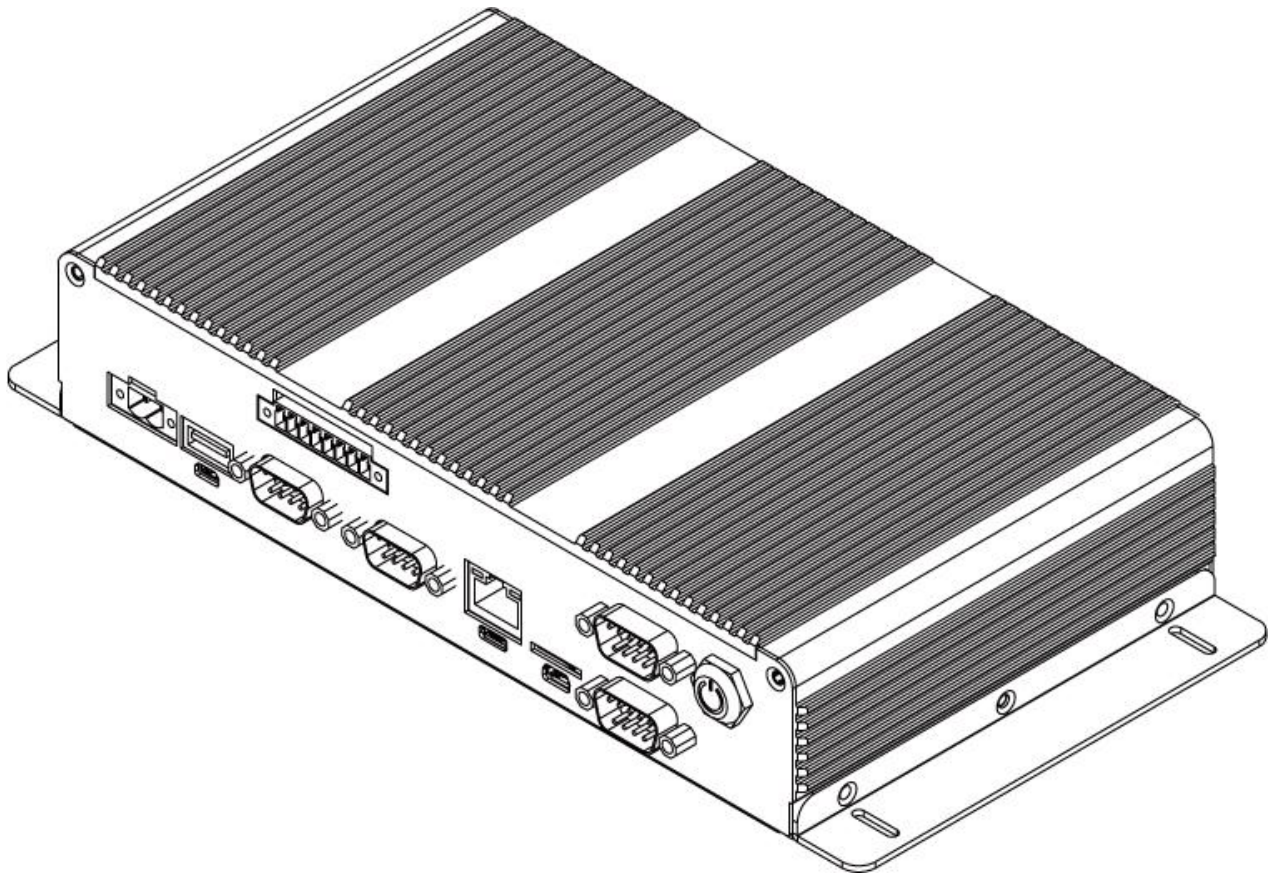


Arm-based Box PC

Freescale i.MX 6 Arm® Cortex®-A9 i.MX6 Dual Core, 1 GHz
Freescale i.MX 6 Arm® Cortex®-A9 i.MX6 Quad Core, 1 GHz (Option)



FA30SB3-210

User Manual

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Preface

Copyright Notice

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Disclaimer

We reserve the right to make changes, without notice, to any product, including circuits and/or software described or contained in this manual in order to improve design and/or performance. We assume no responsibility or liability for the use of the described product(s) conveys no license or title under any patent, copyright, or masks work rights to these products, and make no representations or warranties that these products are free from patent, copyright, or mask work right infringement, unless otherwise specified. Applications that are described in this manual are for illustration purposes only. We make no representation or guarantee that such application will be suitable for the specified use without further testing or modification.

Warranty

Our warranty guarantees that each of its products will be free from material and workmanship defects for a period of one year from the invoice date. If the customer discovers a defect, we will, at his/her option, repair or replace the defective product at no charge to the customer, provide it is returned during the warranty period of one year, with transportation charges prepaid. The returned product must be properly packaged in its original packaging to obtain warranty service. If the serial number and the product shipping data differ by over 30 days, the in-warranty service will be made according to the shipping date. In the serial numbers the third and fourth two digits give the year of manufacture, and the fifth digit means the month (e. g., with A for October, B for November and C for December).

For example, the serial number 1W17Axxxxxxx means October of year 2017.

Customer Service

We provide a service guide for any problem by the following steps: First, visit the website of our distributor to find the update information about the product. Second, contact with your distributor, sales representative, or our customer service center for technical support if you need additional assistance.

You may need the following information ready before you call:

- Product serial number
- Software (OS, version, application software, etc.)
- Detailed description of the problem
- The exact wording of error messages

In addition, free technical support is available from our engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products.

Advisory Conventions

Four types of advisories are used throughout the user manual to provide helpful information or to alert you to the potential for hardware damage or personal injury. These are Notes, Important, Cautions, and Warnings. The following is an example of each type of advisory.



Note:

A note is used to emphasize helpful information



Important:

An important note indicates information that is important for you to know.



Caution

A Caution alert indicates potential damage to hardware and explains how to avoid the potential problem.



Warning!

An Electrical Shock Warning indicates the potential harm from electrical hazards and how to avoid the potential problem.



Alternating Current

The Protective Conductor Terminal (Earth Ground) symbol indicates the potential risk of serious electrical shock due to improper grounding.

Safety Information



Warning!

Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.



Warning!

During heavy loading in 50°C environment, the top side of the EAC Mini may be over 70°C. Please do not touch these parts with your bare hands.



Caution

Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

Safety Precautions

For your safety carefully read all the safety instructions before using the device. All cautions and warnings on the equipment should be noted. Keep this user manual for future reference.

***Let service personnel to check the equipment in case any of the following problems appear:**

- The power cord or plug is damaged.
- Liquid has penetrated into the equipment.
- The equipment has been exposed to moisture.
- The equipment does not work well or you cannot get it to work according to the user manual.
- The equipment has been dropped and damaged.
- The equipment has obvious signs of breakage.
- Do not leave this equipment in an uncontrolled environment where the storage temperature is below -20°C (-4°F) or above 60°C (140°F). It may damage the equipment.



Caution

Use the recommended mounting apparatus to avoid risk of injury.



Caution

Do not cover the openings!



Warning!

Only use the connection cords that come with the product. When in doubt, please contact the manufacturer.



Warning!

Always ground yourself against electrostatic damage to the device.

Important Information

Federal Communications Commission Radio Frequency Interface Statement



This device complies with part 15 FCC rules.

Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class "B" digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

European Union



This equipment is in conformity with the requirement of the following EU legislations and harmonized standards. Product also complies with the Council directions.

Electromagnetic Compatibility Directive (2014/30/EU)

- EN55024: 2010+A1: 2015
 - IEC61000-4-2: 2009
 - IEC61000-4-3: 2006+A1: 2007+A2: 2010
 - IEC61000-4-4: 2012
 - IEC61000-4-5: 2014
 - IEC61000-4-6: 2014
 - IEC61000-4-8: 2010
 - IEC61000-4-11: 2004
- EN 55032: 2015+AC: 2016
- EN61000-3-2:2014
- EN61000-3-3:2013

Low Voltage Directive (2014/35/EU)

- EN 60950-1:2006/A11:2009/A1:2010/A12:2011/ A2:2013

About This User Manual

This User Manual provides information about using the Winmate® FA30SB3-210 ARM-based Box PC.

The documentation set for the nmate® FA30SB3-210 ARM-based Box PC provides information for specific user needs, and includes:

- **FA30SB3-210 ARM-based Box PC Quick Start Guide** - describes how to get the box computer up and running.
- **FA30SB3-210 ARM-based Box PC User Manual** – contains detailed description on how to use the display, its components and features.



Note:

Some pictures in this guide are samples and can differ from actual product.

Revision History

Version	Date	Note
1.0	18-Jan-2019	New release.

Chapter 1: Introduction

This chapter provides the FA30SB3-210 Arm-based Box PC product overview, describes its features and hardware specifications.

1.1 Overview

Congratulations on purchasing Winmate® FA30SB3-210 ARM-based Box PC.

The FA30SB3-210 is an industrial Box PC powered by ARM Freescale® Cortex® A9 i.MX6 Dual 1GHz processor with built-in 16GB eMMC of storage and one micro SD/SDHC card slot for storage expansion. The FA30SB3-210 supports Android 4.4, Linux 4.1.15 (QT 5.5 Browser) or Ubuntu 16.04 OS based on your choice.

Rich I/O interfaces include USB 2.0, USB ITG, one RS-232/422/485 and optional additional two serial interfaces RS-232, CANBus, RJ-45 connector for PoE/LAN, and HDMI port for connecting external display.

The FA30SB3-210 is suitable for machine-to-machine communications, kiosk, smart factory and machine automation applications.

1.2 Product Features

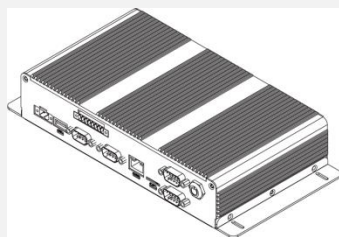
Winmate® FA30SB3-210 ARM-based Box PC offers the following features:

- Intel® Apollo Lake N3350 1.1 GHz
- Fanless cooling system
- Compact size 100 x 70 x 30 mm (w/o mounting bracket)
- Expansion module with 30+ combinations, including 4G/3G/Wi-Fi/ Bluetooth
- Various mounting options: desk, wall, VESA, din-rail, pole
- Suitable for smart factory applications

1.3 Package Contents

Carefully remove the box and unpack your device. Please check if all the items listed below are inside your package. If any of these items are missing or damaged contact us immediately.

Standard factory shipment list:



- **ARM-based Box PC**

Varies by product specifications



- **Quick Start Guide (Hardcopy)**

Part No. 91521117100J



- **Driver CD & User Manual**

Part No. 91711111103L



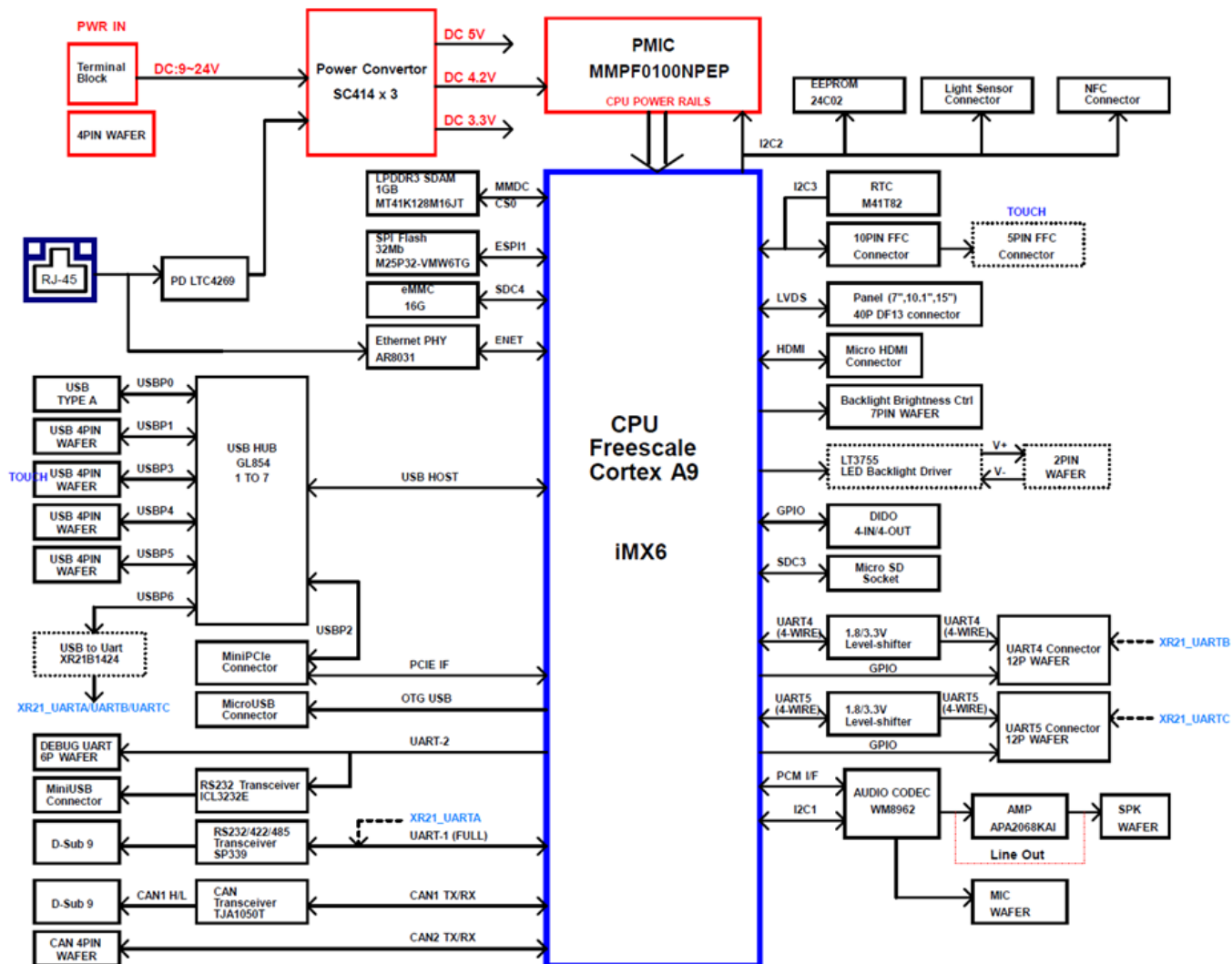
- **Terminal Block 2 pin to 2.5Ø Female Adapter Cable**

Part No. 94J602G020K0

1.4 Hardware Specifications

		Model Name
		FA30SB3-210
System Specification	CPU	Freescale i.MX 6 Arm® Cortex®-A9 i.MX6 Dual Core, 1 GHz Freescale i.MX 6 Arm® Cortex®-A9 i.MX6 Quad Core, 1 GHz (Option)
	System Memory	1GB LPDDR3 (Optional 2GB)
	Storage	16GB eMMC
	Expansion	1 x Micro SD/SDHC card slot
Interface	USB	1 x USB A-Type (Host), 1 x USB OT
	Ethernet	1 x RJ-45 10/100 LAN (Optional PoE)
	HDMI	1 x Micro HDMI
	Serial	1 x RS232/422/485 (Optional other two RS232), 1 x CANBus
	Power Input	Terminal block
Power Management	Power Supply	9-24V DC
User Controls	Button	Power button (Optional)
Mechanical Specification	Dimensions	224 x 127 x 47 mm (8.82 x 5 x 1.85 inches)
	Mounting	Desktop / Wall Mount
	Cooling	Fanless
	Enclosure	Aluminum Profile with Fin Housin
Environment	Operating Temp.	-20~60°C (-4~140°F)
	Storage Temp.	-30~70°C (-22~158°F)
	Operating Humidity	10% ~90% (non-condensing, RH)
	Shock	
Operating System	OS	Android 6.0 (Default) Linux 4.1.15 (QT 5.5 Browser) (Optional) Ubuntu 16.04 (Optional)
Certificate	EMC & Safety	CE, FCC

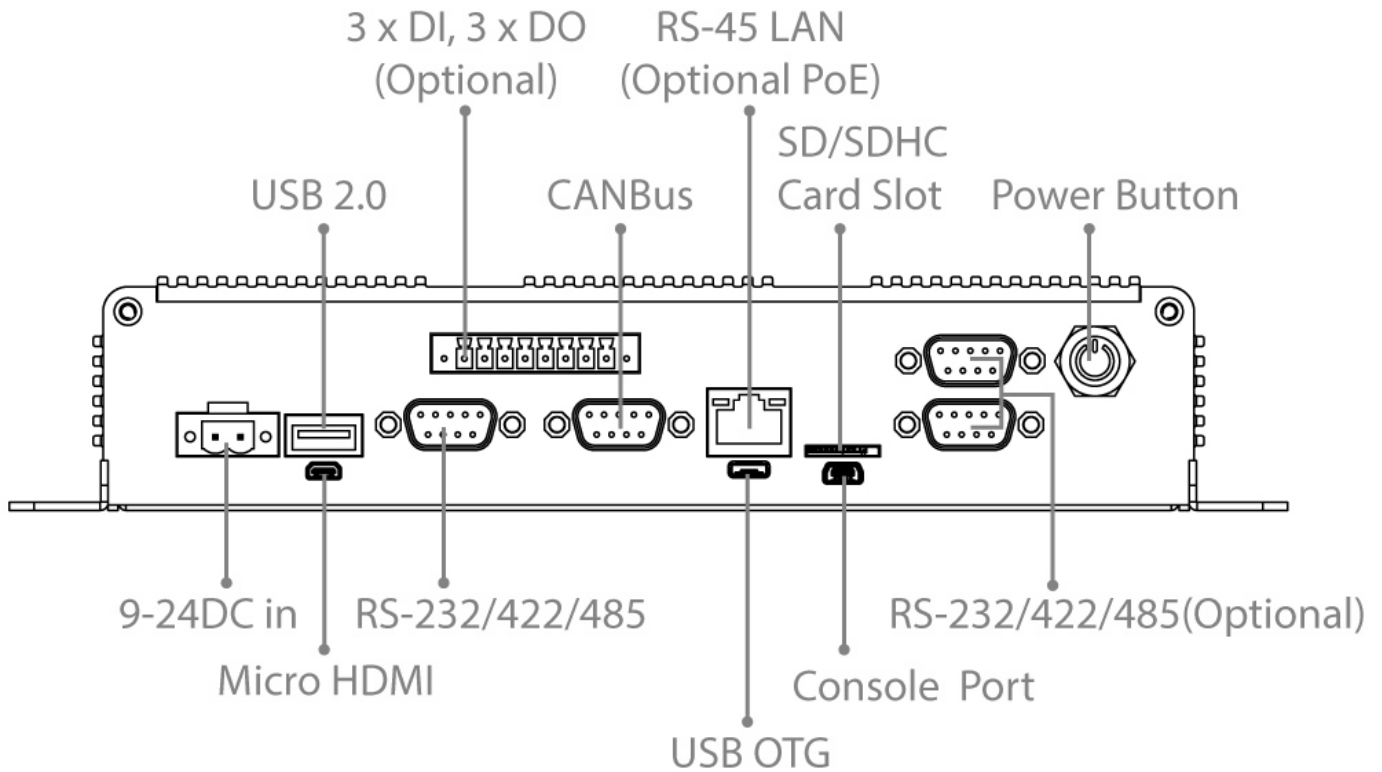
1.5 Function Block Diagram



1.6 Appearance

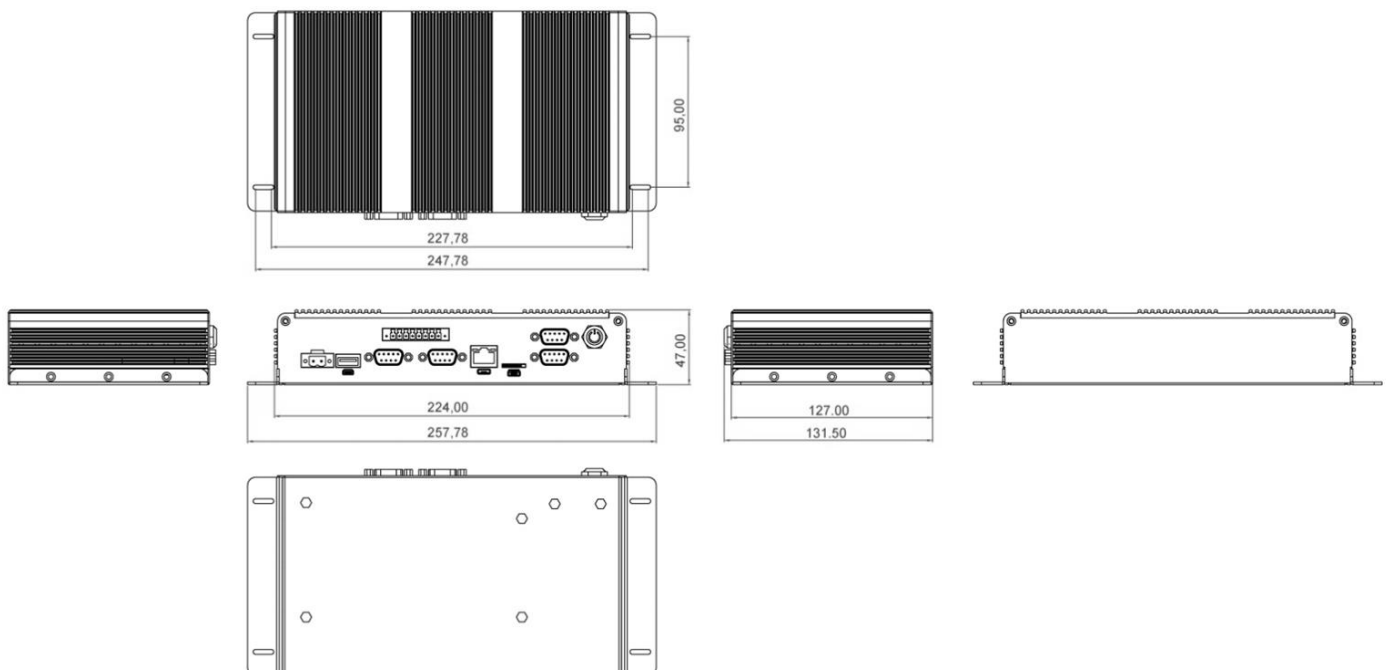
This section includes front and rear side I/O ports location of the FA30SB3-210 ARM-based Box PC.

Front Side



1.7 Dimensions

All dimensions shown in mm (millimeters).



Chapter 2: Hardware Installation

This chapter provides information on how to use external I/O and the installation of FA30SB3-210 Box PC hardware.

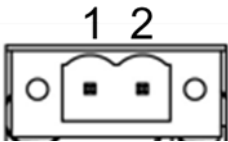
2.1 Connector Description

The following sections give you information about FA30SB3-210 standard connectors and pin assignments.

2.1.1 Power Connector

FA30SB3-210 uses 2-pin terminal block connector for DC in power input. Secure the connector to the motherboard with two screws.

Pin assignment and signal names of power connector



Pin №	Signal Name	Pin №	Signal Name
1	V+	2	V-



Voltage

Minimum Voltage 9V
Maximum Voltage 24V
Maximum Current 6.6A

2.1.2 USB Connector

The FA30SB3-210 provides one USB 2.0 connectors. Use USB 2.0 connector to connect external devices such as mouse or keyboard to the box computer.

Pin assignment and signal names of USB connector



0.5A @ 5 V

Pin №	Signal Name	Pin №	Signal Name
1	+5V	2	Data-
3	Data+	4	GND

2.1.3 Micro HDMI Connector

Plug HDMI signal cable to the micro HDMI connector of the FA30SB3-210, and plug the other end to the monitor.

Pin assignment and signal names of HDMI connector

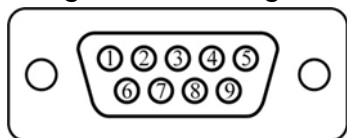


Pin №	Signal Name	Pin №	Signal Name
1	HP_DET_OUT	2	NC
3	HDMI_D2P	4	GND
5	HDMI_D2M	6	HDMI_D1P
7	GND	8	HDMI_D1M
9	HDMI_D0P	10	GND
11	HDMI_D0M	12	HDMI_CLKP
13	GND	14	HDMI_CLKM
15	HDMI_CEC_OUT	16	GND
17	H_CLK_OUT	18	H_DAT_OUT
19	HDMI_5V		

2.1.4 Serial Port Connector

The FA30SB3-210 uses D-Sub 9 RS-232/422/485 serial port connector. The connector secured to the motherboard with two screws. You can configure serial port settings by software.

Pin assignment and signal names of serial port



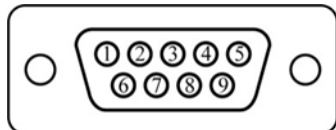
**Default setting: RS-232*

Pin №	RS-232	RS-422	RS-485
1	DCD	TxD-	D-
2	RXD	TxD+	D+
3	TXD	RxD+	NC
4	DTR	RxD-	NC
5	GND	GND	GND
6	DSR	NC	NC
7	RTS	NC	NC
8	CTS	NC	NC
9	RI	NC	NC

2.1.5 CANBus Connector

The FA30SB3-210 has CAN Bus (D-sub 9) connector for machine-to-machine communication and other applications. The connector secured to the motherboard with two screws.

Pin assignment and signal names of CANBus connector

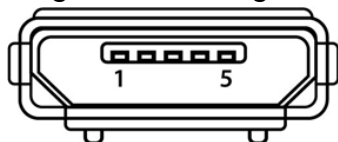


Pin №	Signal Name	Pin №	Signal Name
1	DOUT	2	CAN_L
3	GND	4	COM_I2C2_SCL
5	COM_I2C2_SDA	6	GND
7	CAN_H	8	DIN
9*	POWER(5V)		

2.1.6 USB OTG Connector

Use USB OTG host connector to connect USB flash drives, digital cameras, mice or keyboard to the FA30SB3-210.

Pin assignment and signal names of USB OTG connector

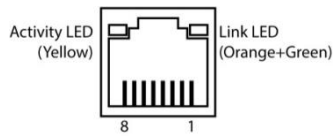


Pin №	Signal Name	Pin №	Signal Name
1	+5V	2	USB_OTG_D-
3	USB_OTG_D+	4	USB_OTG_ID
5	GND		

2.1.7 Ethernet Connector

The EAC Mini FA30SB3-210 has one Ethernet connector located on the front. Ethernet ports provide a standard RJ45 10/100/1000 Mbps jack connector with LED indicators on the front side to show its Active/ Link status and Speed status.

Pin assignment and signal names of Ethernet connector



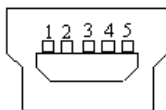
10/100 Mbps- Green
1G Mbps – Orange

Pin №	Signal Name	Pin №	Signal Name
1	TX1+	2	TX1-
3	TX2+	4	TX3+
5	TX3-	6	TX2-
7	TX4+	8	TX4-

2.1.8 Console Port Connector

The FA30SB3-210 uses Mini USB B type connector for debug purpose only.

Pin assignment and signal names of console port



Pin №	Signal Name	Pin №	Signal Name
1	DEBUG_VBUS	2	RX
3	TX	4	GND(Reserved)
5	GND	6	GND
7	GND	8	GND
9	GND		

2.2 Connecting the Power

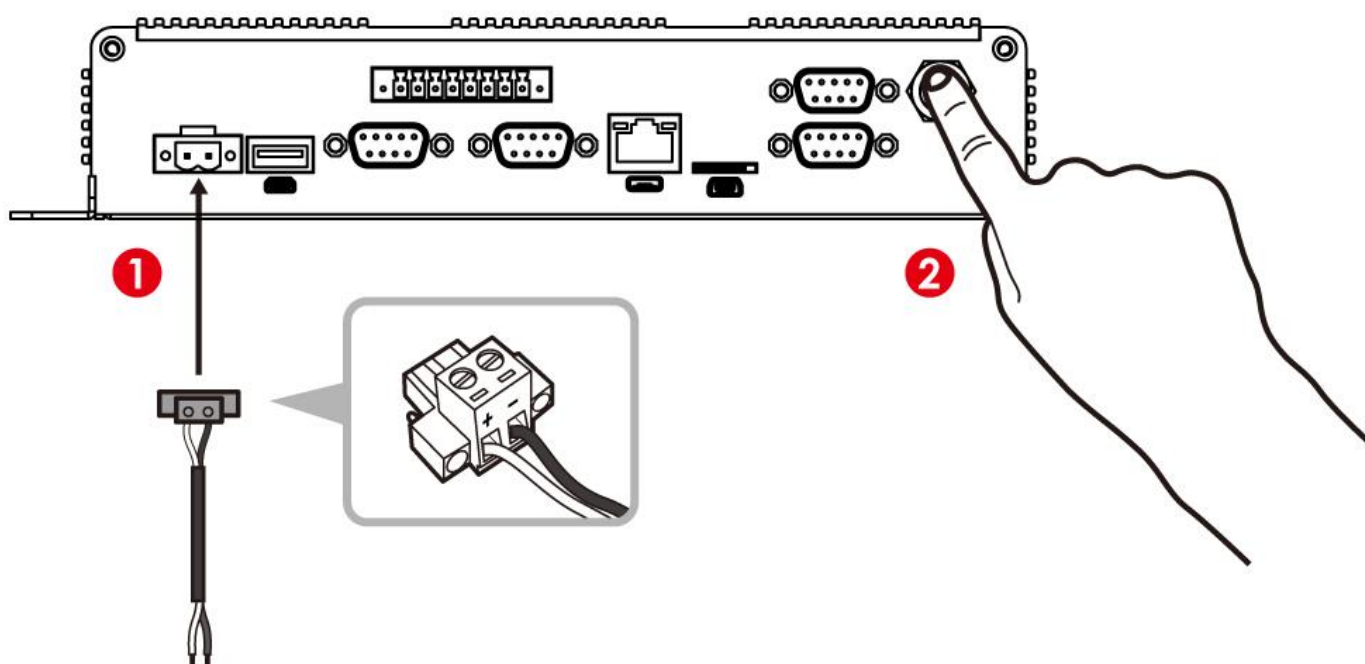
The DC power supply connector of the FA30SB3-210 ARM-based Box PC is on the front panel. The DC power input for the FA30SB3-210 allows a voltage input range from 9 V DC to 24 V DC.

**Warning!**

Ensure voltage and polarity is compliant with the DC input. Improper input voltage or polarity can cause system damage.

To turn on the system:

1. Connect FA30SB3-210 to 9-24V DC. The power source can either be from a power adapter or an in-house power source.
2. Press Power button to turn on the system.



Chapter 3: Mounting

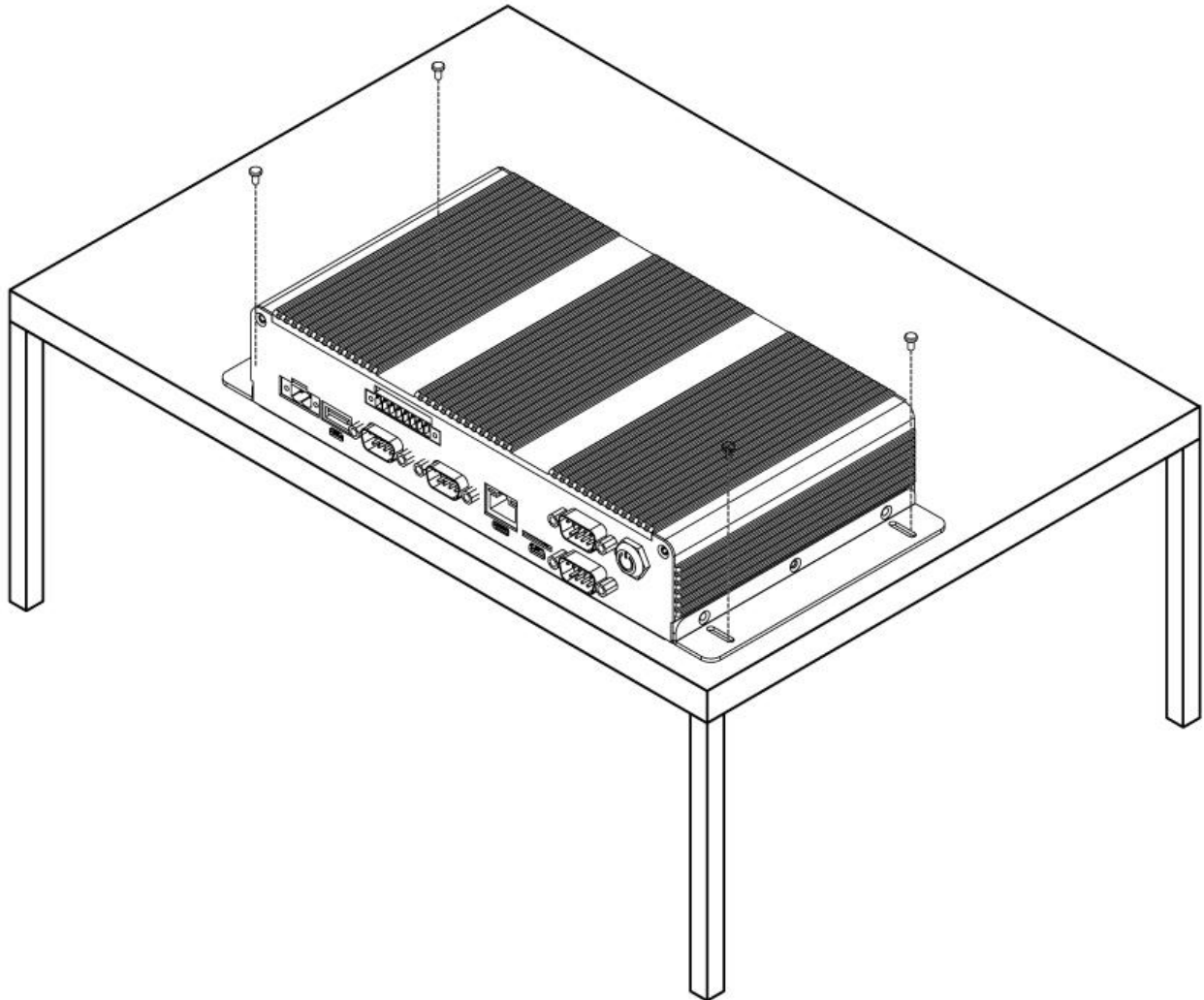
This chapter describes how to mount the FA30SB3-210 ARM-based Box PC.

3.1 Wall and Desk Mounting

The FA30SB3-210 supports two types of mounting: wall and desk mounting.

Mounting Instruction:

1. Fasten screws to secure L-shape mounting brackets to the FA30SB3-210 (If bracket is not installed).
2. Place the FA30SB3-210 on the fixture (ex. table) and fasten screws to secure the unit to the fixture.



Chapter 4: Operating the Device

This chapter provides instructions on how to operate the FA30SB3-210 Box PC. Notice that pictures in this example are for Android 6.0 operating system.



4.1 Operating System

The FA30SB3-210 supports Android 6.0 operating system by default.

**Important:**

The device is shipped with the OS System according to your order. Contact us if you have any questions regarding OS settings.

**Important:**

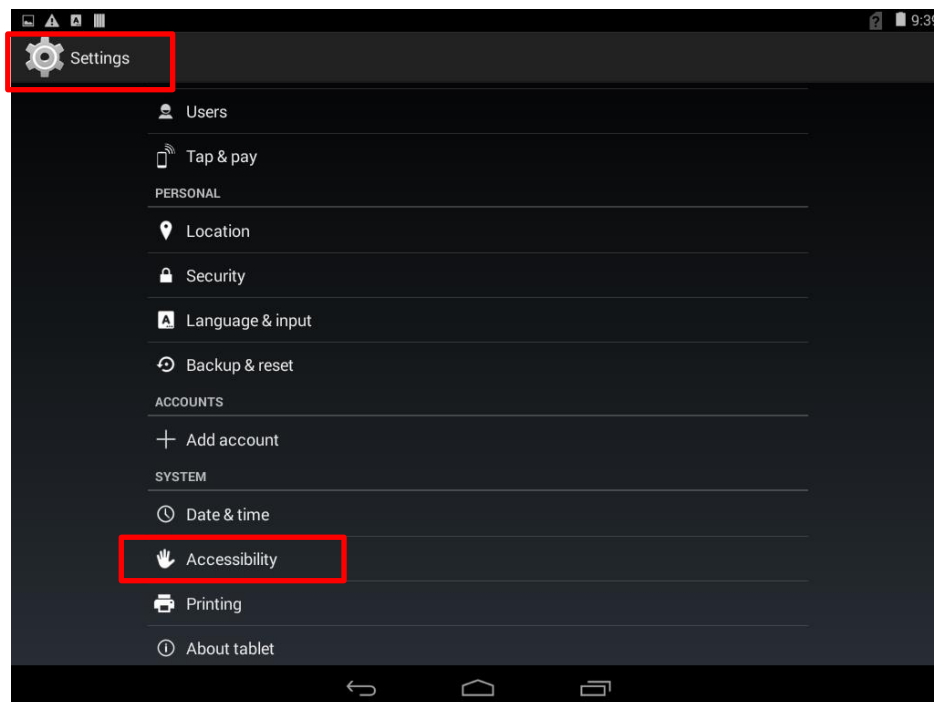
In Android OS the watchdog timer is set by default. The system will automatically reboot if it hangs after 30 seconds. If the app hangs, watchdog function will not be activated.

4.2 Configuring Serial COM Port Settings

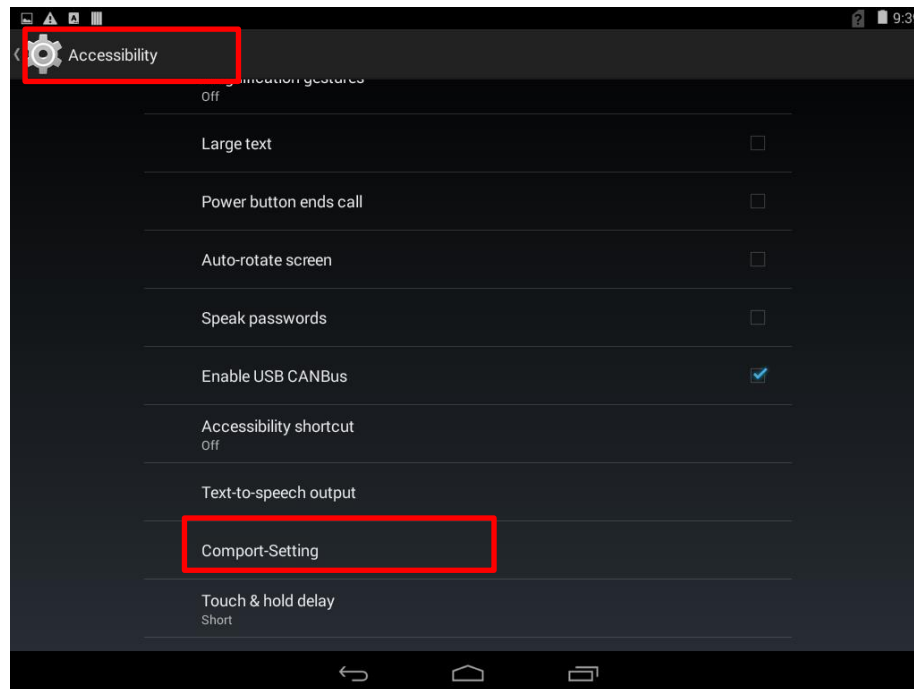
Serial COM Port can be configured for RS-232, RS-422 or RS-485 by software.

To configure serial COM port settings:

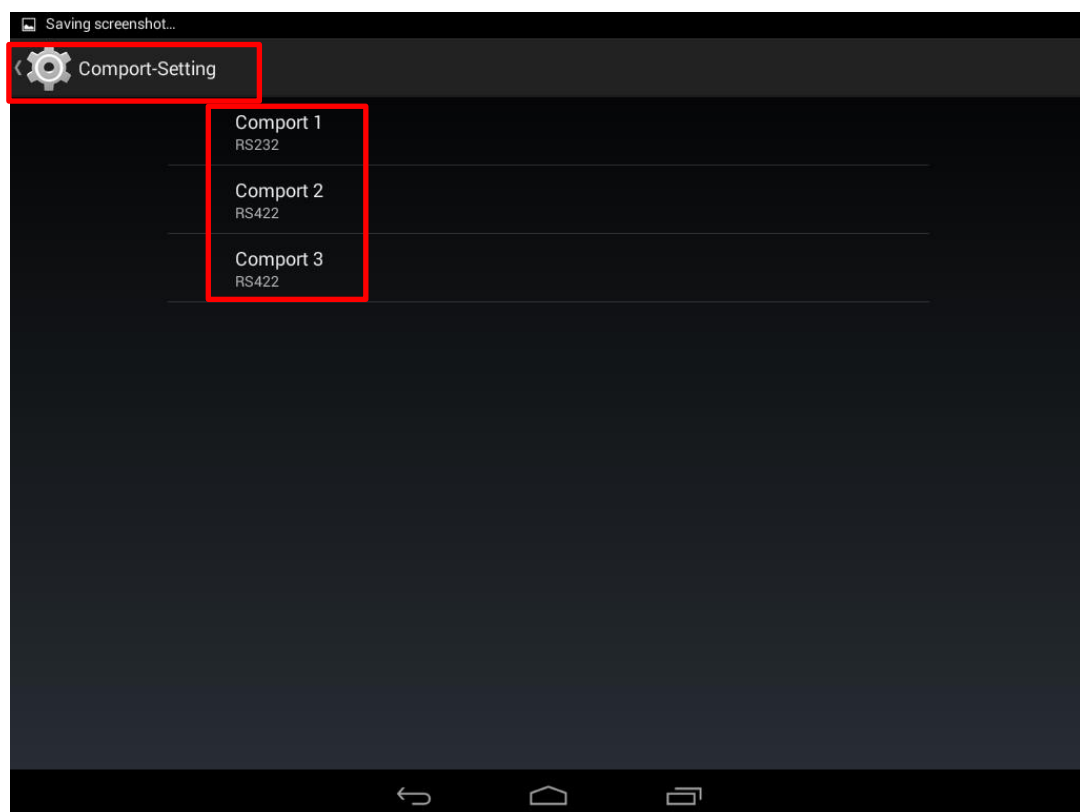
1. **Settings**  **> Accessibility.**



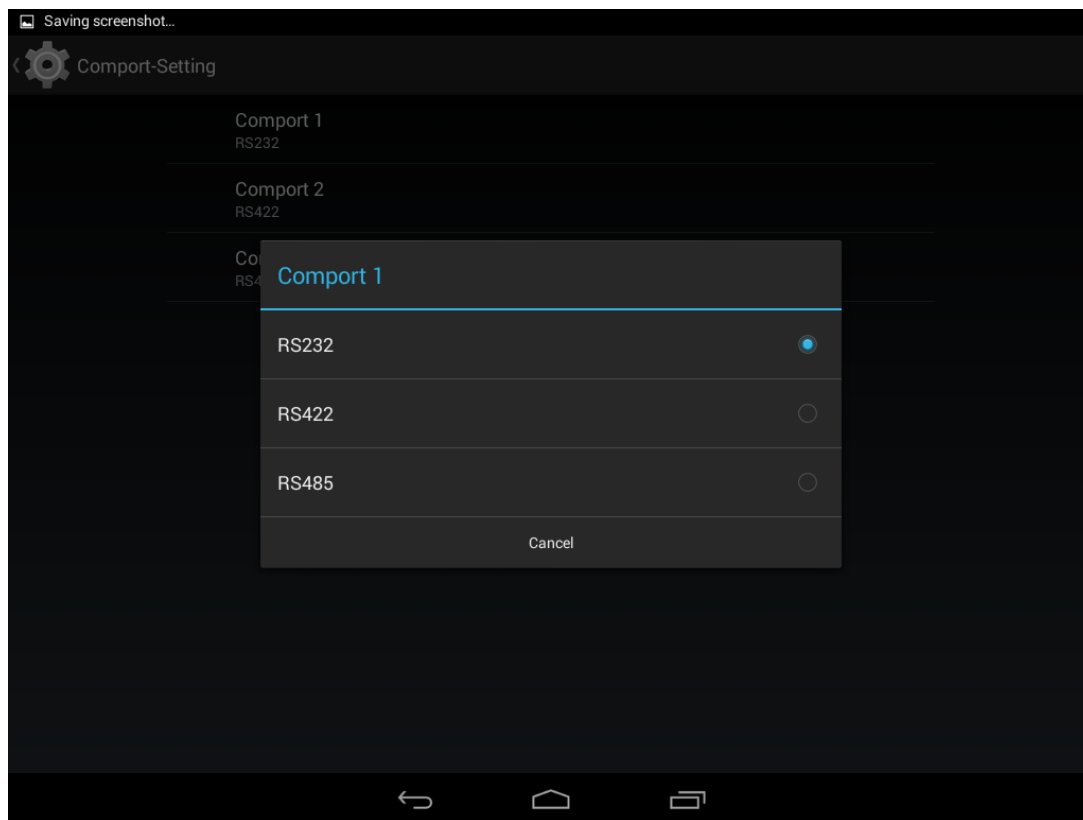
2. Accessibility > Comport-Setting.




3. Comport-Setting > Comport 1/ Comport 2/ Comport 3. Select COM port that you want to configure.

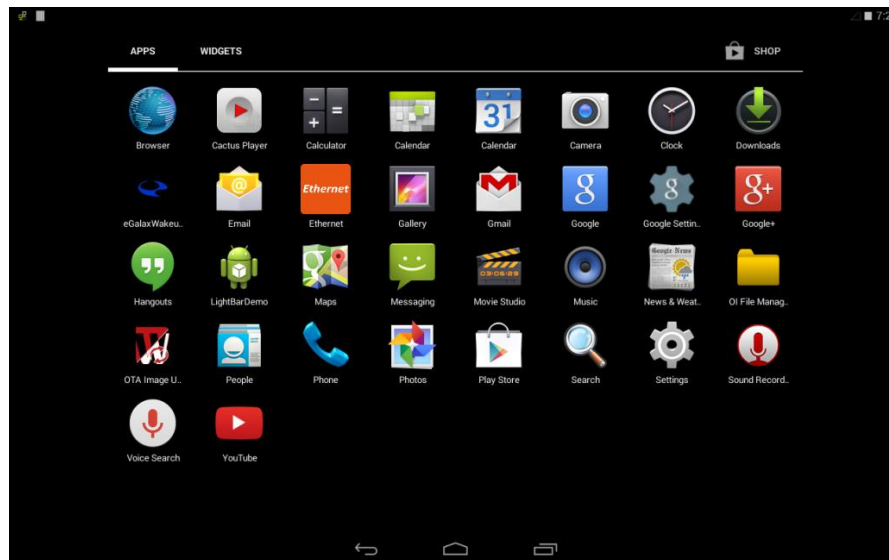


4. **Comport 1 > RS232/RS422/RS485.** Configure serial port settings.

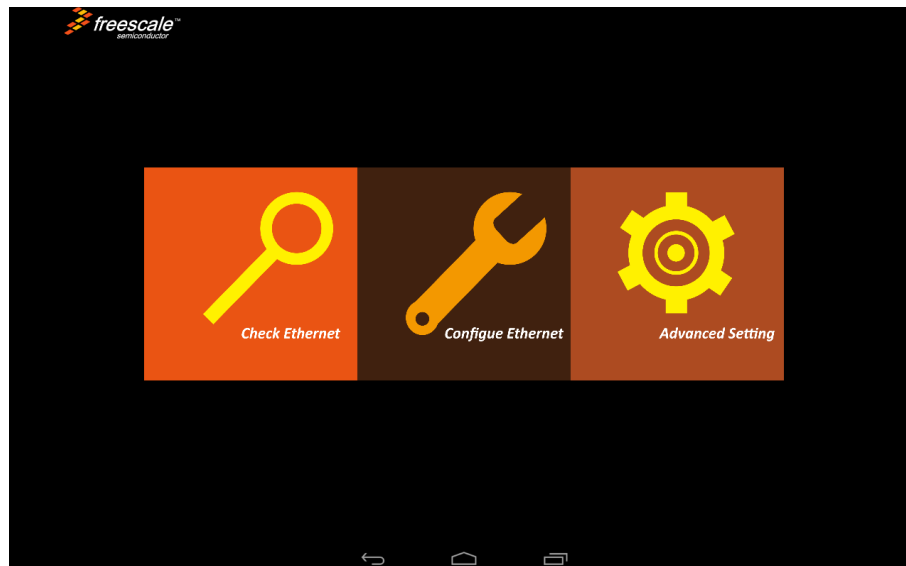


4.3 Ethernet

1. Connect Ethernet cable to the device.
2. Touch **All APPS**  icon, and the open **Ethernet** application.



3. Ethernet APP main menu appears

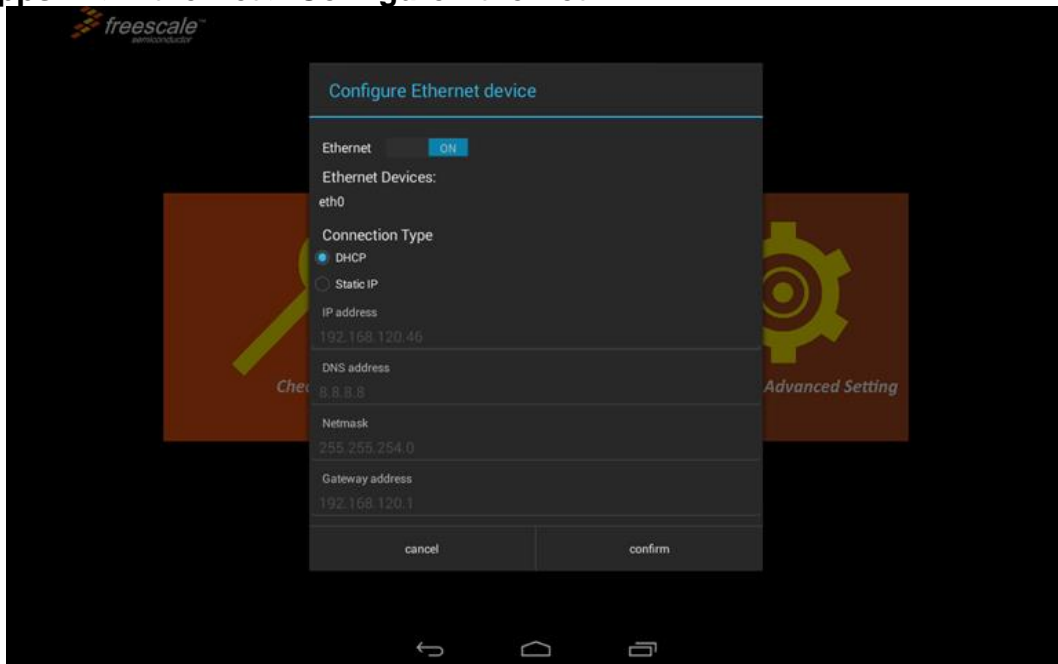


Setting	Description
Check Ethernet	Check Ethernet connection parameters: IP mode, IP address, DNS address and others
Configure Ethernet	Enable Ethernet connection and configure its such as connection type
Advanced Settings	Configure advanced parameters of the Ethernet

4.3.1 Configuring Ethernet Settings

To configure Ethernet:

Go to **All Apps**  **> Ethernet > Configure Ethernet**



Ethernet OFF is set by default. Swipe **Ethernet ON to activate Ethernet connection.*

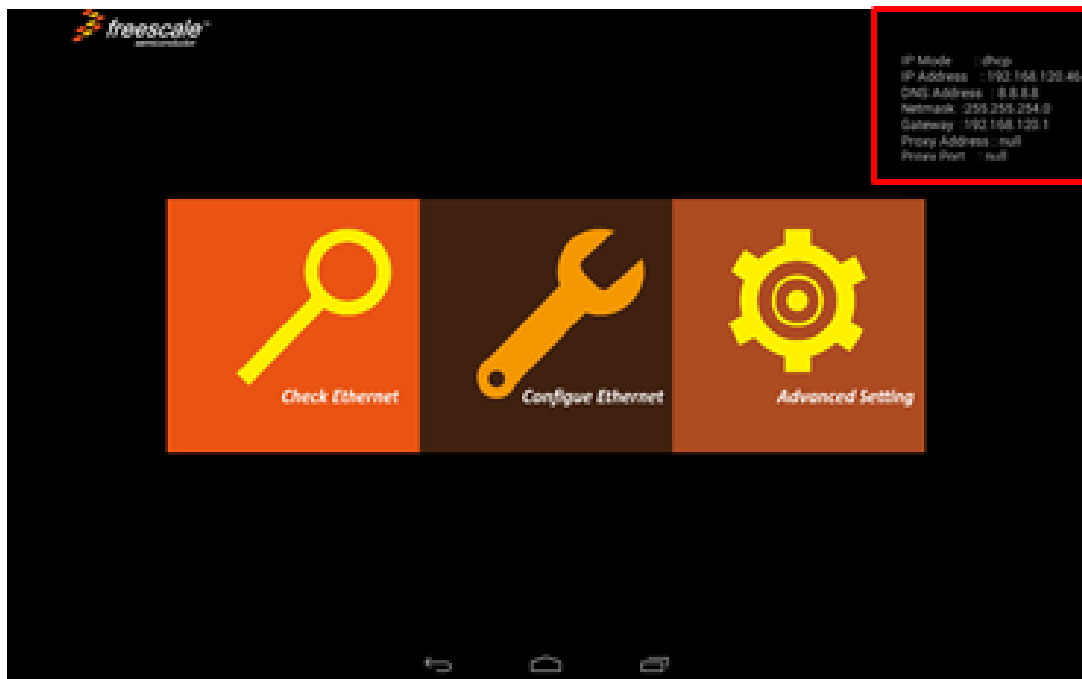
Connection Type

Setting	Description
DHCP (default)	The device automatically capture IP-address from the router
Static IP	Allows to manually set up IP-address, DNS, Network and Gateway

4.3.2 Checking Ethernet Settings

To check Ethernet settings:

Go to **APPS > Ethernet > Check Ethernet**



Ethernet settings menu appears on the top right side of the desktop.

Chapter 5: Software Installation

This chapter describes how to install software on FA30SB3-210 Arm-based Box PC.



5.1 Android Debug Bridge Driver Installation

You need to connect device to the computer with the USB OTG cable. When using a USB cable (not supplied with your device), verify that the cable or cable packaging bears the “Certified USB™” mark to guarantee USB OTG compliance.



Important:

- If your computer is running on Windows Embedded 8 Standard or Windows 8.1 Industry Pro OS system, you need to disable driver signature.
- For Win XP / Win 7 skip disabling driver signature section, and directly proceed to [ADB driver installation](#).

You can find USB OTG driver in the following locations:

CDM v2.08.28 Certified\ftdibus.inf

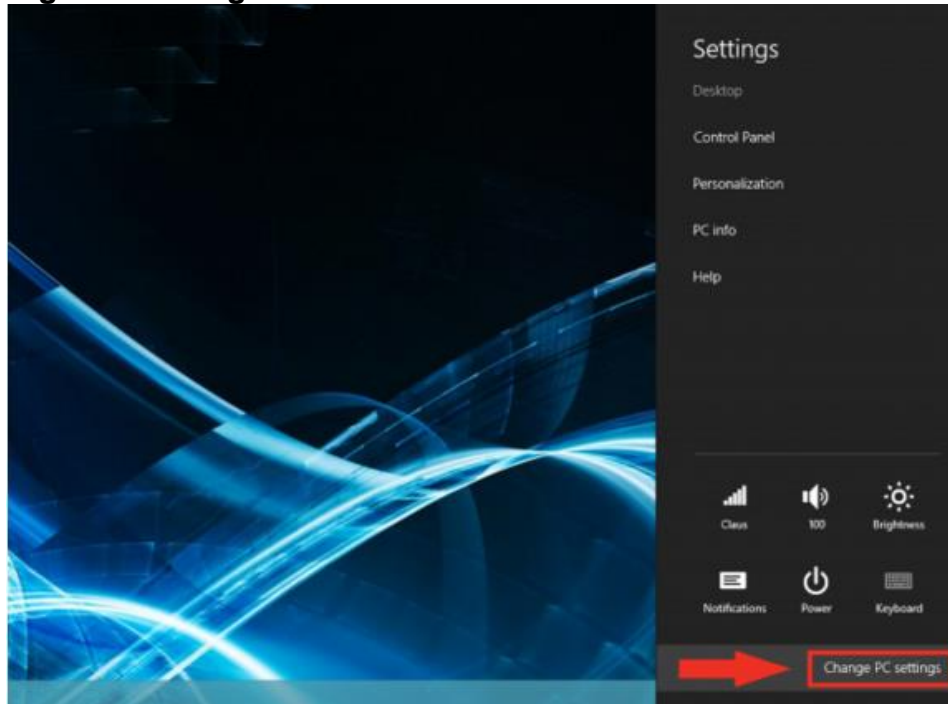
CDM v2.08.28 Certified\ftdiport.inf

5.1.1 Disabling Driver Signature on Windows 8

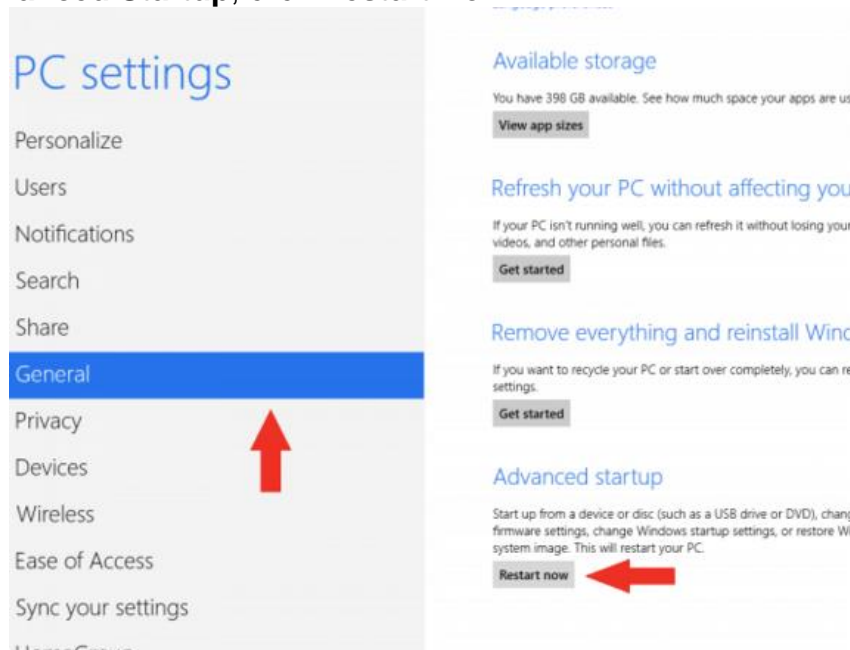
1. Hold down the Windows key on your keyboard and press the letter C to open the Charm menu, and then click the gear icon (**Settings**).



2. Click **Change PC Settings**.

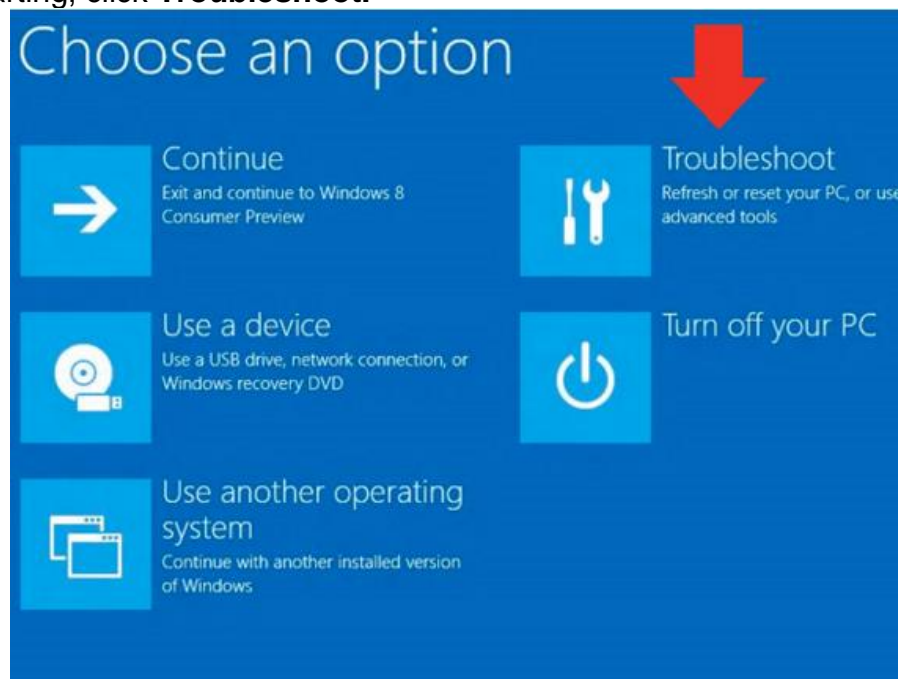


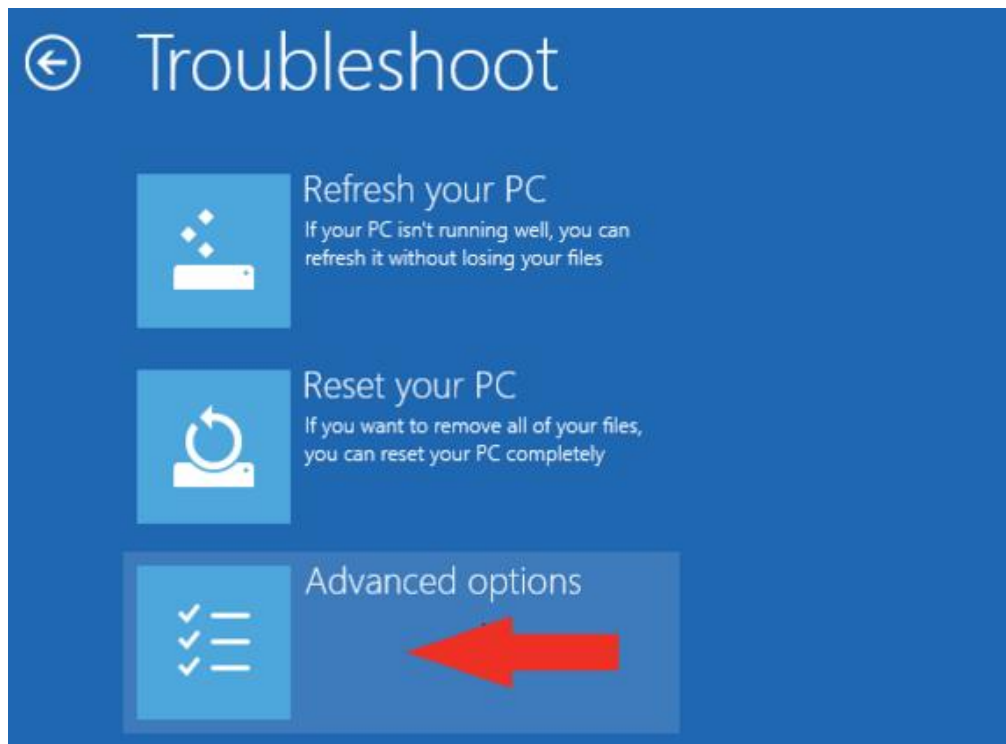
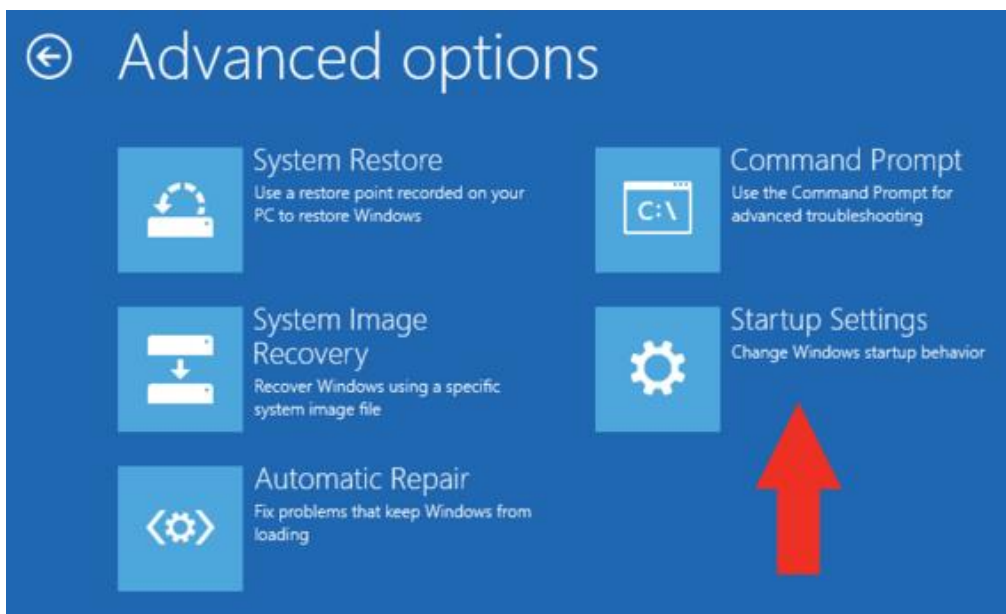
3. Click **General**.
4. Under **Advanced Startup**, click **Restart Now**.

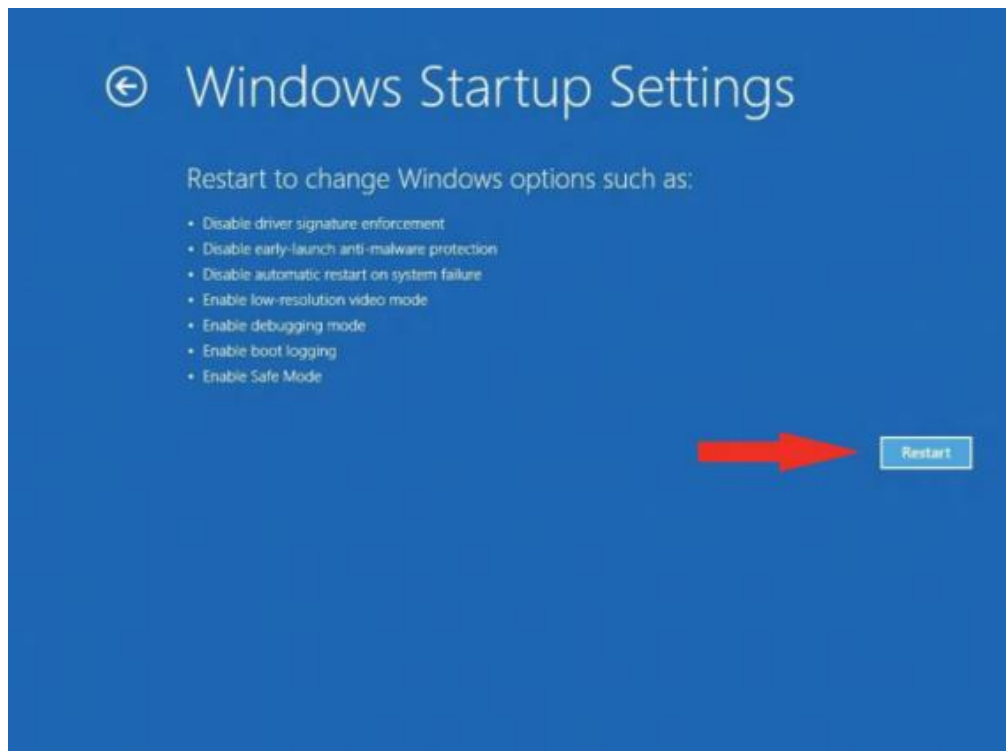
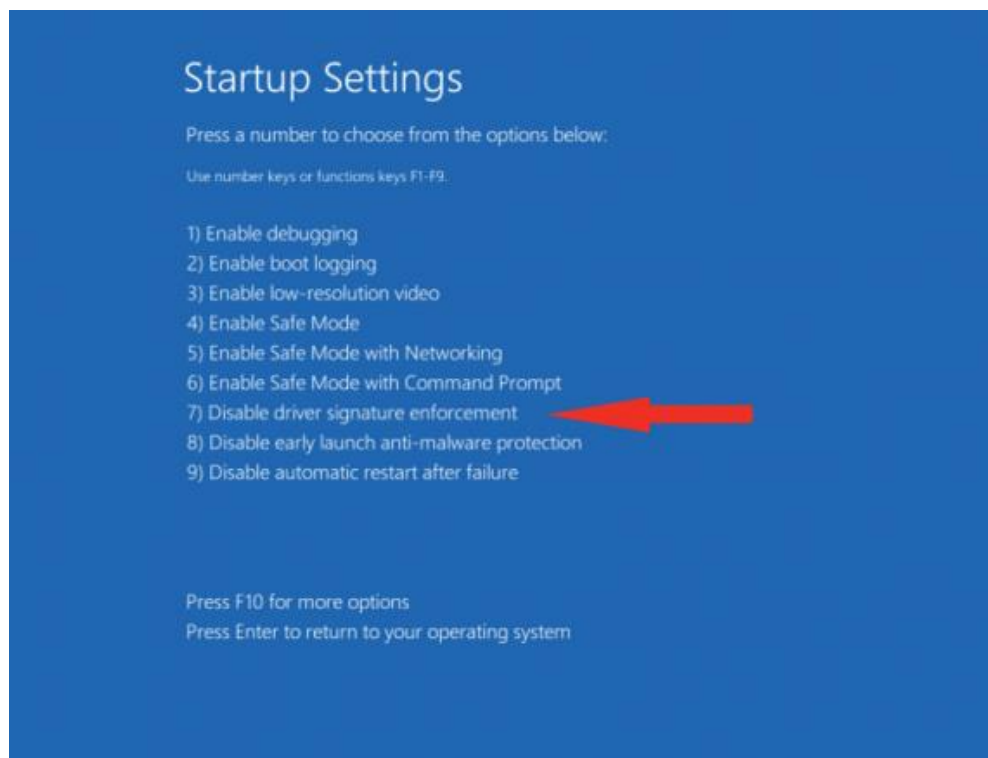


NOTE: In Windows 8.1, the 'Restart Now' button has moved to 'PC Setting -> Update & Recovery -> Recovery.'

5. After restarting, click **Troubleshoot**.

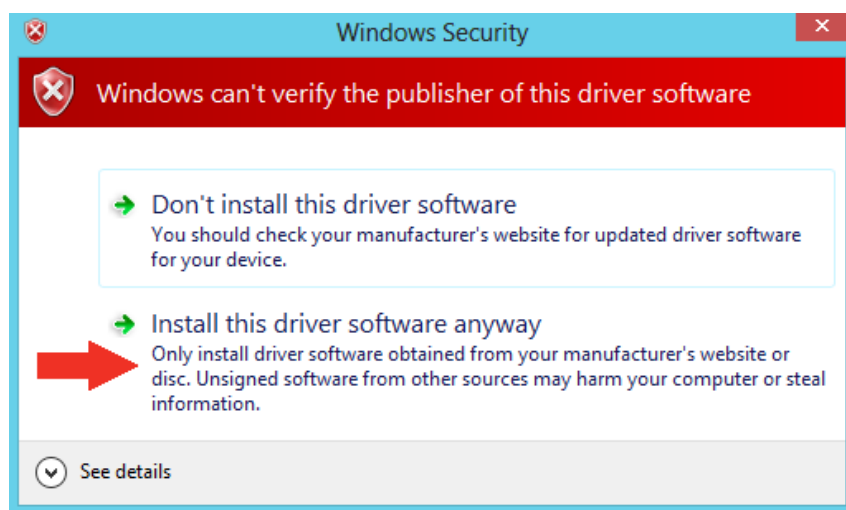


6. Click **Advanced Options**.7. Click **Windows Startup Settings**.

8. Click **Restart**.9. After restarting your computer a second time, choose **Disable driver signature enforcement** from the list by typing the number 7 on your keyboard.

Your computer will restart automatically.

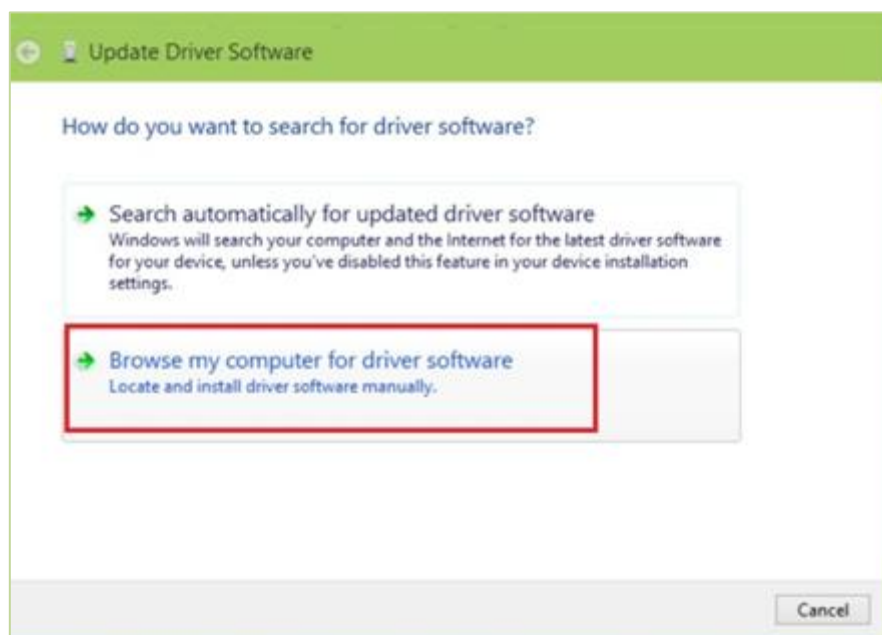
10. After restarting, you will be able to install the ADB drivers normally; however, Windows will display a warning message. When the warning appears, click Install this driver software anyway. If you are unfamiliar with installing drivers, check out our Installing ADB driver tutorial for a step by step guide.

**Note:**

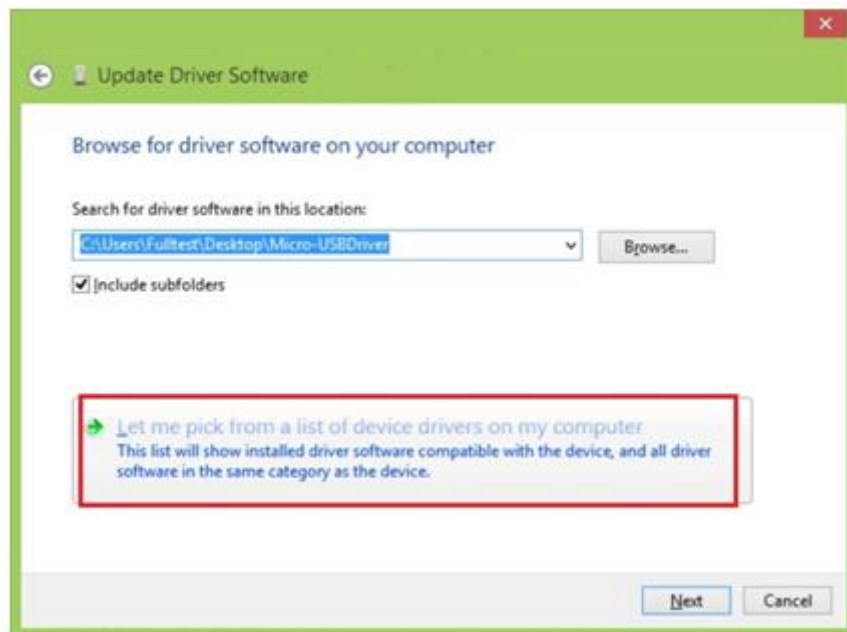
The next time you restart your computer, driver signature enforcement will be in effect again. You will have to repeat this process for any new boards. If you have multiple boards to use with the same computer, we recommend installing the drivers for each one before you shut down or restart your computer.

5.1.2 ADB Driver Installation

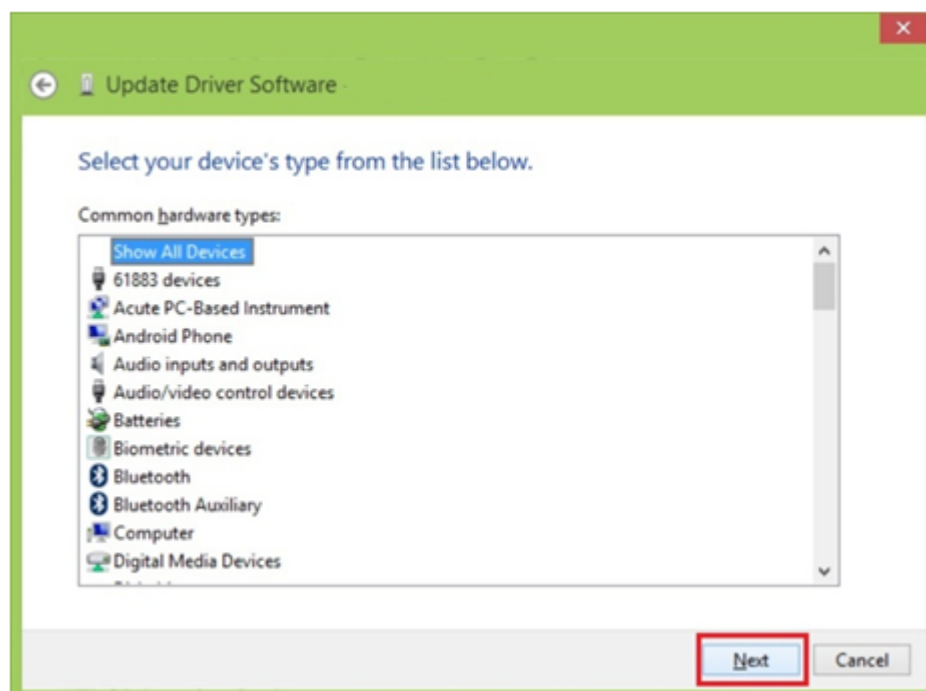
1. Confirm if the USB device was found by the system. Go to Device Manager > 120A > Other devices > FA30XX > Update Driver Software
2. In the Update Driver Software window choose “**Browse my computer for driver software**”.



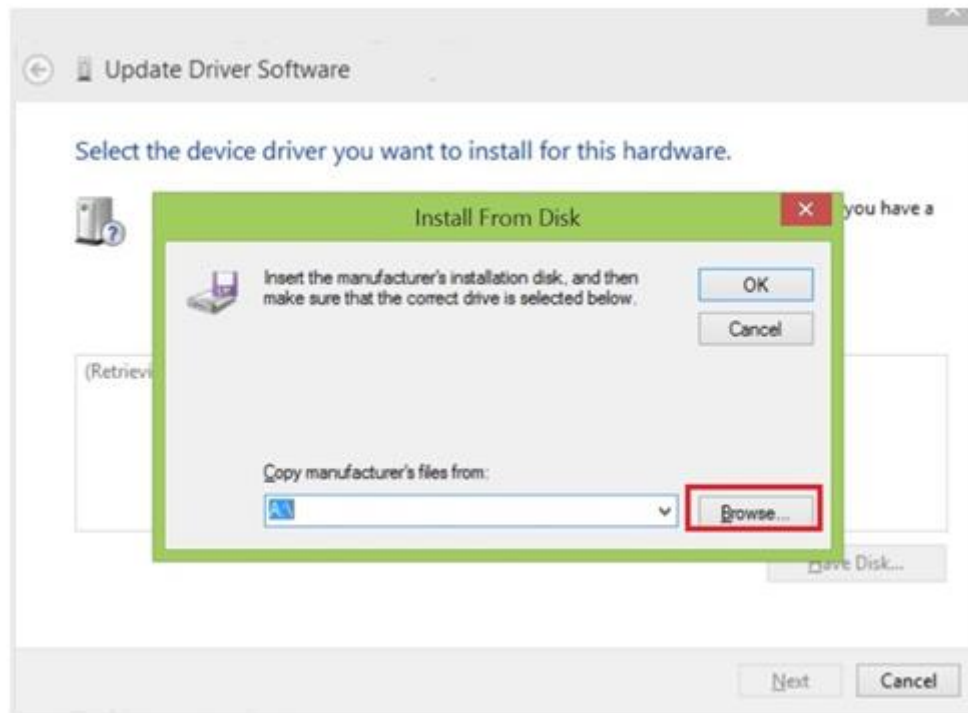
3. Select “**Let me pick from a list of device drivers on my computer**”. Click **Next**.



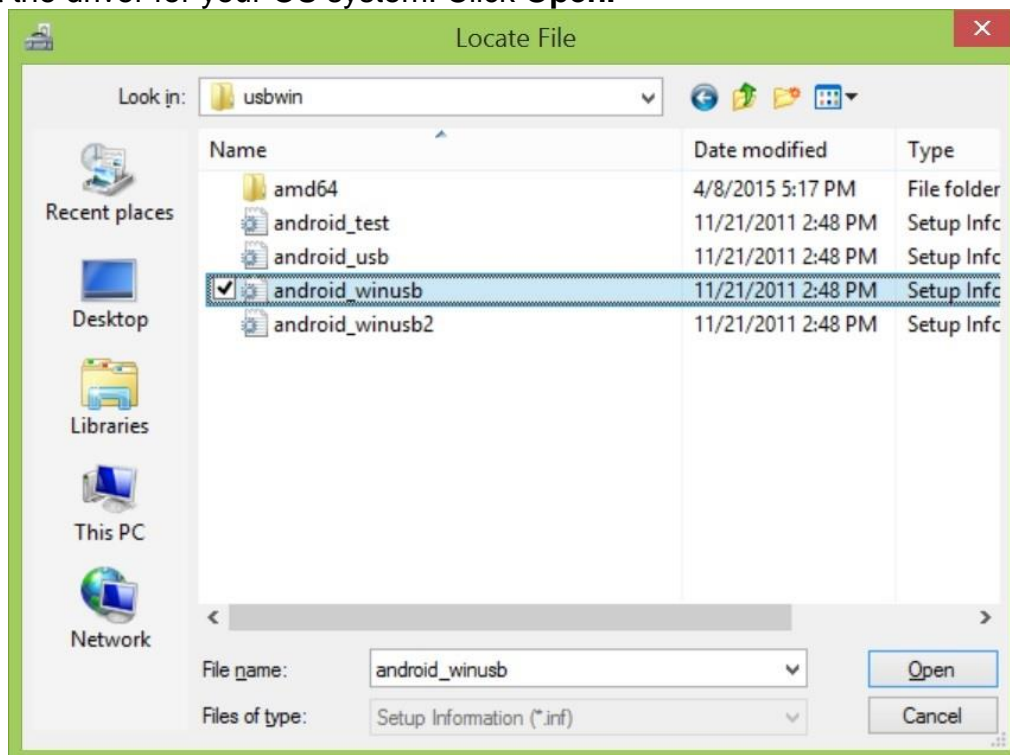
4. Select from your computer.
5. In the Update driver software window, click **Show All Devices** and then click **Next**.



6. The system is looking for the driver folder. Click **Browse**.



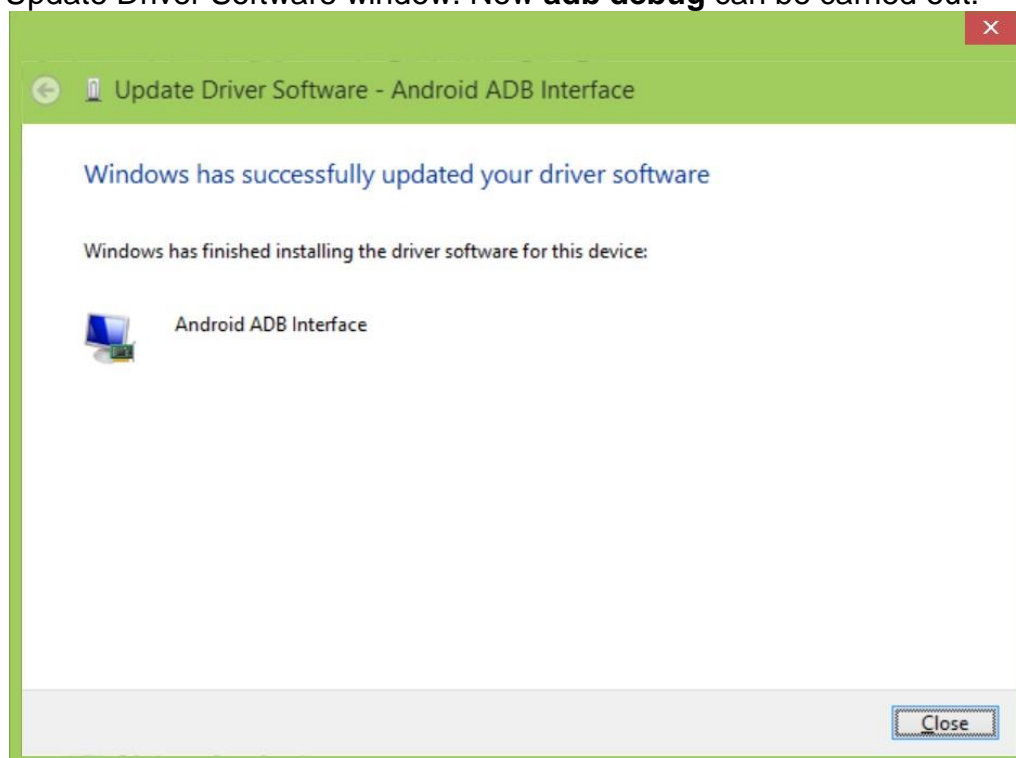
7. Select the driver for your OS system. Click **Open**.



8. Windows Security window will pop up. This message is used to confirm whether the user wants to install the driver. Select **Install this driver software anyway** to continue.



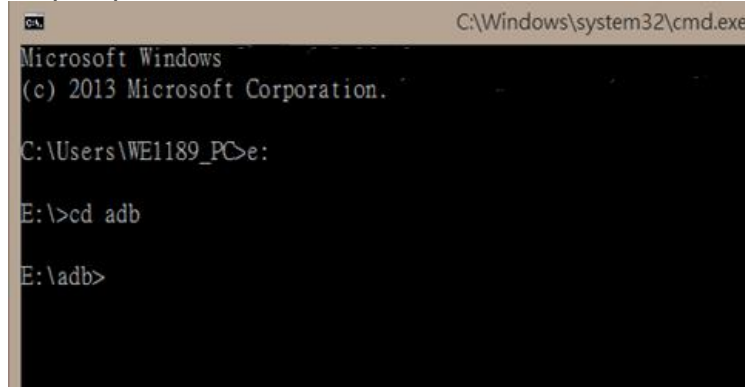
9. When the installation is successfully completed you will see **Android ADB Interface** driver in the Update Driver Software window. Now **adb debug** can be carried out.



5.2 Installing Android Debug Bridge (ADB)

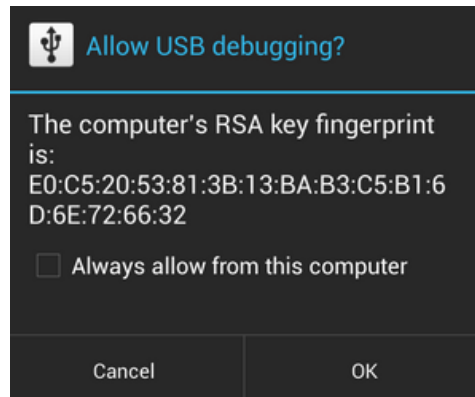
For detailed Android Debug Bridge (ADB) information refer to Android Developers Platform: <http://developer.android.com/tools/help/adb.html>.

1. Decompress adb.zip. Open ADB terminal and move into the adb archive.

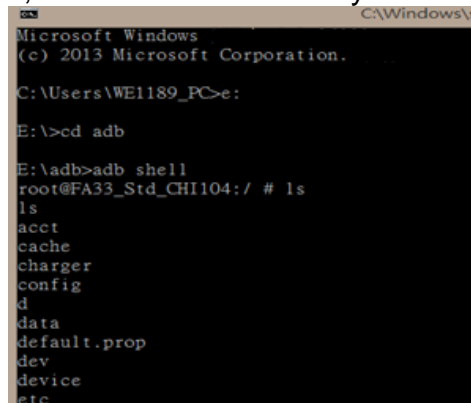


ADB Terminal window

2. Connect your device to the computer via USB OTG. System will ask you to confirm USB debugging. Tap **OK**.



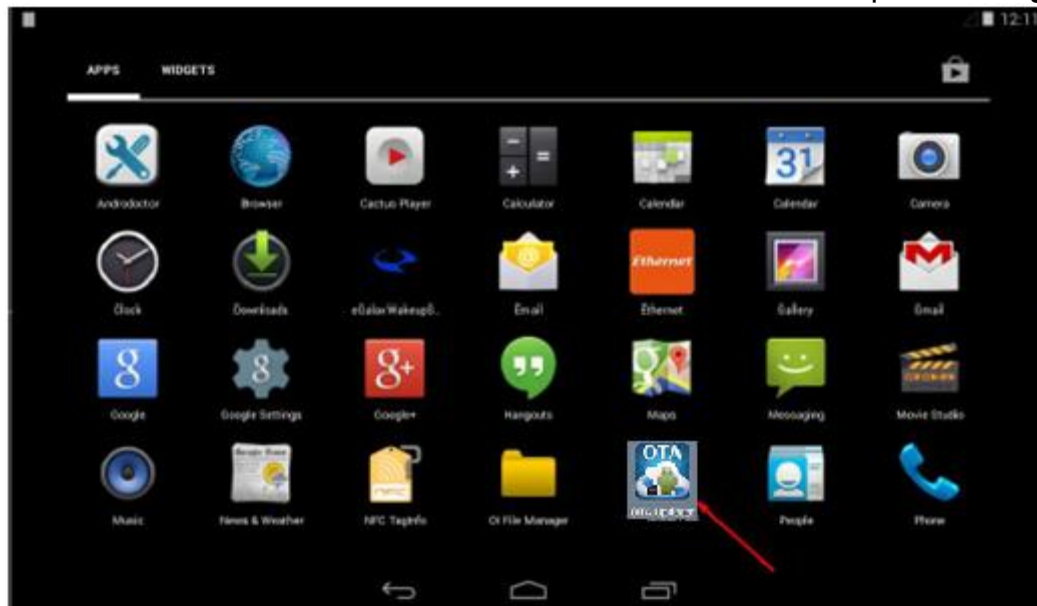
After ADB connection established, install APP or check system log via adb.



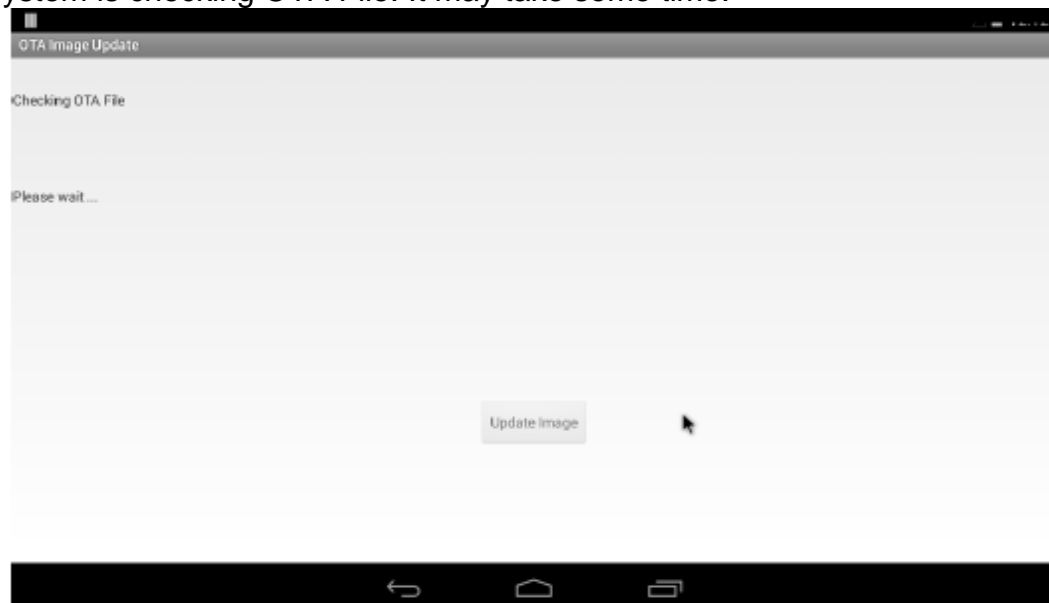
5.3 OTA Update Guide

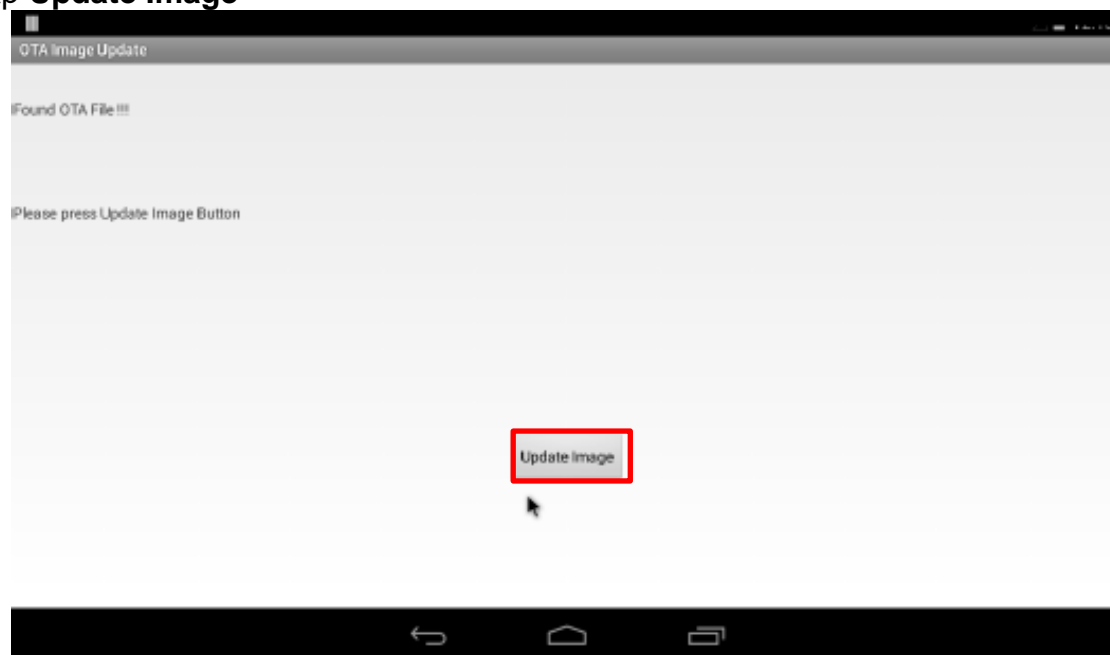
OTA is a tool which can help you to update OS image. To receive Android OS image file contact our sales representatives. Once you get the image file follow the guideline below.

1. Copy image files **ota_FA30_X_X_X_X.zip** and **FA30_X_X_X_X.md5** and to micro SD card.
2. Insert micro SD card to the slot in the device. In the **APPS** menu tap **OTA Image Upd.**

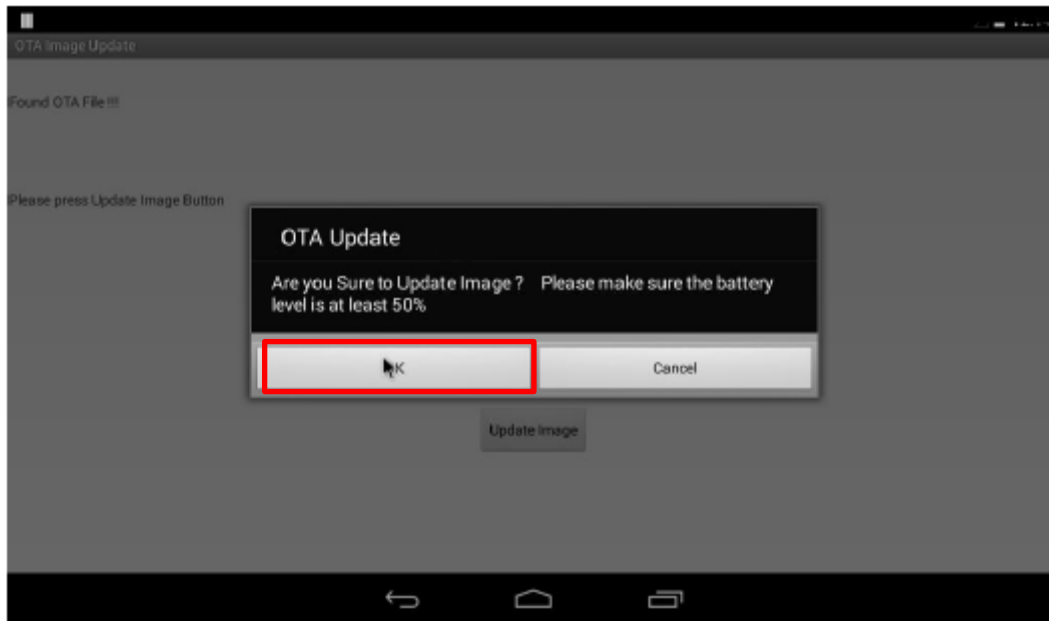


3. The system is checking OTA File. It may take some time.

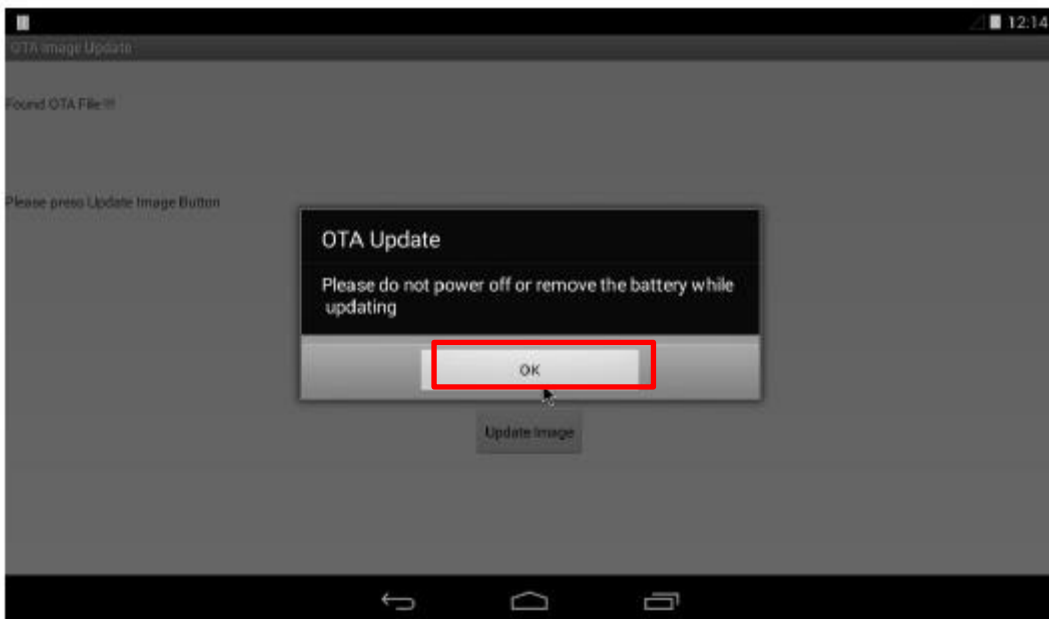


4. Tap **Update Image**5. Make sure the file founded by the system is image update file. Tap **OK**.

6. Tap **OK**. Make sure the battery level is at least 50%.



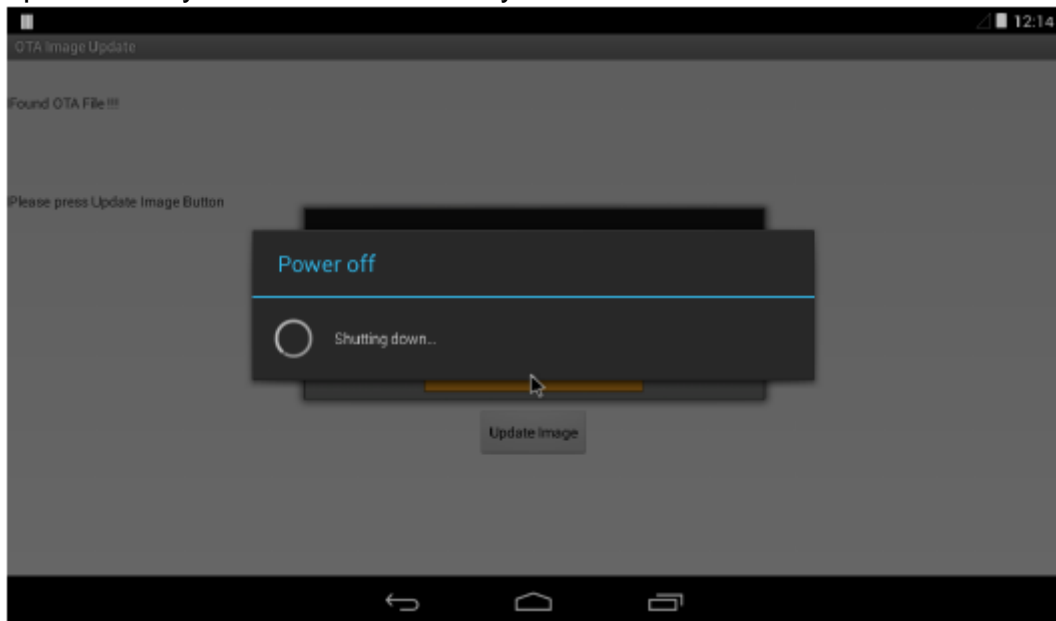
7. Tap **OK**.



Important:

Do not disconnect the power source!
Do not remove the battery!

8. After update the system will automatically restart.



5.4 OS Image Update Guide

To receive OS image update guide please contact Winmate at <http://www.winmate.com/>

Chapter 6: Software Programming Guide

This chapter provides information about software programming tools for the FA30SB3-210 Arm-based Box PC.

6.1 Android Programming Guide

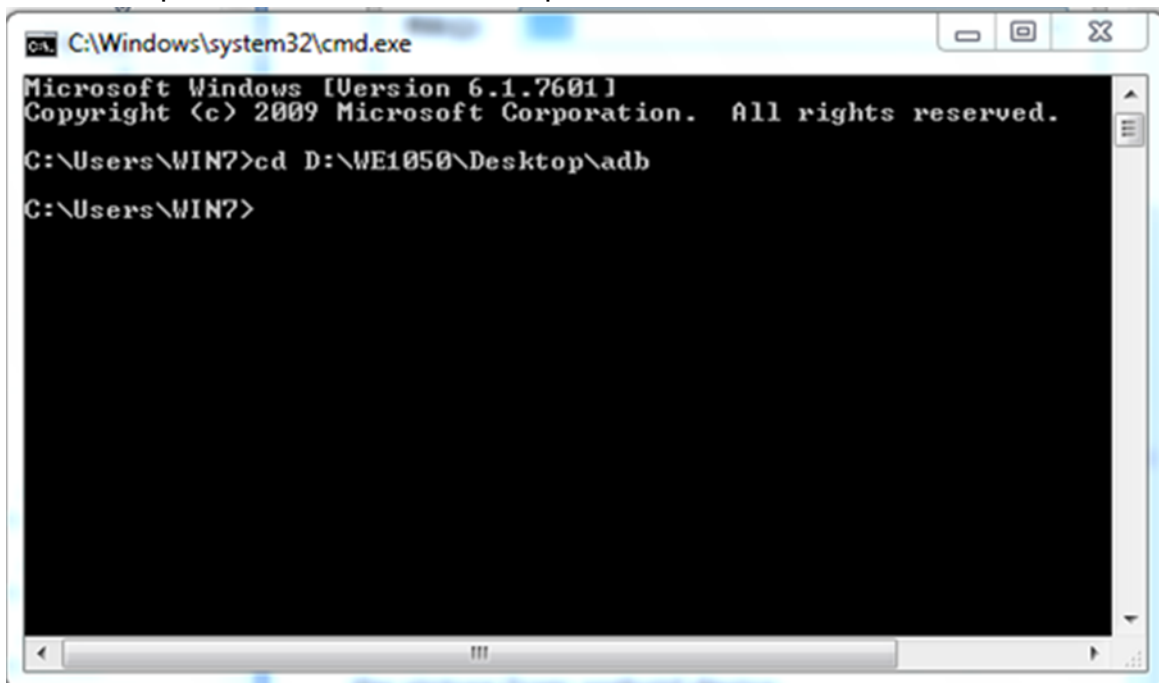
All the programming guides can be found in the driver CD that comes in the package with the FA30SB3-210

6.1.1 ADB Installation

Installation link: FA30-210 CD\Android Documents and Files\PC_tool\adb\driver\adb.rar

ADB Installation:

1. Unzip “adb.rar” to the desktop.
2. Execute “command line”, then go into the “adb” folder
→ For example : `cd D:\WE1050\Desktop\adb`



6.1.2 GPIO

General-purpose input/output (GPIO) is a generic pin on an integrated circuit whose behavior—including whether it is an input or output pin—is controllable by the user at run time. GPIO pins have no predefined purpose, and go unused by default.

You can find all information about Android's GPIO installation inside the Driver CD.

Programming Guide link:

FA30-210 CD\Android Documents and Files\GPIO\ProgrammingGuide

6.1.3 CANBus

You can find all information about Android's CAN BUS installation inside the Driver CD.

Programming Guide link:

FA30-210 CD\Android Documents and Files\Canbus\API\doc\ FA30-210

6.1.4 UART Sample Code

You can find the sample code for Android's UART installation inside the Driver CD.

Sample Code:

FA30-210 CD\Android Documents and Files\UART\SampleCode

You can find Android's UART Switch programming guide installation inside the Driver CD that comes with FA30-210 Motherboard.

Programming Guide Path:

FA30-210 CD\Android Documents and Files\UART\ProgrammingGuide

6.1.5 OTA Update Guide

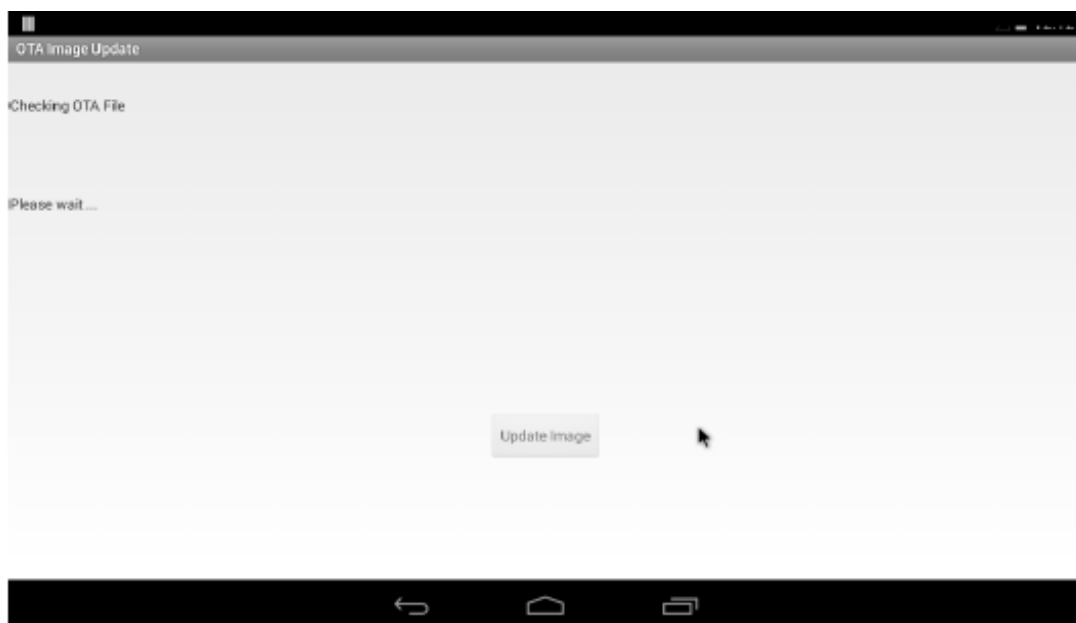
OTA is a tool which can help you to update OS image. To update Android OS image you need to receive image file. Once you get the image file follow the guideline below.

OTA Update:

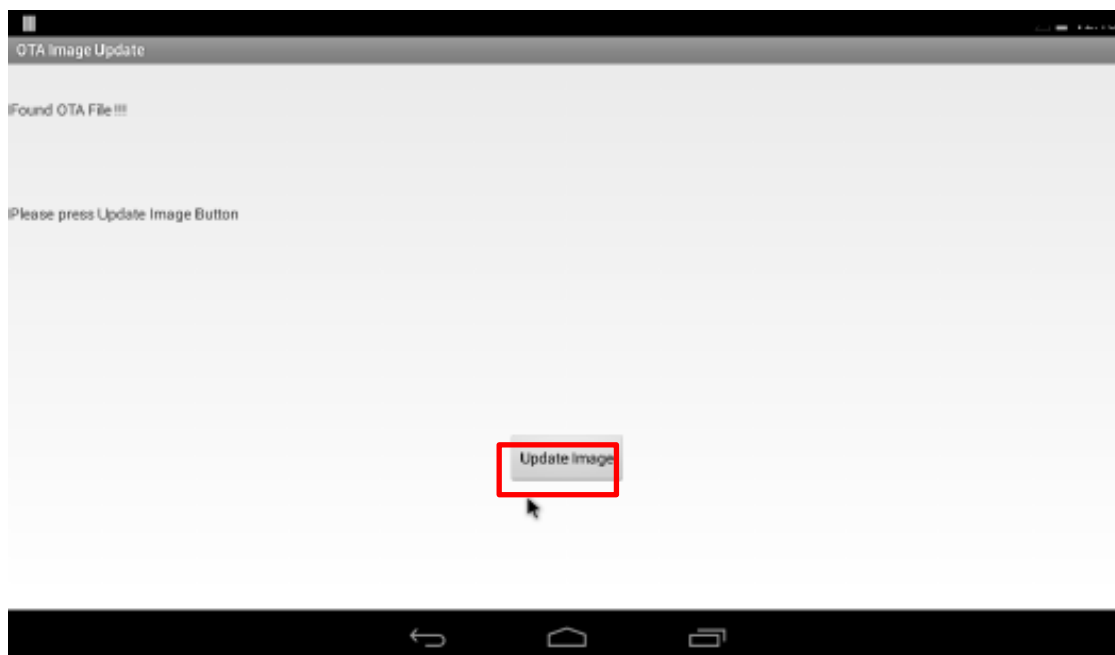
1. Copy the image file to micro SD card.
2. Insert the micro SD card to the slot in the device. In the **APPS** menu tap **OTA Image Upd**



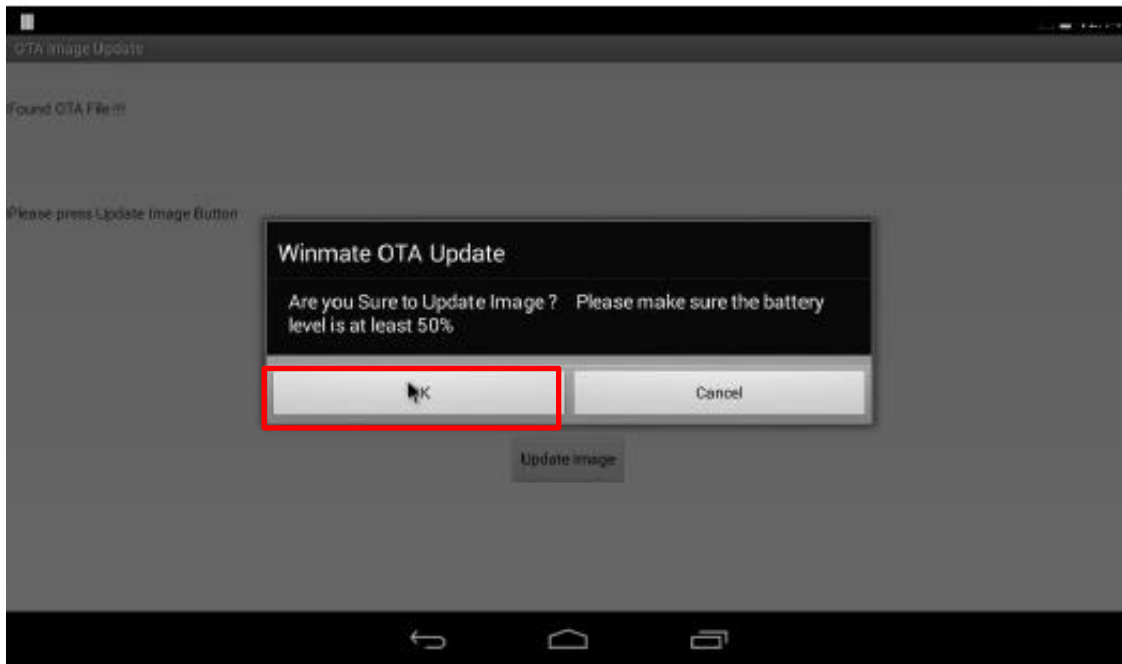
3. The system is checking OTA File. It may take some time.



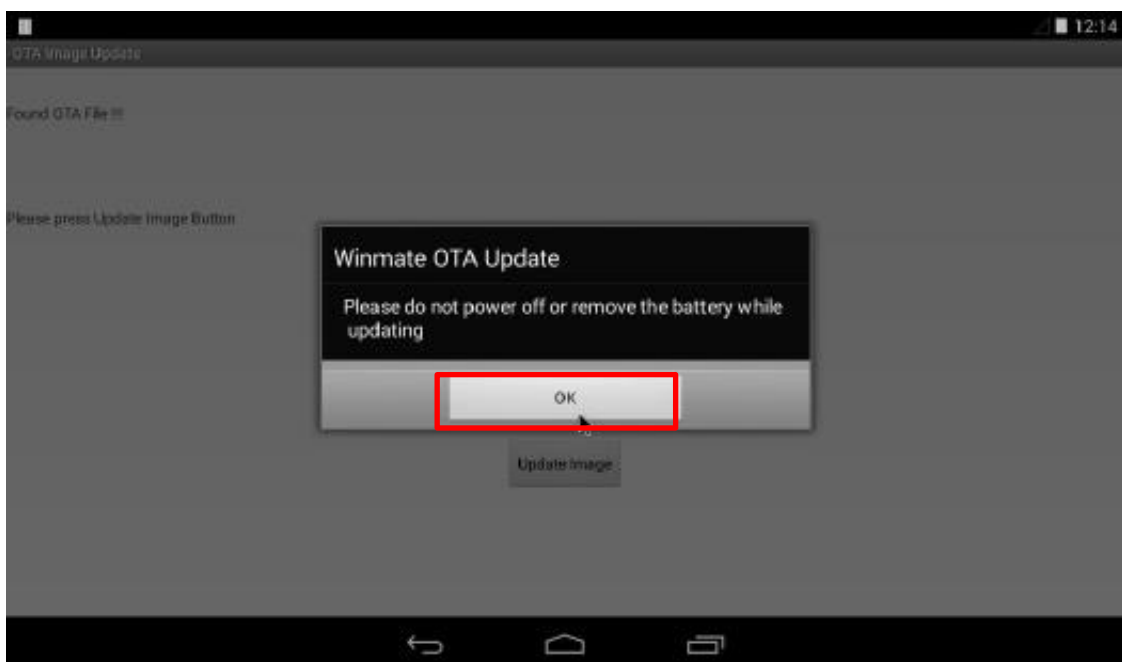
4. Tap **Update Image**



5. Make sure the file founded by the system is image update file. Tap **OK**.
6. Tap **OK**. Make sure the battery level is at least 50%.

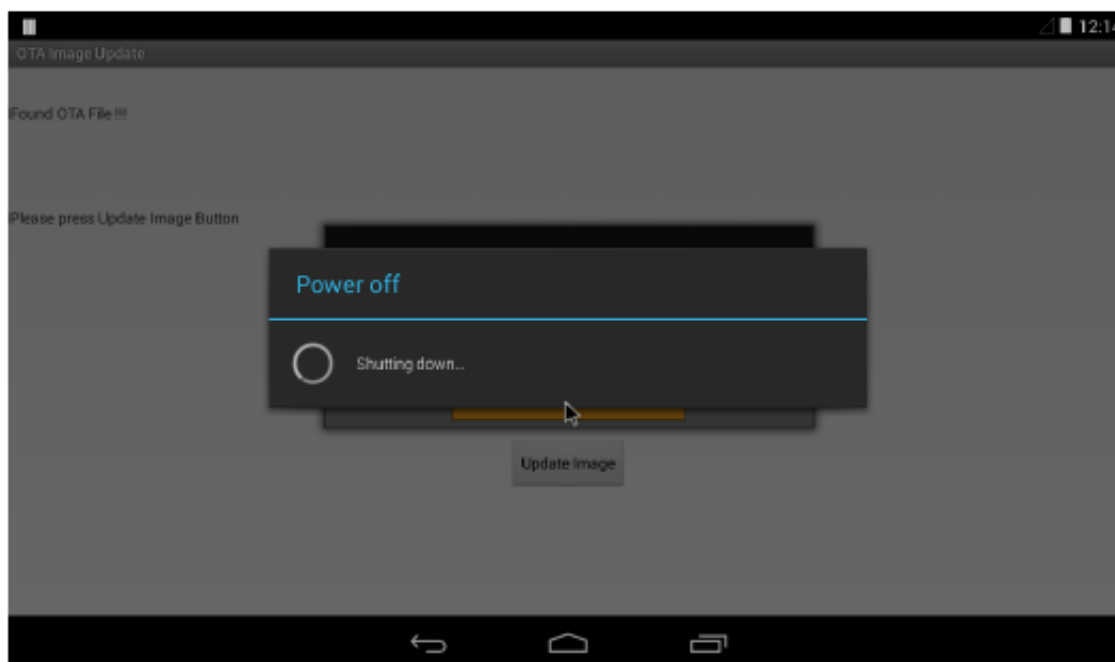


7. Tap **OK**.

**Important:**

Do not disconnect the power source!
Do not remove the battery!

8. After update the system will automatically restart.



6.2 Linux and Ubuntu Programming Guide

6.2.1 GPIO

General-purpose input/output (GPIO) is a generic pin on an integrated circuit whose behavior—including whether it is an input or output pin—is controllable by the user at run time. GPIO pins have no predefined purpose, and go unused by default.

You can find all information about Linux's GPIO installation inside the Driver CD.

Programming Guide link:

FA30-210 CD\Linux_QT Documents and Files\GPIO\ProgrammingGuide

6.2.2 CANBus

You can find all information about Linux's CANBus installation inside the Driver CD.

Programming Guide link:

FA30-210 CD\Linux_QT Documents and Files\Canbus\ProgrammingGuide

6.2.3 UART Switch

You can find all information about Linux's UART Switch installation inside the Driver CD.

Programming Guide link:

FA30-210 CD\Linux_QT Documents and Files\UART\ProgrammingGuide

Chapter 7: Technical Support

This chapter includes pathway for technical support and Software Development Kit (SDK). Free technical support is available from our engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products. If any problem occurs fill in problem report form enclosed and immediately contact us.

Problem Description: Please describe the problem as clearly as possible. Detailed description of the occurred problem will allow us to find the best solution to solve the problem as soon as possible.

Appendix

This chapter provides additional information about FA30SB3-210 AR-based Box PC.



Appendix A: Order Information

FA30SB3-210 ARM – based Box PC is available in the following configurations.

Item	Specifications
Processor	Default: ARM Freescale® Cortex A9 i.MX6 Dual Core 1GHz Option: ARM Freescale® Cortex A9 i.MX6 Quad Core 1GHz
System Memory	Default: 1GB LPDDR3 Option : 2GB LPDDR3

