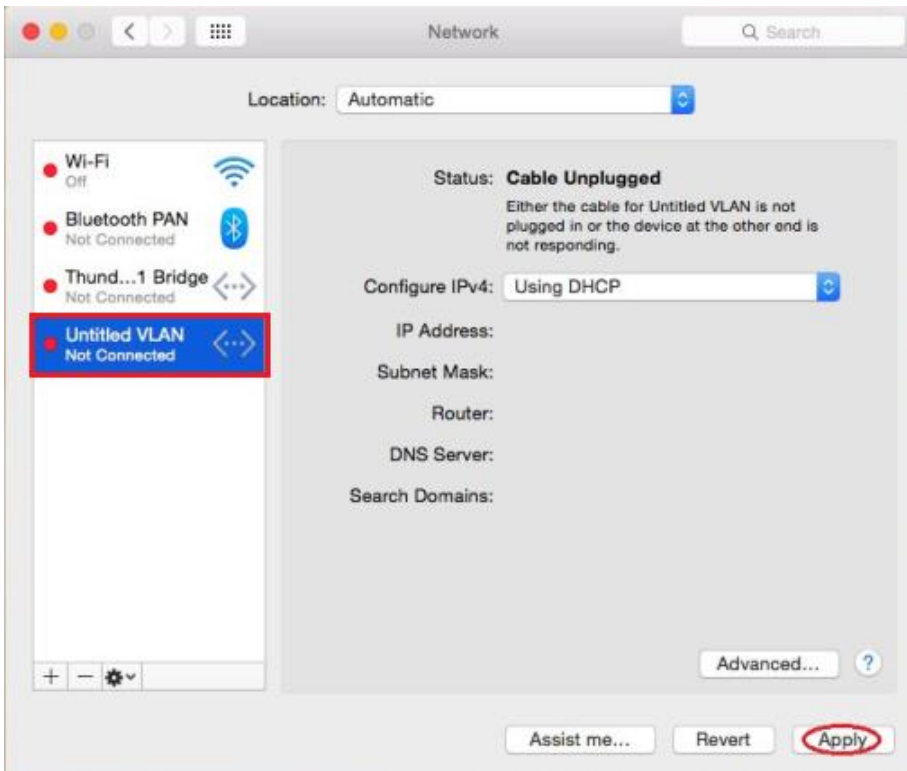
Tag: (1 - 4094)

Interface:



Interface	BSD Name
Thunderbolt1 Bridge	bridge0
Untitled VLAN	vlan0

3. Press "Apply" button to take effect the new VLAN interface configuration.



Network

Location:

Wi-Fi: Off

Bluetooth PAN: Not Connected

Thund...1 Bridge: Not Connected

Untitled VLAN: Not Connected

Status: **Cable Unplugged**
Either the cable for Untitled VLAN is not plugged in or the device at the other end is not responding.

Configure IPv4:

IP Address:

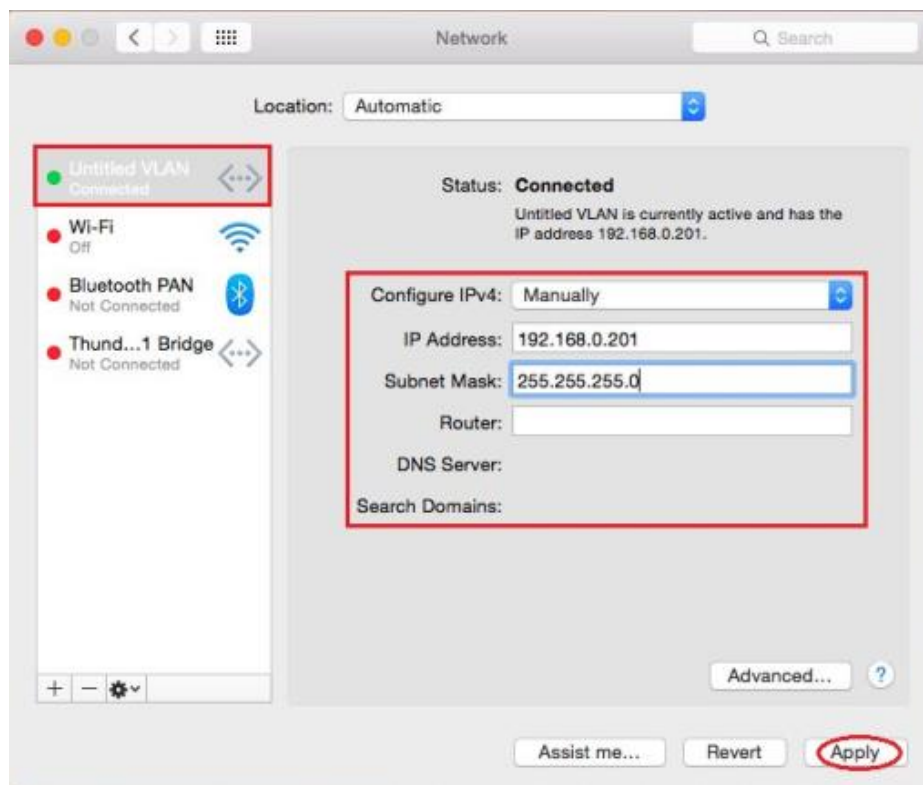
Subnet Mask:

Router:

DNS Server:

Search Domains:

4. Set a proper IP address and press “Apply” button to take effect the new IP address configuration.





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