15” Multi-Touch Chassis HMI
Freescale® Cortex A9 i.MX6 Dual Core 1GHz
(Optional Quad Core)
R15FA3S-PTC3

User Guide
V1.0

Document part number : 91521110101V
Android 6.0

Please read these instructions carefully before using this product, and save this manual for future use
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Preface

FCC 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 "A" 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

Electromagnetic Compatibility Directive (2014/30/EU)
  - IEC61000-4-2: 2009
  - IEC61000-4-4: 2012
  - IEC61000-4-5: 2014
  - IEC61000-4-6: 2014
  - IEC61000-4-8: 2010
  - IEC61000-4-11: 2004
- EN61000-3-2:2014
- EN61000-3-3:2013

Low Voltage Directive (2014/35/EU)

This equipment is in conformity with the requirement of the following EU legislations and harmonized standards. Product also complies with the Council directions.
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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 1W16Axxxxxxxx means October of year 2016.

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

Unealerted’ attention indique un dommage possible à l’équipement et explique comment éviter le problème potentiel.

**WARNING!/AVERTISSEMENT!**
An Electrical Shock Warning indicates the potential harm from electrical hazards and how to avoid the potential problem.

Un Avertissement de Choc Électriqueindique le potentiel de chocs sur des emplacements électriques et comment éviter ces problèmes.
Safety Information

**WARNING! / AVERTISSEMENT!**
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.


**CAUTION/ATTENTION**
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.

*Toujours vérifier votre mise à la terre afin d’éliminer toute charge statique avant de toucher la carte CPU. Les équipements électroniques modernes sont très sensibles aux décharges d’électricité statique. Toujours utiliser un bracelet de mise à la terre comme précaution. Placer toutes les composantes électroniques sur une surface conçue pour dissiper les charge, ou dans un sac anti-statique lorsqu’elles ne sont pas dans le chassis.*

---

**RoHS Declaration**

According to the European Union issued Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS 2.0). Winmate Inc.’s guaranty is able to meet the current regulations and customer requirements in respect of the application of cadmium, lead, mercury, hexavalent chromium, PBBs, PBDEs in its product.
Chapter 1: Introduction

The R15FA3S-PTC3 is a 15-inch flat HMI with chassis front surface industrial design. HMI runs on low power consuming Freescale® Cortex A9 i.MX6 Dual Core processor. Display features 1024 x 768 screen resolution, maximum colors of 16.2 million pixels and projected capacitive touch. Multiple I/O interface includes USB 2.0 and USB OTG, one LAN port, serial interface RS-232/422/485 and CANBus for machine-to-machine communications, mini USB console port and micro SD card for storage expansion.

Chassis housing is protected with IP65 standard against water and dust from the front. The R15FA3S-PTC3 is an ultimate solution for Point-of-Sale (POS) applications.

1.1 Features

- 15” 1024 x 768 with P-CAP touchscreen
- Low power consumption with Freescale® Cortex A9 i.MX6 Dual Core 1GHz (Optional Quad Core) processor
- Fanless cooling system and ultra-low power consumption
- Front IP65 for protection against water and dust
- A true flat, easy-to-clean front surface with edge-to-edge design
- Plastic housing
- Designed for Point-of-Sale (POS) applications
1.2 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:

<table>
<thead>
<tr>
<th>HMI</th>
<th>Quick Start Guide (Hardcopy)</th>
<th>Driver CD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Varies by product specifications</td>
<td>91521110101W</td>
<td>FA30-210: 9171111I103L</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AC Adapter (12V/ 50W)</th>
<th>Power Cord</th>
<th>Terminal Block 2 pin to DC jack</th>
</tr>
</thead>
<tbody>
<tr>
<td>922D050W12VA</td>
<td>Varies by country</td>
<td>94J602G020K0</td>
</tr>
</tbody>
</table>
### 1.3 Description of Parts

**R15FA3S-PTC3**

*Unit: mm*

*Dimensions: 352.50 x 276.70 x 45*

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>12V DC in (2-Pin Phoenix type)</td>
<td>⑥</td>
<td>RJ-45 (LAN) Optional PoE IEEE 802.3at (25W)</td>
</tr>
<tr>
<td>②</td>
<td>USB 2.0</td>
<td>⑦</td>
<td>Console Port (Mini USB) for Linux Debug</td>
</tr>
<tr>
<td>③</td>
<td>CANBus (DB9)</td>
<td>⑧</td>
<td>Micro SD Console Port (Mini USB)</td>
</tr>
<tr>
<td>④</td>
<td>RS-232/422/485 (DB9)</td>
<td>⑨</td>
<td>Power and Reset Button</td>
</tr>
<tr>
<td>⑤</td>
<td>USB OTG</td>
<td>⑩</td>
<td>1 Watt Speaker</td>
</tr>
</tbody>
</table>

---

### Connectors

- **①** 12V DC in (2-Pin Phoenix type)
- **②** USB 2.0
- **③** CANBus (DB9)
- **④** RS-232/422/485 (DB9)
- **⑤** USB OTG
- **⑥** RJ-45 (LAN) Optional PoE IEEE 802.3at (25W)
- **⑦** Console Port (Mini USB) for Linux Debug
- **⑧** Micro SD Console Port (Mini USB)
- **⑨** Power and Reset Button
- **⑩** 1 Watt Speaker
Chapter 2: Installation

2.1 Wiring Requirements

The following common safety precautions should be observed before installing any electronic device:

- Strive to use separate, non-intersecting paths to route power and networking wires. If power wiring and device wiring paths must cross make sure the wires are perpendicular at the intersection point.
- Keep the wires separated according to interface. The rule of thumb is that wiring that shares similar electrical characteristics may be bundled together.
- Do not bundle input wiring with output wiring. Keep them separate.
- When necessary, it is strongly advised that you label wiring to all devices in the system.

CAUTION

- Do not run signal or communication wiring and power wiring in the same conduit. To avoid interference, wires with different signal characteristics (i.e., different interfaces) should be routed separately.
- Be sure to disconnect the power cord before installing and/or wiring your device.
- Verify the maximum possible current for each wire gauge, especially for the power cords. Observe all electrical codes dictating the maximum current allowable for each wire gauge.
- If the current goes above the maximum ratings, the wiring could overheat, causing serious damage to your equipment.
- Be careful when handling the unit. When the unit is plugged in, the internal components generate a lot of heat which may leave the outer casing too hot to touch.
2.2 VESA Mounting

This device supports VESA Mounting and provides various types of mounting options to fit any industrial use.

<table>
<thead>
<tr>
<th>Size</th>
<th>VESA Plate</th>
<th>Screw Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>15&quot;</td>
<td>75x75 mm, 100x100 mm</td>
<td>M4 x 5</td>
</tr>
</tbody>
</table>

**Mounting Instruction**

Use Philips M4x5 screws to fix the desk stand to VESA holes on the back cover of the device.

*The picture is for demonstration purposes only. VESA Mounting accessories are not supplied by Winmate.*
2.3 Turning On

Follow the following steps to turn on your device:

1. Connect one side of 2-pin terminal block to DC jack connector to the HMI. Connect the other side to the AC adapter.
2. Connect the power cord to AC adapter.
3. Plug the power cord to the AC outlet.
4. Press **Power** button on the rear OSD panel.
2.4 Connecting Peripherals

2.4.1 Power Input Connector

The DC power source input of the HMI is a 2 pin terminal block connector that supports 12V DC power input.

![Diagram of power input connector]

<table>
<thead>
<tr>
<th>Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Voltage: 11.4V</td>
</tr>
<tr>
<td>Maximum Voltage: 12.6V</td>
</tr>
<tr>
<td>Maximum Current: 4.2A</td>
</tr>
</tbody>
</table>

2.4.2 Serial Port Connector

The HMI has one serial port connector to connect your device to external devices such as mouse, modem or printer.

![Diagram of serial port connector]

You can configure serial port settings by software.

<table>
<thead>
<tr>
<th>Pin №</th>
<th>RS-232 (Default)</th>
<th>RS-422</th>
<th>RS-485</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DCD</td>
<td>TxD-</td>
<td>D-</td>
</tr>
<tr>
<td>2</td>
<td>RXD</td>
<td>TxD+</td>
<td>D+</td>
</tr>
<tr>
<td>3</td>
<td>TXD</td>
<td>RxD+</td>
<td>NC</td>
</tr>
<tr>
<td>4</td>
<td>DTR</td>
<td>RxD-</td>
<td>NC</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>GND</td>
<td>GND</td>
</tr>
<tr>
<td>6</td>
<td>DSR</td>
<td>NC</td>
<td>NC</td>
</tr>
<tr>
<td>7</td>
<td>RTS</td>
<td>NC</td>
<td>NC</td>
</tr>
<tr>
<td>8</td>
<td>CTS</td>
<td>NC</td>
<td>NC</td>
</tr>
<tr>
<td>9</td>
<td>RI</td>
<td>NC</td>
<td>NC</td>
</tr>
</tbody>
</table>
2.4.3 Ethernet Connector

The HMI supports one RJ45 10/100/1000 Mbps Ethernet interface for connecting to the internet.

<table>
<thead>
<tr>
<th>Pin №</th>
<th>Signal Name</th>
<th>Pin №</th>
<th>Signal Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TX1+</td>
<td>2</td>
<td>TX1-</td>
</tr>
<tr>
<td>3</td>
<td>TX2+</td>
<td>4</td>
<td>TX2-</td>
</tr>
<tr>
<td>5</td>
<td>TX3+</td>
<td>6</td>
<td>TX3-</td>
</tr>
<tr>
<td>7</td>
<td>TX4+</td>
<td>8</td>
<td>TX4-</td>
</tr>
</tbody>
</table>

**IMPORTANT:**
Power Device (PD): follows IEEE 802.3at (25 Watt)

2.4.4 USB 2.0 Connector

Use USB A Type (USB 2.0) connector to connect your device to other USB 2.0 compatible devices.

<table>
<thead>
<tr>
<th>Pin №</th>
<th>Signal Name</th>
<th>Pin №</th>
<th>Signal Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+5V</td>
<td>2</td>
<td>USB_D-</td>
</tr>
<tr>
<td>3</td>
<td>USB_D+</td>
<td>4</td>
<td>GND</td>
</tr>
</tbody>
</table>

3.4.5 USB OTG Connector

Use USB OTG connector to connect the HMI to other USB On-The-Go compliant devices such as flash drives, digital cameras, mice or keyboards. Use USB OTG cable to install software on the HMI.

<table>
<thead>
<tr>
<th>Pin №</th>
<th>Signal Name</th>
<th>Pin №</th>
<th>Signal Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+5V</td>
<td>2</td>
<td>USB_OTG_D-</td>
</tr>
<tr>
<td>3</td>
<td>USB_OTG_D+</td>
<td>4</td>
<td>USB_OTG_ID</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Refer to the User Manual for more details on how to install software.
3.4.6 Micro SD Card Slot

Insert microSD card to microSD card slot to extend the memory of your HMI.

<table>
<thead>
<tr>
<th>Pin №</th>
<th>Signal Name</th>
<th>Pin №</th>
<th>Signal Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DATA2</td>
<td>2</td>
<td>DATA3</td>
</tr>
<tr>
<td>3</td>
<td>CMD</td>
<td>4</td>
<td>+3.3V</td>
</tr>
<tr>
<td>5</td>
<td>CLK</td>
<td>6</td>
<td>GND</td>
</tr>
<tr>
<td>7</td>
<td>DATA0</td>
<td>8</td>
<td>DATA1</td>
</tr>
<tr>
<td>9</td>
<td>Card_Det</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.5 Speaker

Speaker is located on the rear side of the display.

<table>
<thead>
<tr>
<th>Electrical Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated impedance</td>
</tr>
<tr>
<td>6±15% ohms@2KHz, 1 Vrms input</td>
</tr>
<tr>
<td>Power Rating</td>
</tr>
<tr>
<td>0.67 W</td>
</tr>
<tr>
<td>Short Term Max Power</td>
</tr>
<tr>
<td>1.3W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Acoustical Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound Pressure Level</td>
</tr>
<tr>
<td>75±3dB/40cm@1kHz</td>
</tr>
</tbody>
</table>
Chapter 3: Operating the Device

The R15FA3S-PTC3 runs on Android 6.0 OS (Default).

3.1 Home Screen

Your device runs on Android 6.0 Operation System (Default).

Navigation Buttons
Back
Opens the previous screen you were working in, even if it was in a different app. Once you back up to the Home screen, you can’t go back any further.

Home
Returns to the Home screen. To get suggestions based on the screen you’re currently viewing, touch & hold this button.

Overview
Opens a list of thumbnail images of screens you’ve worked with recently. To open one, touch it. To remove a screen from the list, swipe it left or right or touch the X.

Your apps
To see all your apps, touch in the Favorites tray on any Home screen. This is where you can see all your apps, including those that come with your phone or tablet and those you downloaded on Google Play. You can move app icons to any of your Home screens. The apps you’ve used most recently appear in the first row.

Some apps hide these buttons temporarily, or fade them to small dots in the same position. To bring them back, touch the dots, touch the screen in the middle, or swipe up from the bottom.

Many screens in apps and Settings include a menu icon at the top right of the screen. Touch it to explore additional options, including Help & feedback.

To add an app to a Home screen:

1. Go to the Home screen where you want to place the app.
2. Touch All Apps.
3. Swipe from left to right to find the app you want.
4. Touch & hold the app until the Home screen appears, slide it into place, and lift your finger.

To remove an app icon from the Home screen without removing it permanently from your device, touch & hold it, slide your finger toward the top of the screen, and drop the app over Remove in the top left.
3.2 Quick Settings

You can open your device’s Settings app from the All Apps screen or from Quick Settings.

For example, to change notification sounds, and volume go to Settings > Device > Sound to change the volume.

Use Quick Settings to easily change frequently used settings, like turning on Wi-Fi. To open Quick Settings, swipe down from the top of the screen with two fingers. To change a setting, just touch the icon:

- **Display brightness**: Slide to lower or increase the brightness of your screen.
- **Wi-Fi network**: Turn Wi-Fi on or off or open the Wi-Fi settings menu.
- **Bluetooth settings**: Turn Bluetooth on or off or open the Bluetooth settings menu.
- **Auto-rotate**: Lock your device’s orientation in portrait or landscape mode.
Open the main Settings menu by touching **Settings** 🛠 at the top right.
3.3 Configuring Serial Port Settings

Serial COM Port can be configured for RS-232, RS-422 or RS-485. Winmate provides COM port settings application for Android OS.

To configure serial port settings:

1. Settings > Accessibility.

3. Comport-Setting > Comport 1/ Comport 2/ Comport 3

* Select Comport 1/ Comport 2/ Comport 3 that you want to configure.

4. Comport 1 > RS232/RS422/RS485

* Configure Comport 1 settings
3.4 Brightness Adjustment

Use can adjust the screen brightness in Android settings. Pull down from the top of the screen to get the notifications area. You can also access display settings in the settings menu.

To adjust the brightness of the screen:

1. Settings > Display > Brightness Level

Tap the cursor to the left to reduce the screen brightness. Tap the cursor to the right to increase the screen brightness.
3.5 Ethernet

1. Connect Ethernet Cable to the HMI.

2. Touch All APPS icon, and open Ethernet application.

3. Ethernet APP main menu appears
3.5.1 Configuring Ethernet Settings

Go to All Apps > Ethernet > Configure Ethernet

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

Connection Type

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHCP</td>
<td>The device automatically capture IP-address from the router</td>
</tr>
<tr>
<td>Static IP</td>
<td>Allows to manually set up IP-address, DNS, Network and Gateway</td>
</tr>
</tbody>
</table>
3.5.2 Configuring Ethernet

To check Ethernet settings:

Go to All Apps > Ethernet > Check Ethernet

Ethernet settings menu appears on the top right side of the desktop.
3.6 Winmate® Home Manager (WHM)

Winmate® HMI running on Android OS comes with preinstalled APP named Winmate® Home Manager (WHM) which let the device manager to lock the launcher then the user can only use one application assigned by the device manager.

3.6.1 How to Lock Applications

To lock applications:

1. In the main APPS window, select the **Home Manager APP** and tap it to open.
### Menu | Description
--- | ---
Home Manager | Set which app you want to run up automatically after booting
Password Manager | Set the WHM password *(Default password is “0000”)*.
About | Displays information about Home Manager

2. Go to **Application Selector**, and choose the app which you want to run up automatically after booting.
3. Go back to “Home Selector” and press “Clear and Reset Default Home”.

4. Select “Restrict Home” and “Always”, and then restart the computer to enable these settings.

The system will automatically start the application which you selected and lock it. Any time user presses home key or back key; the system will go back to the same application which you have selected.
3.6.2 How to Unlock Applications

Follow the instruction below to reset Home Manager.

1. If you want to reset the home manager, pull down the left side to open the status bar and open HomeManager.

2. System will request the password to login. Touch OK.
Default password is “0000”.

3. Restart the system and you will go back to the normal Launcher.

3.6.3 How to Change Password

To change the password:

1. Go to Password Manager and set your own password for this APP.
2. The default password is “0000”. Enter a new password in New Password field, and then tap Change Password.
Chapter 4: Software Installation

This chapter contains software installation and updates guide. All the programming guides can be found in the driver CD included in the package.

4.1 Android Debug Bridge Driver Installation

**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 FA30-210 USB OTG driver in the CD that comes in the package:
- CDM v2.08.28 Certified\ftdibus.inf
- CDM v2.08.28 Certified\ftdiport.inf

You need to connect HMI 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 (see below) to guarantee USB OTG compliance.

*I/O layout of the HMI device on the picture is for demonstration purposes only. Your I/O layout may vary from the picture above.*
4.1.1 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**.

![Windows Startup Settings](image)

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

![Startup Settings](image)

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
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.

4.1.2 ADB Driver Installation

1. Confirm whether the USB device was found by the system. Device Manager > 120A > Other devices > FA34 > 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.
4.2 Installing Android Debug Bridge (ADB)


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

   ![ADB Terminal window]

2. Connect FA34 motherboard to the computer via USB. FA34 will ask you to confirm USB debugging. Tap OK.

   ![Allow USB debugging]

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

![ADB Terminal window]
4.3 Downloading Image Tool

Download OS Image Tool update guide from Winmate Download Center:

4.4 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.

To update OTA firmware:

1. Copy image files `ota_FA34_X_X_X_X.zip` and `FA34_X_X_X_X. md5` and to micro SD card.

2. Insert micro SD card to the slot in the computer. In the APPs menu tap OTA Image Upd.
System shows OTA firmware related information.

3. Click Auto-check Update. 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. Make sure the battery level is at least 50%. Tap **OK**.

7. Tap **OK**.

**IMPORTANT:**
Do not disconnect the power source!
Do not remove the battery!
8. After update the system will automatically restart.

4.5 OS Image Update Guide

Download OS Image update guide from Winmate Download Center
# Appendix A: Product Specifications

<table>
<thead>
<tr>
<th>Model Name</th>
<th>R15FA3S-PTC3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Display</strong></td>
<td></td>
</tr>
<tr>
<td>Size/Type</td>
<td>15” TFT</td>
</tr>
<tr>
<td>Resolution</td>
<td>1024 x 768</td>
</tr>
<tr>
<td>Brightness</td>
<td>300 cd/m²</td>
</tr>
<tr>
<td>Contrast Ratio</td>
<td>700:1 (typ.)</td>
</tr>
<tr>
<td>Viewing Angle</td>
<td><del>80</del>80 (H); <del>80</del>80 (V)</td>
</tr>
<tr>
<td>Max Colors</td>
<td>16.2M</td>
</tr>
<tr>
<td>Front Side Glass</td>
<td>Yes (Optional)</td>
</tr>
<tr>
<td>Touch</td>
<td>Projected Capacitive Touch (Default)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>System Specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor</td>
<td>Freescale® Cortex A9 i.MX6 Dual Core 1GHz (Optional Quad Core)</td>
</tr>
<tr>
<td>Memory</td>
<td>1GB LPDDR3</td>
</tr>
<tr>
<td>Storage</td>
<td>Onboard 16GB eMMC (Default), micro SD card</td>
</tr>
<tr>
<td>OS</td>
<td>Android 6.0 (Default) Linux 4.1.15, QT 5.5 (Optional) Ubuntu 16.04 (Optional)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Input/Output</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial Port</td>
<td>1 x RS-232/422/485 (DB9), 1 x CANBus (DB9)</td>
</tr>
<tr>
<td>USB</td>
<td>1 x USB 2.0, 1 x USB OTG</td>
</tr>
<tr>
<td>Ethernet</td>
<td>1 x RJ 45-10/100/1000 Mbps (LAN) *Optional PoE IEEE 802.3at (25W)</td>
</tr>
<tr>
<td>Console</td>
<td>1 x Mini USB</td>
</tr>
<tr>
<td>SD Card</td>
<td>1 x Micro SD Card Reader</td>
</tr>
<tr>
<td>Power Connector</td>
<td>1 x Terminal block 2-pin</td>
</tr>
<tr>
<td>Speaker</td>
<td>2 x 1W Speakers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Power Specifications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Input</td>
<td>12V DC Terminal Block (Phoenix Type)</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>13W typical, normal operation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mechanical Specification</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting</td>
<td>VESA Mount (100x100 mm, 75x75 mm)</td>
</tr>
<tr>
<td>Dimensions (W x H x D)</td>
<td>352.5 x 276.7 x 45 (mm)</td>
</tr>
<tr>
<td>Housing</td>
<td>Color RAL 7016 Plastic casing</td>
</tr>
<tr>
<td>Buttons</td>
<td>Power, Reset</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environment Considerations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature</td>
<td>0°C to 40°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-10°C to 50°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>10%~95% (non-condensing)</td>
</tr>
<tr>
<td>Certification</td>
<td>CE, FCC Class A, UL, RoHS Directive 2011/65/EU</td>
</tr>
</tbody>
</table>
Appendix B: Cleaning the LCD Monitor

Before cleaning:
- Make sure the device is turned off.
- Disconnect the power cable from any AC outlet.

When cleaning:
- Never spray or pour any liquid directly on the screen or case.
- Wipe the screen with a clean, soft, lint-free cloth. This removes dust and other particles.
- The display area is highly prone to scratching. Do not use ketene type material (ex. Acetone), Ethyl alcohol, toluene, ethyl acid or Methyl chloride to clear the panel. It may permanently damage the panel and void the warranty.
- If it is still not clean enough, apply a small amount of non-ammonia, non-alcohol based glass cleaner onto a clean, soft, lint-free cloth, and wipe the screen.
- Do not use water or oil directly on the display screen. If droplets are allowed to drop on the screen, permanent staining or discoloration may occur.

Appendix C: Technical Support

Winmate provides the following Drivers, SDK and Update Guide:

<table>
<thead>
<tr>
<th>Item</th>
<th>Driver</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Android Driver</td>
<td>USB Driver</td>
</tr>
<tr>
<td>2</td>
<td>Android Driver</td>
<td>USB OTG Driver</td>
</tr>
<tr>
<td>3</td>
<td>SDK</td>
<td>Android SDK</td>
</tr>
<tr>
<td>4</td>
<td>SDK</td>
<td>Linux SDK</td>
</tr>
<tr>
<td>5</td>
<td>Guide</td>
<td>Download OS Image Tool</td>
</tr>
</tbody>
</table>

To find the Drivers and SDK, please refer to the Driver CD that comes in the package or contact us. Also, you can download drivers from Winmate Download Center.