



## Application Notes

### Installing USB driver for the MDP Device on Windows

**Document purpose:**

*This Bsquare external document is intended to provide an overview of the installation of the USB driver for the MDP device*

TABLE 1. REVISION HISTORY

Revision	Date	By	Purpose
1.2	Dec 29 <sup>th</sup> 2010	Joseph Lee	Update USB PID for Froyo Build
1.1	Nov 09 <sup>th</sup> 2010	Joseph Lee	Update to use BSQUARE VID
1.0	Oct 08 <sup>th</sup> 2010	Joseph Lee	First Release

## 1. Overview

This Document provides a step by step guide in how to install the USB driver for the MDP device on a PC running Microsoft Windows.

## 2. Prerequisites

- a) A PC running Windows XP. It is recommended that the latest Service Pack ( SP3 as of this writing ) is installed
- b) Latest Android SDK ( 2.2 as of this writing ) <sup>[1]</sup>
- c) Latest Android USB Driver for Windows ( r3 as of this writing ) <sup>[2]</sup>

## 3. Steps

### 3.1 Update the USB Driver INF file `android_winusb.inf` for MDP device

After the Android USB driver is installed successfully, you can find them under the subfolder

```
[Android SDK Root]\android-sdk-windows\usb_driver
```

Modify and save the file `android_winusb.inf` by appending the following paragraph to the sections `[Google.NTx86]` and `[Google.NTamd64]` :

```
;BSQUARE MDP8655
%SingleAdbInterface% = USB_Install, USB\VID_0956&PID_9025
%CompositeAdbInterface% = USB_Install, USB\VID_0956&PID_9025&MI_01
%SingleBootLoaderInterface% = USB_Install, USB\VID_18D1&PID_D00D
```

### 3.2 Create or modify the file `adb_usb.ini`

After the Android SDK installs successfully, a folder called `.android` will be created in the default Windows user directory:

```
C:\Documents and Settings\\.android
```

If it does not already exist, create a file called `adb_usb.ini` in this folder. Modify this file to only contain the following line:

```
0x0956
```

### 3.3 Connect the MDP device to the PC over USB

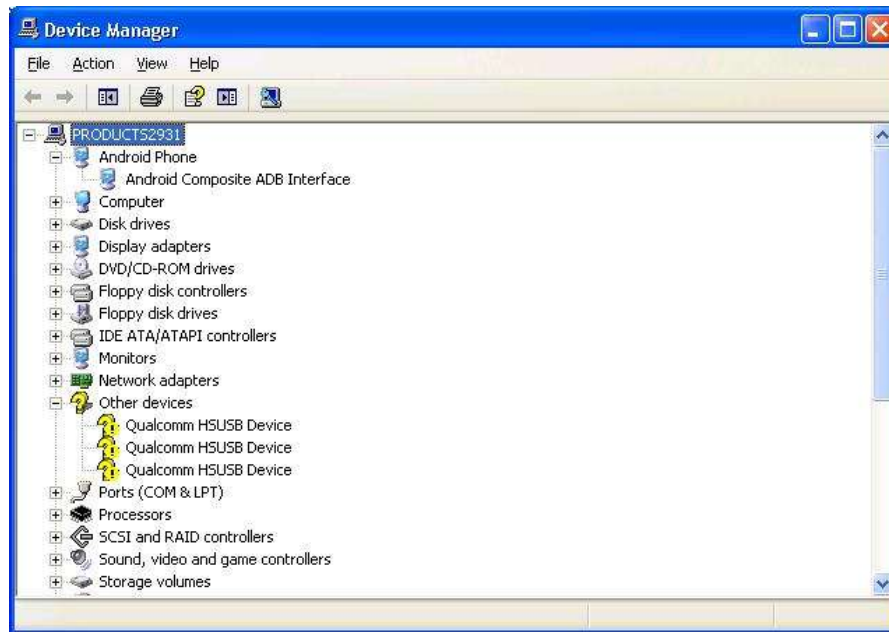
The MDP device should be plugged into the USB port on the PC directly without any hubs in between.

When Windows detects the MDP device, it will recognize that this is new hardware inserted the first time and ask for the device driver for the MDP device. Point the wizard to the Android USB driver folder as mentioned in step 3.1:

```
[Android SDK Root]\android-sdk-windows\usb_driver
```

Note that Windows will prompt multiple times for a driver since the MDP device is showing up as multiple USB ports. Simply repeat the step above until Windows no longer prompts for new hardware drivers.

When this process is completed successfully, you will find a new device called `Android Phone` added in the Device Manager:



### 3.4 Restart Android Debug Bridge (ADB)

When the Android SDK is installed, `adb` will be automatically started. Since we update the USB driver after that, we need to restart `adb`. To do that, go to the Task Manager on the PC, locate `adb` from the Processes tab and kill that.

To restart `adb`, open `cmd.exe` and navigate to the folder

```
[Android SDK Root]\android-sdk-windows\tools
```

Run `adb.exe` from there.

## 4. Verification

To verify that the device drivers are installed properly, we can use `adb` for checking.

Open a Command Window on the PC and run the following command:

```
C:\android-sdk-windows\tools>adb devices
```

You will see the following message displayed if the above process is successful:

List of devices attached

1234567890ABCDEF device

## 5. References

[1] <http://developer.android.com/sdk/installing.html>

[2] <http://developer.android.com/sdk/win-usb.html>