# UPort<sup>™</sup> 1100 Series Quick Installation Guide

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Technical Support Contact Information www.moxa.com/support



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#### Overview

The UPort 1100 series is part of Moxa's UPort Line of USB-to-Serial adaptors. The UPort product line provides a wide range of easy-to-use solutions for adding Windows COM ports and Linux tty ports through a PC's USB port. The UPort 1100 series includes the following models:

UPort 1110: 1-port RS-232 USB-to-Serial Converter.
UPort 1130: 1-port RS-422/485 USB-to-Serial Converter.
UPort 1130I: 1-port RS-422/485 USB-to-Serial Converter with

Isolation Protection.

UPort 1150: 1-port RS-232/422/485 USB-to-Serial Converter.
UPort 1150I: 1-port RS-232/422/485 USB-to-Serial Converter with

Isolation Protection.



## **ATTENTION**

Before plugging the adaptor into your computer's USB port, we recommend installing the driver first. Please refer to "Software Introduction" for driver installation procedures.

After the driver is installed, the adaptor can be plugged into any upstream type A USB port, either on a PC host or on an upstream hub. The adaptor is hot-pluggable, so there is no need to power down your computer prior to installation. The **Found New Hardware** wizard will automatically locate the appropriate drivers, and various windows will appear as the adaptor is being installed.

After the **Found New Hardware** wizard finishes installing the adaptor, the Windows Device Manager may be used to modify the settings for the new COM port. The new COM port will be listed under Ports (COM & LPT) and the new adapters will be listed under Multi-port serial adapters. For more information about port configuration, please refer to the UPort 1100 series user manual.

# **Package Checklist**

Before installing the adaptor, please verify that the package contains the following items:

- UPort 1100 series USB-to-Serial Converter
- Quick installation guide (printed)
- Warranty card

The UPort 1130/1130I/1150/1150I will also come with the following item:

Mini DB9F-to Terminal-Block Converter

**NOTE** Please notify your sales representative if any of the above items are missing or damaged.

## **Serial Port Assignments**

The UPort 1100 series uses male DB9 connectors. Pin assignments are shown in the following diagram:

ı	Ма	le	D	В9	1
	1	2 3	3 4	5	
0	(		H	5	0
		6 7	8 8	9	

Pin	RS-232	RS-422/485 (4-wire)	RS-485 (2-wire)
1	DCD (in)	TxD-(A)	ı
2	RxD (in)	TxD+(B)	ı
3	TxD (out)	RxD+(B)	Data+(B)
4	DTR (out)	RxD-(A)	Data-(A)
5	GND	GND	GND
6	DSR (in)	ı	I
7	RTS (out)	- 1	
8	CTS (in)	ı	I

The UPort 1130/1130I/1150/1150I comes with a DB9 to terminal block converter, with pin assignments as shown below:



-		
Pin	RS-422/485 (4-wire)	RS-485 (2-wire)
1	TxD+(B)	ı
2	TxD-(A)	-
3	RxD+(B)	Data+(B)
4	RxD-(A)	Data-(A)
5	GND	GND

Note that the converter maps pin 1 on the DB9 connector to pin 2 on the terminal block, and pin 2 on the DB9 connector to pin 1 on the terminal block.

## **LED Indicators**



## UPort 1110/1130/1130I/1150 LED description:

Name	Color	Description
Active	Red	This LED indicates normal operation.
		Steady: The UPort is operational.
		Off: A fault condition exists; there may be a
		problem with the converter, the driver
		installation, or PC configuration.
TxD	Green	Blinking: Serial device is transmitting data.
RxD	Yellow	Blinking: Serial device is receiving data.

#### UPort 1150I LED description:

Name	Color	Description
Active	Red	Steady: The UPort is operational.
		Off: A fault condition exists; there may be a
		problem with the converter, the driver
		installation, or PC configuration.
TxD	Green	Blinking: Serial device is transmitting data.
RxD	Yellow	Blinking: Serial device is receiving data.
DTR, DSR,	Red	Steady: Require these signals to operate.
RTS, CTS,		Off: Disable these signals to operate.
DCD		

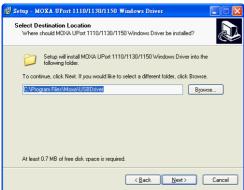
## Windows Driver Installation

The following instructions and screenshots are from a PC running Windows 32-bit, but the same instructions apply for a Windows 64-bit platform. If you want to know which Windows OSs Moxa supports, please go to support center on Moxa's website to check the latest driver <a href="http://www.moxa.com/support/">http://www.moxa.com/support/</a>, under **Product Support**.

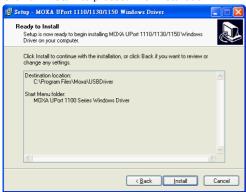
1. Run the Setup program, click **Next** to start installing the driver.



2. Click on Next to install the driver in the indicated folder.



3. Click on **Install** to proceed with installation.



4. Then, click **Finish** to complete the driver installation.

## **Installing the Hardware**

1. Case 1: The UPort Driver is Certified

If the UPort driver that you installed has been certified by Microsoft, the UPort and the UPort's serial ports will be installed automatically when you plug the UPort into your computer's USB port.

## Case 2: The UPort Driver is NOT Certified

If the UPort driver that you installed has not been certified by Microsoft, then plugging the driver into your computer's USB port will activate the UPort installation program. The first part of the installation procedure installs the software for the UPort itself (the second part of the procedure installs the serial ports).

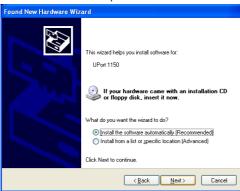
Plug the adaptor into any upstream USB port (e.g., a USB port on your computer). Windows are done with hardware installation at this point and may continue on to port configuration. Windows will auto-detect the UPort cable and show **Found New Hardware** in the System Tray.



The following window will appear. Select No, not this item click Next.



Select Install the software automatically (Recommended), and then click Next to proceed.



- 4. The next window cautions you that this software has not passed Windows logo testing. This is a standard warning, and Moxa has thoroughly tested the driver for safe Windows operation. Please click **Continue Anyways** to proceed. Then, click **Finish** to complete the driver installation.
- 5. Repeat Step2 to Step 4 until COM port is installed.

## **Installing the macOS Driver**

Supporting macOS 10.12 and later, follow the steps below to install driver.

- 1. Enter Recovery Mode.
- Disable System Integrity Protection (SIP) by typing 'csrutil disable' in the terminal.
- 3. Return to Normal Mode.
- 4. Launch the UPort driver installer.
- 5. Enter Recovery Mode again.
- Enable System Integrity Protection (SIP) by typing 'csrutil enable' in the terminal.
- Return to Normal Mode.

For detailed instructions, please refer to 'readme.txt' in the driver installation package.

# **Installing the Linux Driver**

#### **Linux Kernel 2.4.x**

Execute the following commands from the Linux prompt:

- # tar -xvfz driv\_linux2.4\_uport1p\_vx.x\_build\_yymmddhh.tgz
- # cd /mxu1100 24/driver
- # make clean
- # make install
- # modprobe mxuport1100 24

**NOTE** yy = year, mm = month, dd = day, hh = hour

#### For All Other Kernels

Please refer to readme.txt that is included in the driver file for detailed instructions. The driver file can be downloaded from Moxa's website, under the Product page.

# tar xvfz driv\_linux\_uport1p\_v1.x\_build\_xx.tgz
# make clean; make install
# modprobe mxu11x0

## Installing the Win CE 5.0/6.0 Driver

Moxa provides two installation procedures that can be used to install the Windows CE 5.0/6.0 driver: by "CAB file" and with the "installation package." In this document, we only cover the CAB file installation. If you need to use package to install the WinCE driver, please refer to the user's manual.

#### Installation with a CAB File

**Step 1:** Install Microsoft ActiveSync on the source PC. Before running ActiveSync on the source PC, use an RS-232 null modem cable to connect the WinCE device (CEPC) to the PC.

**Step 2:** Go to the "Command Prompt" on the WinCE device and execute the repllog command. A new partnership window will appear. Select "No" and then click on "Next." You will see "Connected" in ActiveSync.

 $\mbox{\bf Step 3:}$  Click on the "Explore" button in the ActiveSync window, and then copy the

UP1100\_COM\_v1.0\_Setup.CAB (For WinCE 6.0) or UP1100\_COM\_v1.1\_Setup.CAB (For WinCE 5.0) file to the Mobile/Target Device.

**Step 4:** Double click on the CAB file to start installing the UPort 1100 series WinCE driver.

After installing the driver, plug the UPort 1100 series device into the USB port of the WinCE Device. The driver will be loaded automatically. At this point, the UPort 1100 series is ready to use.