

# PL-2303 USB-to-Serial Bridge Controller Mac OS X Universal Binary Driver Installation Guide (for Mac OS X 10.9, 10.10, 10.11, 10.12, 10.3)

#### Introduction

This installation guide document shows the procedure for installing the Mac OS X driver v1.6.1 for the Prolific PL-2303 devices. The driver can be downloaded from the Support webpage of the Prolific website:

http://www.prolific.com.tw/US/ShowProduct.aspx?p\_id=229&pcid=41

# System Requirement

The following requirements are needed:

- Mac OS X 10.9 (Mavericks), 10.10 (Yosemite), 10.11 (El Capitan), 10.12 (Sierra), 10.13 (High Sierra)
- Apple Mac OS X compatible computers
- PL-2303 USB-to-Serial Cable Adapter
- PL-2303 Mac OS X Universal Binary Driver:
  - PL2303\_MacOSX\_1.6.1\_20160309.pkg

•••	Overview	Displays	Storage	Support	Service	
	Care and	Ve M Pr M	ersion 10.13. acBook Air ( rocessor 1.4 emory 4 GE	1 13-inch, Eai 4 GHz Intel ( 3 1600 MHz	Core i5	10
	9	Se	System Repo	CPWNVG		
тм аг	nd © 1983-2017	Apple Inc. /	All Rights Res	erved. Licens	e and Warranty	

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### Mac OS X Driver Installation

The following steps will show how to install the PL-2303 device under Mac OS X operating system:

 Download the Mac OS X Universal Binary driver from Prolific website and extract pkg file. <u>http://www.prolific.com.tw/US/ShowProduct.aspx?p\_id=229&pcid=41</u>

$\leq \geq$				Q Search
Favorites	Name	Date Modified ^	Size	Kind
iCloud Drive	PL2303_MacOSX_1.6.1_20160309.pkg	5:37 PM	6 MB	Installer package
AirDrop				
Applications				
🔜 Desktop				
🖺 Documents				
Downloads				

2. Click on the driver installer pkg file to run the driver installation process. Click Continue to proceed and follow the succeeding instructions to complete the installation.

	Welcome to the Prolific USB to Serial Cable driver v1.6.1 Installer
<ul> <li>Introduction</li> <li>Destination Select</li> <li>Installation Type</li> <li>Installation</li> <li>Summary</li> </ul>	You will be guided through the steps necessary to install this software.
	Go Back Continue

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3. At the end of the installation, you will need to restart your computer. Close all programs and click Restart to complete installation and reboot the system.

	Install Prolific USB to Serial Cable driver v1.6.1
	The installation was completed successfully.
<ul> <li>Introduction</li> <li>Destination Select</li> <li>Installation Type</li> <li>Installation</li> <li>Summary</li> </ul>	The installation was successful. The software was installed.
	Click Restart to finish installing the software.
	Go Back Restart

4. Now plug the PL-2303 USB-to-Serial adaptor or cable to the USB port. You can first run the System Profiler program under the Applications-Utilities folder. Click USB hardware inside System Profiler and look for "USB-Serial Controller" or "USB-Serial Controller D". This means that the hardware device is detected by your Mac computer.

		MacBook Air
Hardware	USB Device Tree	
ATA	▼USB 3.0 Bus	
Audio	ADATA USB Flash Drive	
Bluetooth	BRCM20702 Hub	
Camera	Bluetooth USB Host Co	ntroller
Card Reader	USB-Serial Controller D	
Diagnostics	USB-Senar Controller D	
Disc Burning		
Ethernet Cards		
Fibre Channel		
FireWire		
Graphics/Displays		
Hardware RAID		
Memory		
NVMExpress		
PCI		
Parallel SCSI		
Power		
Printers		
SAS		
SATA/SATA Express		0
SPI	USB-Serial Controller D:	
Storage		
Thunderbolt	Product ID:	0x2303
USB	Vendor ID: Version:	0x067b (Prolific Technology, Inc.) 4.00
Vetwork	Serial Number:	4.00
Firewall	Speed:	Up to 12 Mb/sec
Locations	Manufacturer:	Prolific Technology Inc.
Volumes	Location ID:	0x14200000 / 7
WWAN	Current Available (mA): Current Required (mA):	1000
Wi-Fi	Extra Operating Current (mA):	
▼ Software	Extra operating current (inv).	
JR20's MacBook Air	Hardware > USB > USB 3.0 I	Bus > USB-Serial Controller D

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cd /dev

ls tty.usbserial\*

5. You can then proceed to check if the USB serial port device is setup properly. You can run the Terminal program under Applications-Utilities folder and type the following commands:

dev ---bash -- 80×23
[JR20s-MacBook-Air:dev JR20§ cd /dev
[JR20s-MacBook-Air:dev JR20§ ls tty.usb\*
tty.usbserial
JR20s-MacBook-Air:dev JR20§

You should see the "**tty.usbserial**" device which means the USB serial device is already setup properly. If you try to plug another PL-2303 device, you should also see several "tty.usbserialx" listed where "x" is the assigned device number similar to Windows COM port assignment.

6. NOTE: Mac OS may also pop-up a new network interface when it detects a new USB-Serial Controller device. See next section for more explanation.





NOTE: Mac OS High Sierra 10.13 introduces a new feature that requires user approval before loading new third-party kernel extensions. Go to **System Preferences - Security & Privacy** and click **Allow**.

https://developer.apple.com/library/content/technotes/tn2459/\_index.html

	System Extension Blocked A program tried to load new system extension(s) signed by "". If you want to enable these extensions, go to the Security & Pri System Preferences pane.	vacy
••• <>	Security & Privacy	Q Search
	password has been set for this user Change Password Require password 15 minutes C after sleep or scre Show a message when the screen is locked Set Lock Disable automatic login	een saver begins
0	ops downloaded from: App Store App Store and identified developers <b>Go to System Preferences - Secur</b>	ity & Privacy
	software from developer "Prolific Technology Inc." was I from loading.	Allow
Click the lo	ck to make changes.	Advanced ?

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### How to Connect Serial Modem

The following steps will show how to connect a Serial Modem using the PL-2303 cable:

1. One common test is to connect a 56K serial modem to the PL-2303 adapter. Go to System Preferences and click on Network.



2. The left side column shows you all the existing ports and status. If you do not see the USB Serial Controller device, click on the "+" add button to look for the device.

0 🔴	Networ	ĸ
Show All		٩
	Location: Automatic	•
Ethernet Not Connected	Status	Cable Unplugged Either the cable for Ethernet is not plugged
FireWire Not Connected		in or the device at the other end is not responding.
On AirPort	Configure IPv4	Using DHCP
	IP Address	
	Subnet Mask	
	Router	
	DNS Server	
	Search Domains	
+ - *-	_	Advanced) (?)
Click the lock to pr	vent further changes.	Assist me Revert Apply

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3. Select the Interface "USB-Serial Controller". You can also choose to change the Service Name to distinguish the device if you have several devices attached.

0 0	Network	
I   ▶ Show All		Q
• Ethernet Not Connected	Select the interface and enter a name for the new servi Interface: USB-Serial Controller D Service Name: PL2303 Modem	ice.
FireWire Not Connected	Cancel	ot plugged is not
● Wi-Fi	Configure IPv4: Using DHCP	<b></b>
Bluetooth PAN No IP Address	IP Address: Subnet Mask: Router: DNS Server: Search Domains:	
+   – &▼	to prevent further changes. Assist me	Advanced ?

4. Now the "USB-Serial Controller" device is added to the list and you can start to configure the serial modem Internet dial-up settings attached to the PL-2303 cable adaptor.

00	Network	
Show All		Q
Loo	cation: Automatic	\$
PL2303 Modem      Not Configured	Status: Not Configured	
● Ethernet 《		
● FireWire Not Connected	Configuration: Default	*
● Wi-Fi ⑦	Telephone Number: 94125678 Account Name: prolific	
e Bluetooth PAN No IP Address	Password:	
	Connect	
+ - 🌣	Show modem status in menu bar	Advanced ?
Click the lock to prevent	further changes. Assist me	Revert Apply

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5. Click the Connect button to start the Internet dial-up connection. Make sure the serial modem has a telephone connected and powered on.

Location: Automatic Status:	Connecting
Status:	
Status:	Connecting
>	
Configuration:	Default \$
Telephone Number:	94125678
Account Name:	prolific
Password:	•••••
	Disconnect **
Show modem stat	us in menu bar Advanced ?
vent further changes.	Assist me Revert Apply
	Telephone Number: Account Name: Password:

6. When connection is made, you can start to use Mac OS X Safari web browser and monitor the modem connection status by data sent and received.

0 0	Network
t ⊨ Show All	Q
	Location: Automatic \$
<ul> <li>PL2303 Modem Connected</li> <li>Ethernet Not Connected</li> <li>FireWire Not Connected</li> <li>Wi-Fi Off</li> <li>Bluetooth PAN No IP Address</li> </ul>	Status:       Connected         Connect Time:       00:00:14       Sent:         IP Address:       61:226:253.159       Received:         Configuration:       Default       ‡         Telephone Number:       94125678         Account Name:       prolific         Password:       •••••••         Disconnect
+   −   & ▼   Click the lock to	Show modem status in menu bar Advanced ?

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# How to Run Serial Port Terminal Program

You can use any serial port terminal program and a null modem cable to connect two cables together and transmit/receive data files. The following steps will show how to use the program:

- Download the CoolTerm program from below website and install the program under Mac OS X: <u>http://freeware.the-meiers.org/</u>
- Run the program and select the PL-2303 device by clicking on Options-Serial Port. Click on Port to select 'usbserial'. Set the desired baud rate and other port settings. Click OK and click Connect to open the port.

Serial Port Terminal Receive Transmit Miscellaneous	Serial Port Options Port: usbserial $\ddagger$ , Baudrate: 115200 $\ddagger$ Data Bits: 8 $\ddagger$ Parity: none $\ddagger$ Stop Bits: 1 $\ddagger$ Flow Control: CTS DTR XON	
	Re-Scan Serial Ports	

3. Open another CoolTerm File and plug another PL-2303 device. Click on Options-Serial Port and click on Port to select the other PL2303 cable (usbserial1).



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4. Set the same serial port settings to match the other PL2303 cable. Click OK and click Connect to open the port.

	Serial Port	Serial Port Options			
	Terminal Receive	Port: Baudrate: Data Bits: Parity: Stop Bits:	usbserial1	+	
	Transmit Miscellaneous		115200	+	
			8 none	¢	
			1	÷	
		Flow Contro	I: W CIS ✓ DTR ✓ XON		
			Re-Scan Serial Ports		
			Cancel	ОК	

 Use a serial null modem cable to connect between the two PL-2303 cables. Click 'Connection-Send Textfile' to transfer text file. You can also send text file from the other PL2303 cable at the same time.

◎ ○ ○ CoolTerm_0	⊙ ○ ○ CoolTerm_1
🗅 🖆 🔛 🖉 💥 🖏 Hex 🔞	🗅 🖆 💾 🙋 🙀 💥 🗮 🔯
New Open Save Connect Disconnect Clear Data Options View Hex Help 44444444444	New Open Save Connect Disconnect Clear Data Options View Hex Help
	444455555555 55555555555 Sending 7% 666666666
444455555555 Sending 9% 555555555 55555555555555555555555555	55555555555555555555555555555555555555
66666666666666666666666666666666666666	666666666666 Cancel 77777777
777777777777777777777777777777777777777	
777777788888888888888888888888888888888	7777777888 <del>888888888888888888888888888</del>
RRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	999999999999999999999999999999999999999
dddddddddddddddddddddddddddddddddddddd	999999999999999999999999999999999999999
999999999999999999999999999999999999999	111111111111111111111111111111111111111
111111111111111111111111111111111111111	11111111111\par
11111111111\par	22777227722772277227722772277227722772
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777777788888888888888888888888888888888	
888,899,999	999999999999999999999999999999999999999
999999999999999999999999999999999999999	999999999999999999999999999999999999999
usbserial / 115200 8-N-1 / CTS / DTR / XON	usbserial1 / 115200 8-N-1 / CTS / DTR / XON
Connected 00:00:53	Connected 00:01:56

6. You can also simply plug a loopback connector (TX-RX short) to the PL-2303 serial port and type the keyboard to show the send characters on the local window display.

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# How to Uninstall Driver

To remove and uninstall the PL-2303 drivers from Mac OS X operating system, you must be logged on as root. You can use the "sudo" command option to substitute user privileges.

1. Run a Terminal session (Applications-Utilities-Terminal) and enter the following commands at the command prompt:

```
sudo rm -rf /Library/Extensions/ProlificUSBSerial.kext
sudo rm -rf /var/db/receipts/*PL2303*.*
```

 To remove the port from the system, go to System Preferences and select Network. Select the "USB-Serial Controller" device shown from the Show menu and click on the "-" remove button to uninstall the port.

\varTheta 🔿 🔿 Network						
Show All		٩				
Location: Automatic						
USB-Sentroller	Status:	Not Configured				
FireWire Not Connected     Sector						
+ - &-	☑ Show modem statu her changes.	Assist me Revert Apply				

3. Restart the computer again before reinstalling the driver.

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