

PL2303 USB-to-Serial Controller Android USB Host Solution (How to Connect PL2303 Device to Android Tablets & Phones)



Prolific Technology provides the first and only Android USB Host API and driver solution (NO root permission needed) for connecting PL2303 USB-to-Serial devices to Android-powered devices with [USB Host mode support](#) (see Figure 1-1). This document provides information on how to help Prolific customers use the PL2303 Android Java Driver Library to develop Android application software (Apps) for communicating with the PL2303 USB-to-Serial device.

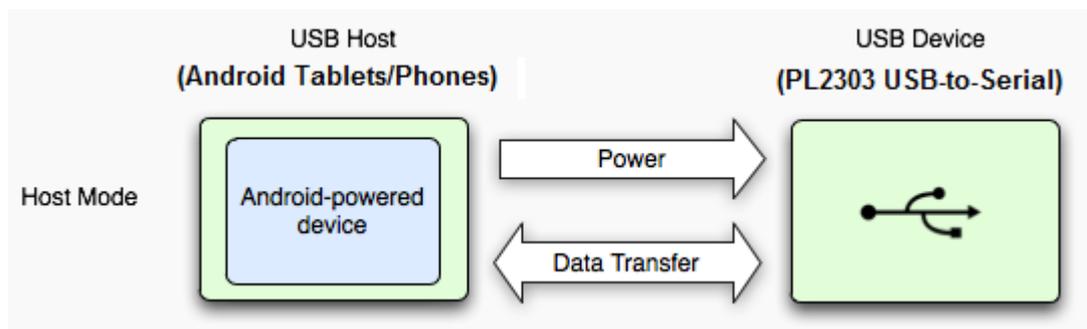


Figure 1-1: Android USB Host Mode

Minimum Requirements

- ✓ USB Device with PL2303HXD, PL2303EA, PL2303RA, or PL2303SA controller chip
 - USB to Serial Cables/Adapters/Converters Devices
 - USB GPS Devices
 - USB Health/Medical/Fitness Devices
 - USB POS Devices
 - Other USB-to-Serial (UART/RS232) Interface Devices
 - Micro USB Host OTG Cable may be needed for Android Phones
 - NOTE: PL2303HXA and PL2303XA are not supported (Discontinued Products)
- ✓ Android-Powered Device (Tablet/Phones) with USB Host Mode Support
 - Android 3.2 and above OS versions
- ✓ Know-How in Java Programming and Android App Software Development

PL2303 Android Software Development Kit (SDK)

Prolific provides the following file package to help customers develop PL2303 Android Apps:

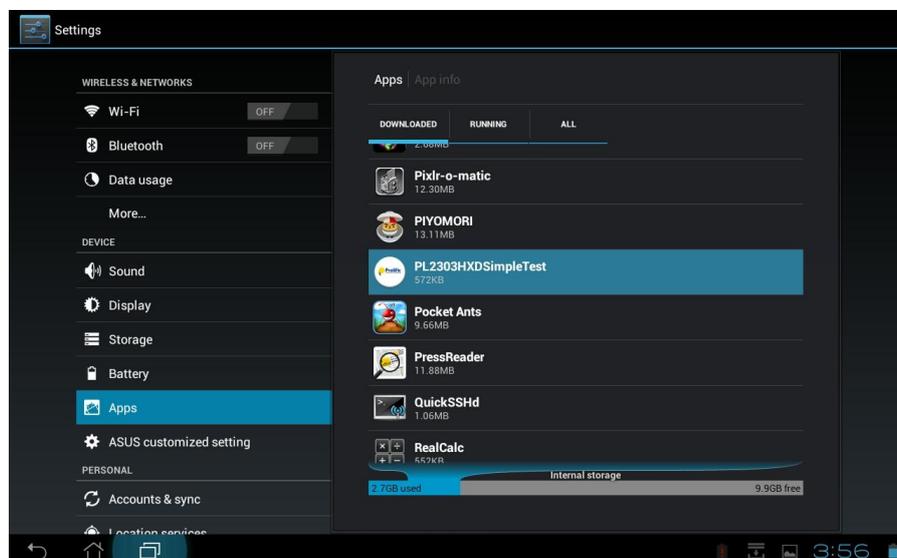
- ✓ **PL2303 Sample Test Android App Software** (`ap_PL2303HXDSimpleTest.apk`)

Type	Name	Size
	 ap_PL2303HXDSimpleTest.apk	171KB

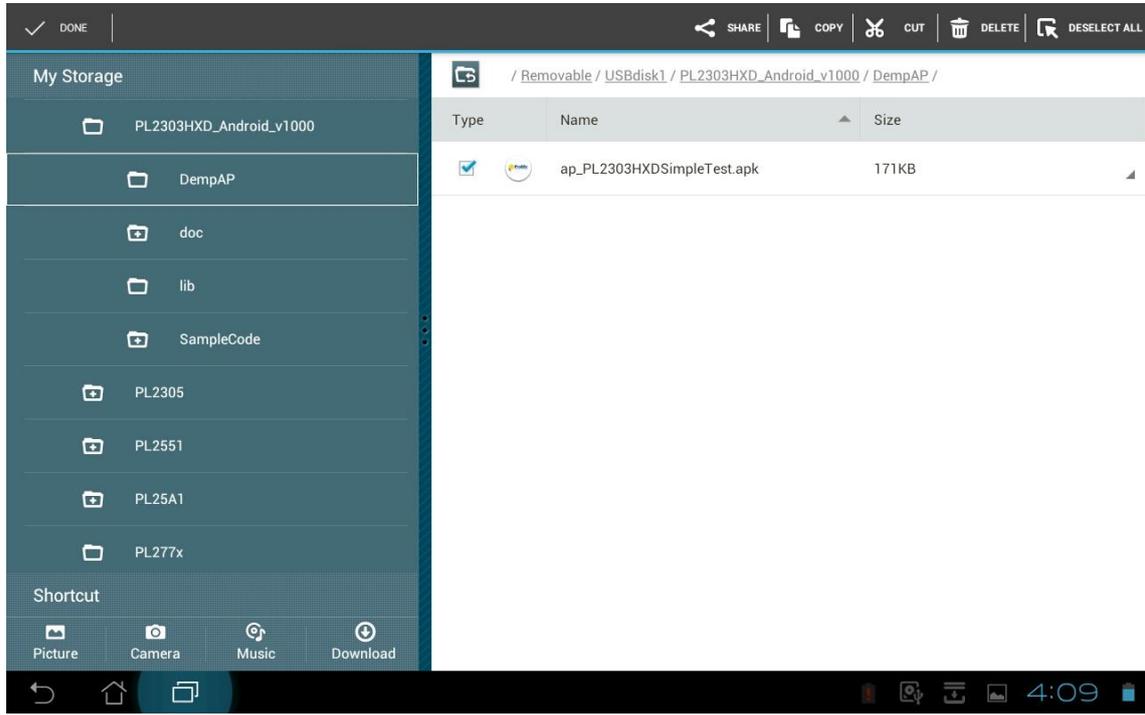
- This is demo application to detect PL2303 device in Android and do simple test.
- ✓ **PL2303 Android USB Host Solution Application Note**
 - This document which includes User Guide for running the above sample program.
- ✓ **PL2303 Sample Test Android App Source Code**
 - Source code for ap_PL2303HXDSimpleTest.apk
- ✓ **PL2303 Android Java Driver Library** (`p12303driver.jar`)
 - PL2303 Android Driver for PL2303HXD, PL2303EA, PL2303RA, and PL2303SA only.
- ✓ **PL2303 Android App Development Reference Document**
 - Reference document for writing Android Application Software (`index.html`)

PL2303 Sample Test Program

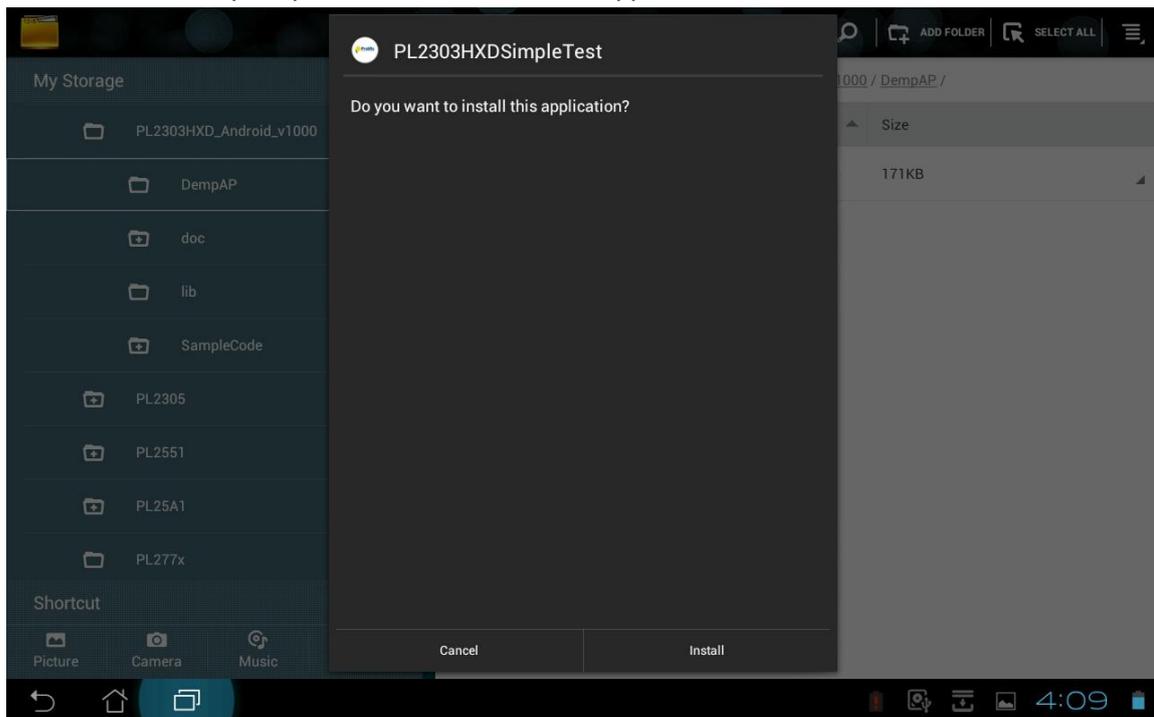
This section describes how to install and run the PL2303 Android Sample Test program using a USB-to-Serial (RS232 DB9) cable:



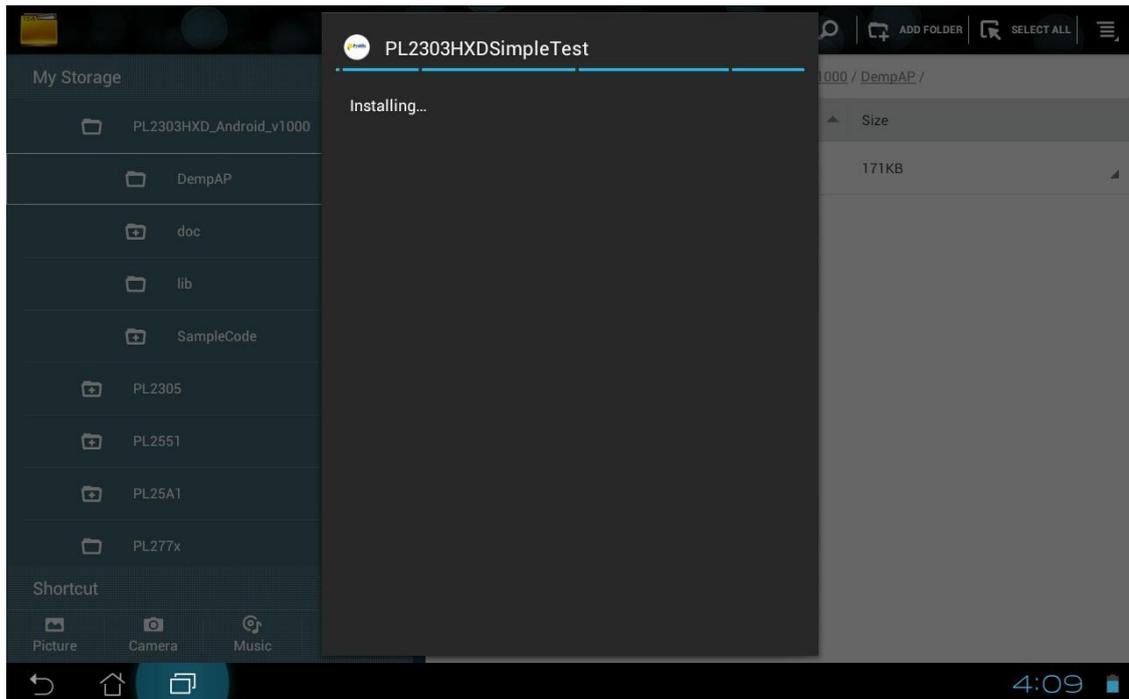
1. Power on your Android device (Android 3.2 and above) with USB host support. Only one PL2303 device is supported.
2. Click check on the Android Sample Test program (**ap_PL2303HXDSimpleTest.apk**) to run install.



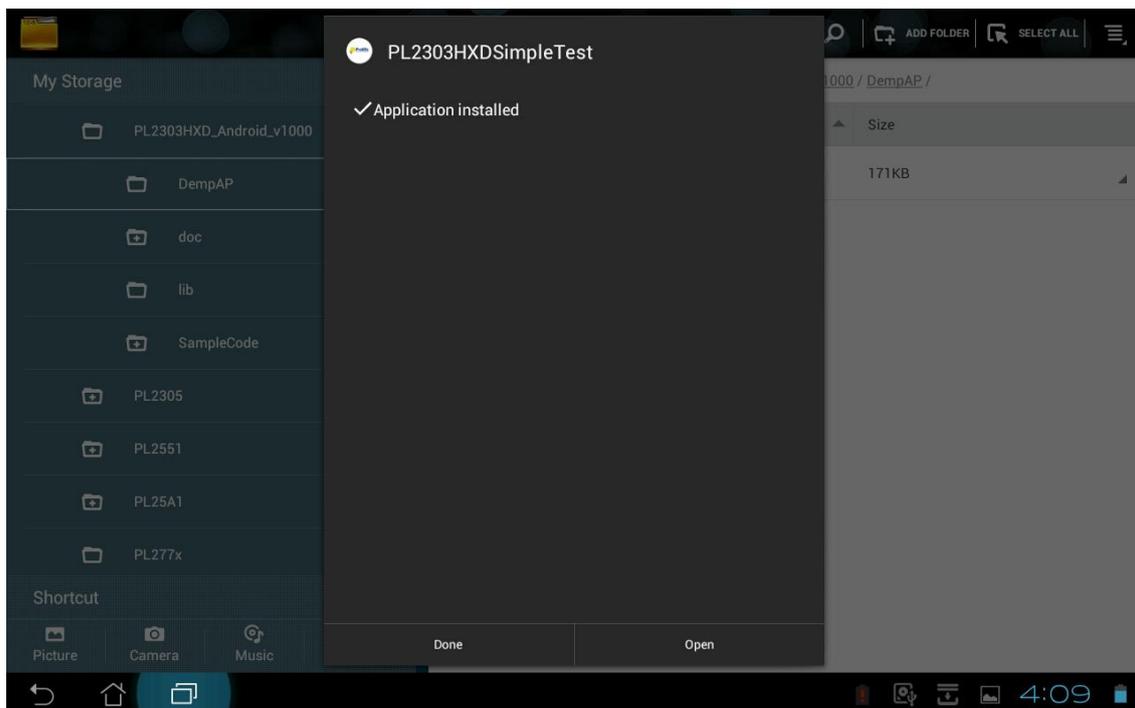
3. Click Install when prompted to install the Android app.



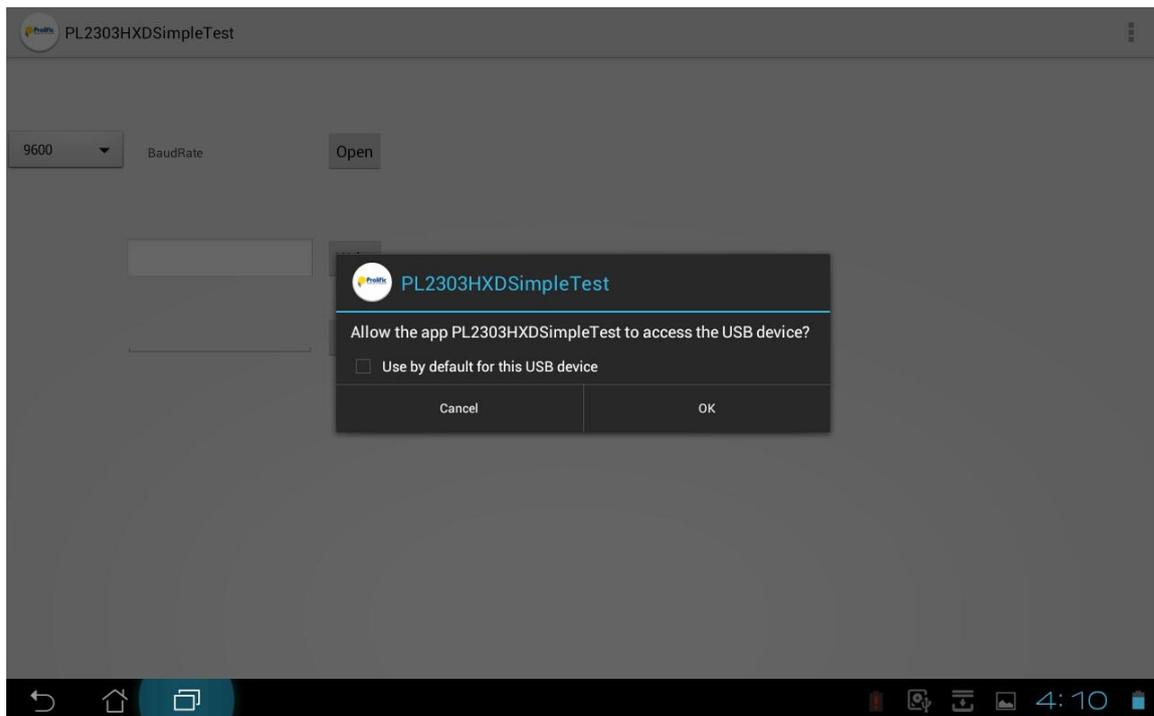
4. The PL2303 Android app will start to install.



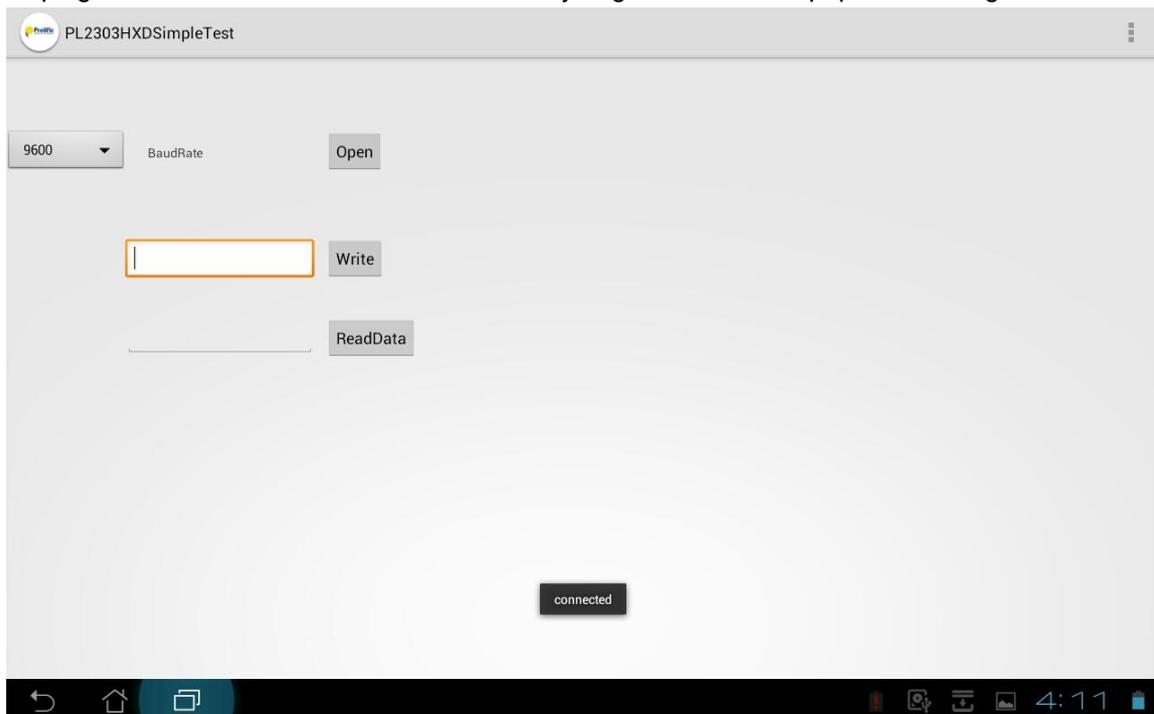
5. When Application is installed, click OPEN.



6. Plug in the PL2303 USB to Serial device. Click OK when prompted to allow the app to access the USB device.



7. If the PL2303 USB device is detected, the app will pop out a connected status message. If not, replug the device and click OPEN. Make sure you get a connected pop out message.

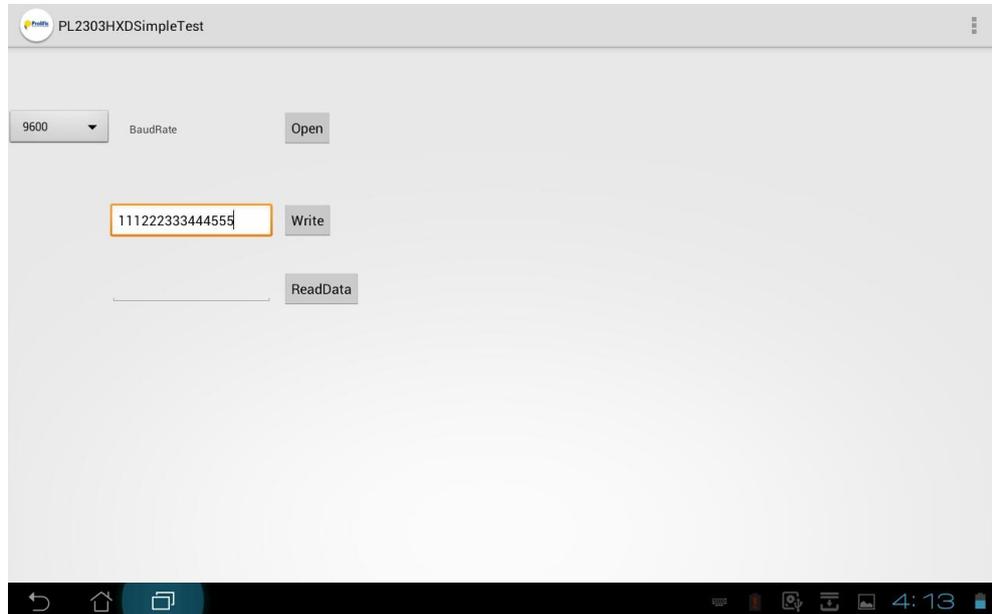


8. There are two ways to run the PL2303 Simple Test app:

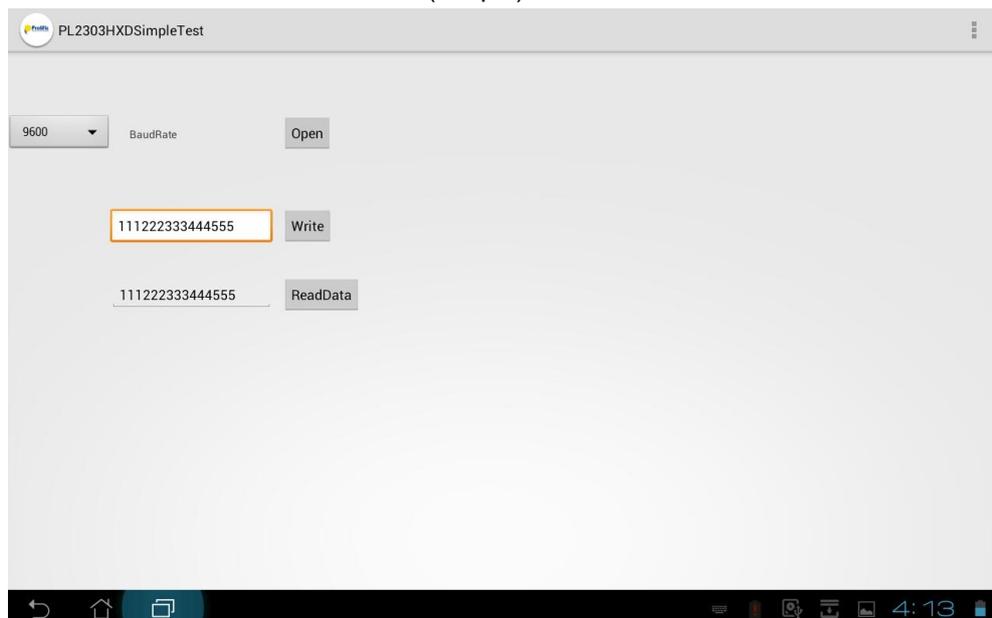
➤ **Using Loopback Connector:**

i. Plug a loopback connector (TX-RX pins short) to the USB-to-Serial RS232 cable. Set the desired baud rate settings.

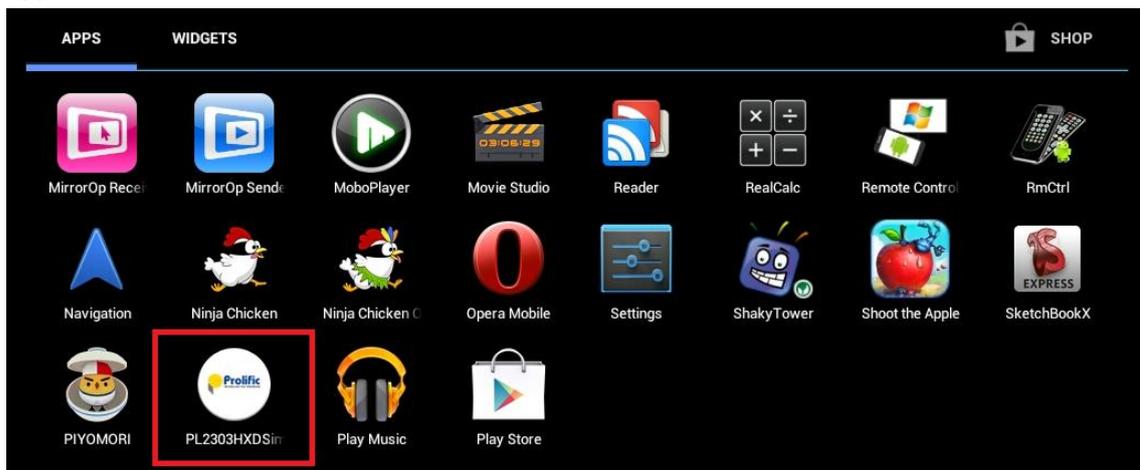
ii. Type the keyboard on the Write box field and click Write button to send data (TX pin).



iii. Click ReadData button to read data (RX pin).



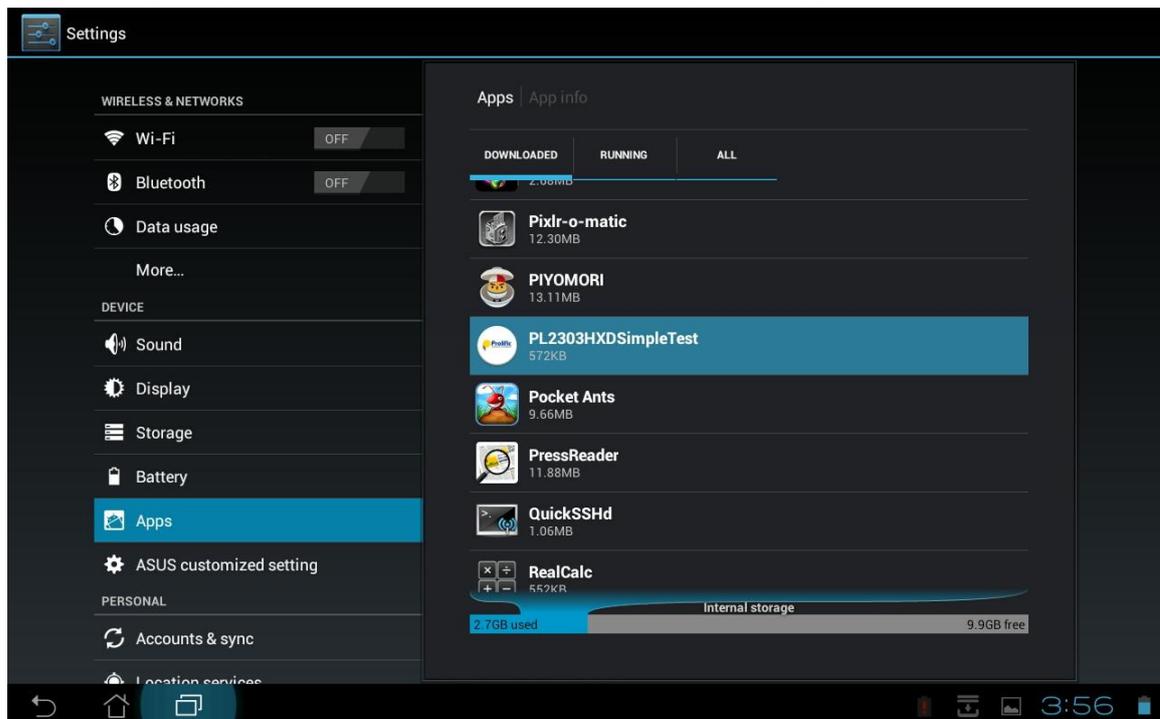
- To run the Android app again, simply go to APPS folder and look for PL2303HXDSimpleTest app.



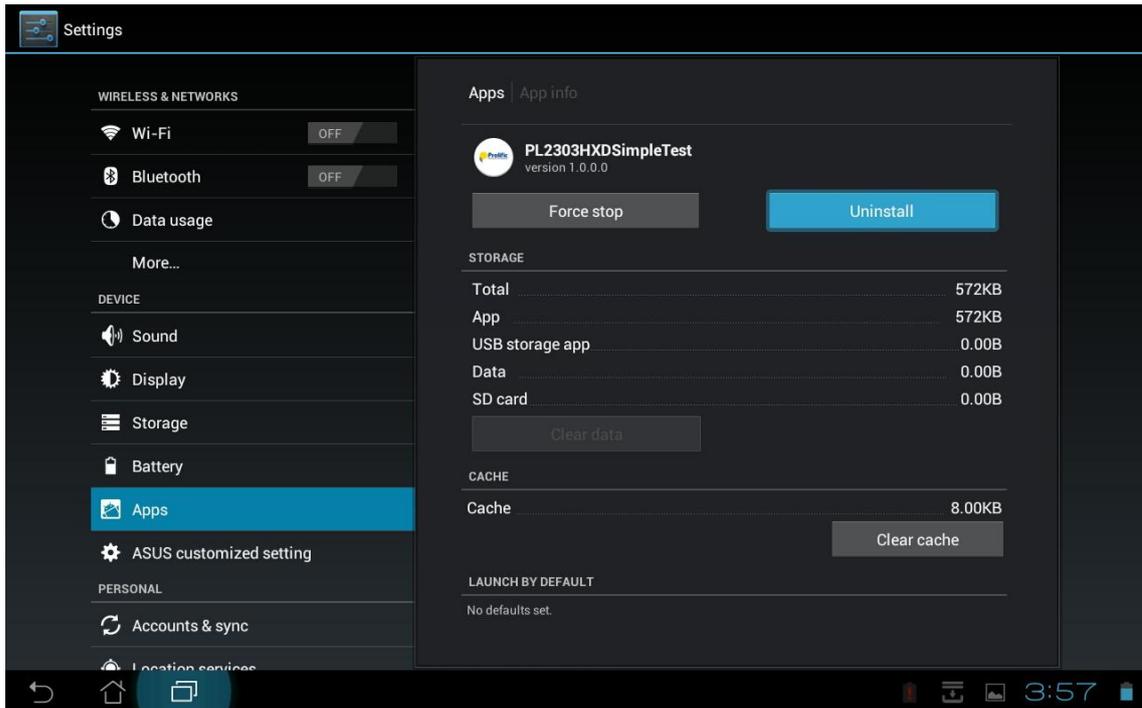
Uninstalling the PL2303 Android App

To uninstall the PL2303 Android App, follow the below steps:

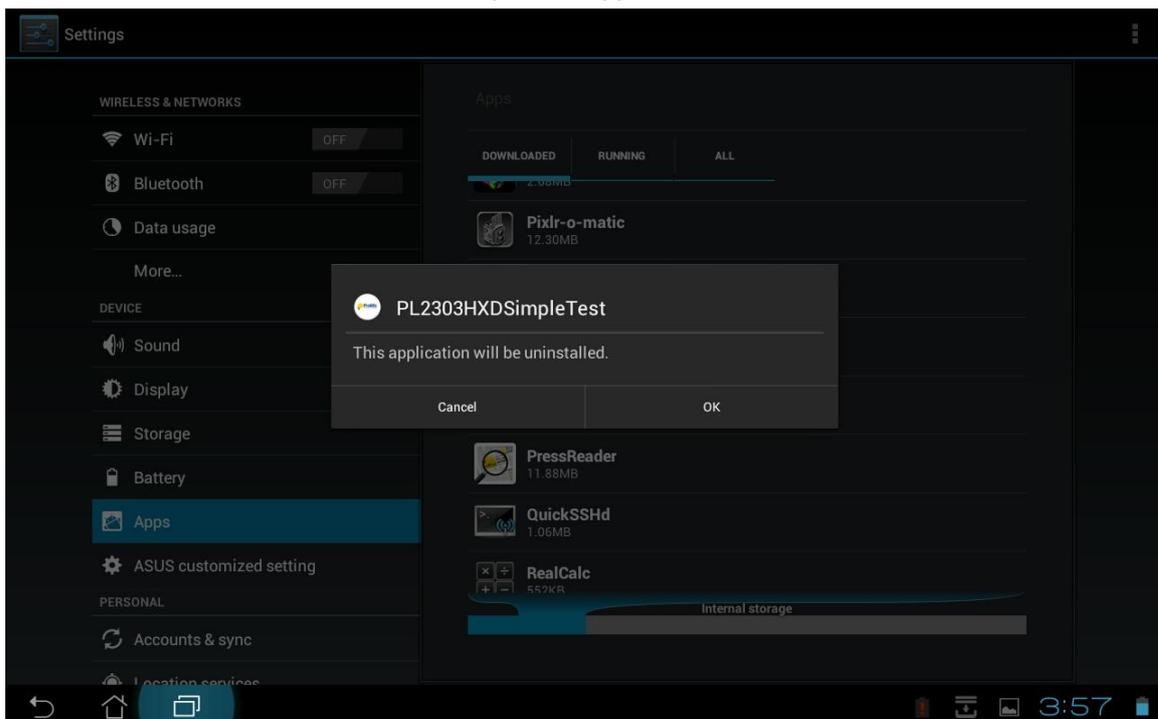
- Go to Settings - Apps folder. Look for the PL2303HXDSimpleTest app.



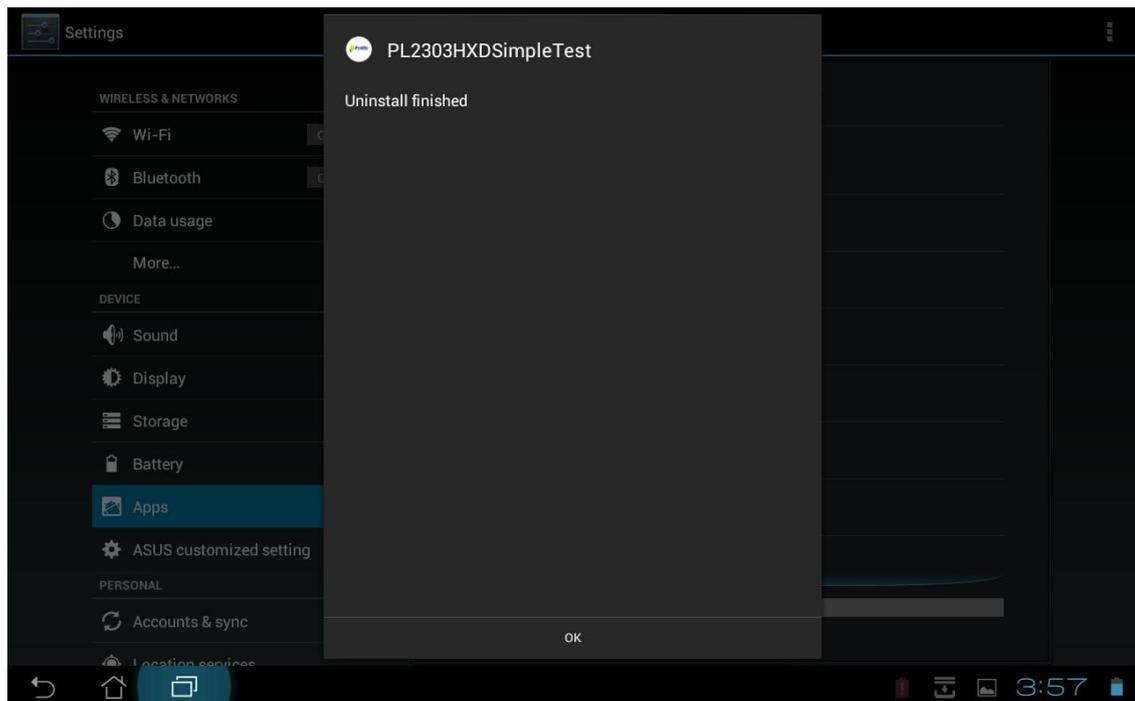
2. Click on the PL2303HXDSimpleTest program and click Uninstall button.



3. Click OK to uninstall the PL2303HXDSimpleTest app.



4. Click OK when uninstall is finished.



Contact Information

Taipei Headquarter

7F, No.48, Sec. 3, Nan Kang Rd., Nan Kang, Taipei, Taiwan 115, R.O.C.

Tel: +886-2-2654-6363

Fax: +886-2-2654-6161

Website: www.prolific.com.tw

E-mail: sales@prolific.com.tw

For Technical Inquires: <http://www.prolific.com.tw/US/contact.aspx>