AIM-Android10-ARM_64-PPC1XX User Manual 2021-12-10



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1 About Manual

Thank you for using Advantech product and AIM-Android 10. This manual is a user manual of AIM-Android 10. This manual may be copied and distributed in any medium, either commercially or non-commercially.

2 Introduction

AIM-Android 10 is developed for Advantech devices based on formal Android 10. It is customized to satisfy users' requirements and to add new functions and features.

2.1 New features

2.1.1 Automatic Installation

In the process of installation, device recognizing can make phase more automatically. It will ensure that the users use Advantech android in Advantech device more comfortably.

2.1.2 Debugging Support

In the Advantech device you can also use adb over USB OTG. It will ensure that the users use debugging in Advantech device more comfortably.

2.1.3 Serial Port Support

We have developed a demo serial port JNI, JAR and utility for users. It can test serial port functions with UI utility.

2.1.4 Pre-installed Third Party Applications

Third party applications are installed as default. It is more convenient for the user.

2.2 Device support list

We currently support the following products: PPC-1XXW

2.3 Preview

After installation, you can see the HOME and application list:



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HOME





3 Installation

It is easy to install AIM-Android 10 on a hard disk.

3.1 Prepare an Installtion sdcard

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×
SDBoot:2.12
🗌 SD Boot
Restore
Firmware
Demo
Create
Restore

You should click the "Create" button to burn the sdcard.

3.2 Install android 10

- **Step 1 :** Please power off in PPC1XX.
- Step 2 : Insert the SD card.
- Step 3 : Power on in PPC1XX.
- **Step 4 :** Installing system update.





Step 5 : Please Remove the SD Card when PPC1XX show the message "Doing Action succeeded. please remove the sdcard......".



Step 6 : Remove SD card.

The Android image will be auto-install.

3.3 Hardware Requirements

The following information represents the requirements necessary to install AIM-Android 10 successfully.

Sdcard Size

- Recommended : 8 G or more



4 Usage

4.1 About SerialPort sample

After installing AIM-Android, you will see a Serial application in App list. Users can test serial port with it.

After starting the application, you will see:

2:09 🖭 🦞			(->ı
ComPort			
CON	VI Port Settings	Receive Windows	
COM Port	/dev/ttyS1		
Baud Rate	1152000		
Common	LoopBack		
	Open		
		Send Windows	
			Clean
		(Send
		< ◆ ■	
		Serial port options	

Usage: choose the port, baudrate.(e.g., ttyS1, 9600)

4.2 About KioskSetting

For Android Kiosk solution, Advantech provide a kiosk setting launch App, user can user this App to set any other android App as kiosk App, kiosk App means it will run in full screen when boot up, navigate bar and status bar of android will hide.

4.2.1 Set the Kiosk Setting app as the default launcher

Just launch the kiosksetting app, the app can be the android default home app. When KioskSetting app starts for the first time, you can see the following screen. Please set the password of kiosk mode according to the prompt information in the dialog box.



Kiosk Mode Passwo	ord Setup		
Note: The password include: an upperca digit and a symbol.	d must be at least 12 c se character, a lowerc	characters long and ase character, a	
Password			
Confirm Password			
		Use a 6- character password	
	SUBMIT	CANCEL	

After input, click "SUBMIT" button to enter the app main interface.

Select One App For I	iosk Mode	 	
Chromium	WebStation		

4.2.2 Set third app as kiosk app

First, click the "Chromium" icon in the main interface, and then click the "lock & launch" button to set the Chromium app as kiosk app.



4.2.3 Exit kiosk app

If you want to exit the kiosk app, you need to long press the "EXIT KIOSK" on the screen and enter the password for setting the kiosk mode before.

After long pressing the "EXIT KIOSK" on the screen, the following dialog box will appear to ask for the password. After entering the password, click "CONTINUE" button to return to the KioskSetting app interface.

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EXIT KIOSK								
		Exit Kiosk Mod	le					
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4.2.4 Set WebView as kiosk app

Click the "WebStation setup" and input the URL.

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KIOSK Setting					
Select One App For Kiosk	Mode				හ
Chromium	WebStation				
		/			
Show system apps	WebStation setup	Power		Lock & Launch	Exit
V1.0.1	g				
Select One App For Kid	osk Mode			රි	3
Chromium	WebStation	address setup			
	URL	os://www.baidu.com		-	
			OK Cancel		
Show system ap	ps WebStation setup	Power		Lock & Launch Exit	

Click the "WebStation" icon in the main interface, and then click the "lock & launch" button to set the Chromium app as kiosk app.



国内再现富豪"移民潮"?1.5万人卷走万亿资产,国家终于出手了

If you want to exit the kiosk app, you need to long press the "EXIT KIOSK" on the screen and enter the password for setting the kiosk mode before.

4.2.5 Show system app

Click the "Show system apps" icon in the main interface



4.2.6 Exit kioskSetting

Click the "Exit" in the main interface and input the password. If you exit the application successfully, the launche3 will be the default home app.





Note:

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If you don't want to use the "EXIT KIOSK" button, we can deeply customize the image and use the gestures (similar to " \checkmark ") to trigger the exit action.

4.3 About Screen RotationControl

The rotate step of the screen.



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÷	↔ 📉 🖬 1:58
Rotation Control	
Control	
Start controlling rotation Start this application now.	
Settings	
Start on boot This application automatically starts on system boot.	
Notification Priority Default	
Help	
View description View description of each mode.	
⊲ C	
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Rotation Control	
Control	
Start controlling rotation Start this application now.	۰ ا
Settings	
Start on boot This application automatically starts on system boot.	•
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Control	
Start controlling rotation Start this application now	
	Silent notifications
Start on boot This application automatically starts on system boot.	0
Notification Priority Default	 Android System USB debugging connected Tap to turn off USB debugging
	③ Android System · Charging this device via USB ~
View description View description of each mode	Manage

4.4 Other Applications

Many other applications for arm supported by Android or other resource web sites. You can search and download them from internet by yourself.





4.5 How to use adb tool in windows

4.5.1 Install ADB

After the connection is built, download & execute "ADBDriverInstaller.exe" to install adb driver.

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	APK INStall	er	
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Operating System: Windows 7 Service Manufacturer ASUS	ce Pack 1 [x64] Description ADB Interface	Device Manager Device Status Driver incorrectly	Refrest
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Operating System: Vindows 7 Servic Manufacturer ASUS	ce Pack I (x64) Description AD8 Interface	Device Manager Device Status Driver incorrectly	Refres

4.5.2 Create PATH

Add adb-tool and create path in windows.





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nputer Name Ha	rdware	Advanced	System Protection	Remote
ou must be logged	d on as a	an Administra	tor to make most of t	hese changes.
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Visual effects, pro	cessor s	cheduling, m	emory usage, and vir	tual memory
				Settings
User Profiles				
Desktop settings r	elated to	your logon		
				Settings
Startup and Recov	very			
System startup, sy	stem fail	ure, and deb	ugging information	
				Settings
			Environme	ent vanables
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vironment Varial	bles	ОК	Cancel	Apply S3
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Vironment Varial User variables fo Variable APR_ICONV_P/ TEMP TMP	bles r axawa Va ATH C: %	OK ang.fei alue \Program Fil USERPROFI	es (x86)\Subversion LE%\AppData\Loca LE%\AppData\Loca	Apply S3 Niconv I\Temp I\Temp
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🔆 Favorites	Name	*	Date modified	Туре
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V	ariable name:	PATH		
v	ariable value:	E:\adb-tools		
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Appendix

1. How to start application after booting android system?

After android system is started, it will broadcast an action message named 'android.intent.action.BOOT_COMPLETED'. You can receive this message and start your application.