

# Android

## Quick-Boot Release Note

TCCxxx-Android\_4.4(Kitkat)-Quickboot-Release\_Note-V1.03.03

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*Preliminary*

***TeleChips***

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**Revision History**

Date	Version	Description
2013-03-20	0.01	Release note for JellyBean Quickboot Pre-Alpha Release
2013-05-22	0.02	Release note for JellyBean Quickboot Beta Release
2013-06-07	0.03	Release note for JellyBean Quickboot Beta +Patch
2013-07-03	1.00	Release note for JellyBean Quickboot Official Release
2013-08-05	1.01	Release note for JellyBean Quickboot v1.01 Release
2013-09-02	1.02	Release note for JellyBean Quickboot v1.02 Release
2013-11-29	1.03	Release note for JellyBean Quickboot v1.03 Release
2014-03-31	1.03.03	Release note for Kitkat Quickboot v1.03.3 Beta Release

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## 1 Quickboot v1.03.03 Kitkat Beta Release

### 1.1 New feature

In the Kitkat 4.4 Quick-boot v1.03.03 added, refer to the following description.

No	Chips	Description
1	<b>TCC8930 MID</b>	In case of NAND, full functions were tested. In case of EMMC, basic functions were only tested.
2	<b>TCC8930 STB</b>	Basic functions were only tested.
3	<b>TCC8935 Dongle</b>	Basic functions were only tested.
4	<b>TCC8920 MID</b>	Basic functions were only tested.
5	<b>TCC8920 STB</b>	Basic functions were only tested.
6	<b>TCC8925 Dongle</b>	Basic functions were only tested.

[table 1. Supported Chip in Kitkat Quick-boot v1.03.03 Beta Release]

### 1.2 Known Issue

In the Kitkat Quick Boot Beta Release, there is some Known Issue. And for more information, refer to the following description.

Function	Description
<b>WI-FI</b>	WI-FI do not connect when device auto reboot after making quick-boot image in the <b>TCC8925 and TCC8935 dongle</b> . We used software reset in order to reboot after making quick-boot image. WI-FI module do not initialize with software reset because we can't fix this issue. If you have the HW RESET PIN of WI-FI module, this issue does not occurs.
<b>Display Problem 1</b>	Sometimes dark-green or black screen happened when rebooting. It only happened on the <b>TCC8930-STB/Dongle and TCC8925-Dongle</b> platform.
<b>Display Problem 2</b>	Sometimes screen shifting problem happened on screen when booting. It only happened on <b>TCC8925 Dongle</b> platform.

[table 3. Known Issue in Kitkat Quick Boot v1.03.03 Beta Release]

## 2 Quickboot v1.03 Release

### 2.1 New feature

In the JellyBean 4.2 Quick-boot v1.03 added new feature, refer to the following description.

No	Chips	Description
1	TCC8930 MID	Support prebuilt snapshot image to enhance productivity(Alpha version) Support to include widget, wallpaper and launcher to snapshot image Support boot chart
2	TCC8930 STB	
3	TCC8935 Dongle	
4	TCC8920 MID	
5	TCC8920 STB	
6	TCC8925 Dongle	

[table 1. Supported Chip in Jelly Bean Quick-boot v1.03 Release]

### 2.2 Known Issue

In the Jelly Bean Quick Boot Official Release, there is some Known Issue. And for more information, refer to the following description.

Function	Description
WI-FI	WI-FI do not connect when device auto reboot after making quick-boot image in the <b>TCC8925 and TCC8935 dongle</b> . We used software reset in order to reboot after making quick-boot image. WI-FI module do not initialize with software reset because we can't fix this issue. If you have the HW RESET PIN of WI-FI module, this issue does not occurs.
Shutdown	Sometimes hang up happened on shutdown when you select factory reset or erasing quick-boot image menu. It happened in the <b>TCC8930 MID and STB</b> only.
Display Problem	Sometimes black or shifting problem happened on screen when booting. It happened on <b>TCC8925 Dongle</b> only.

[table 3. Known Issue in Jelly Bean Quick Boot v1.03 Release]

### 2.3 Change History

- Support prebuilt snapshot image to enhance productivity.
- Support to include widget, wallpaper and launcher in snapshot image.
- Support boot chart
- [Bug fixed] AfterQBSysCallback3 did not call in first boot.
- Add StartSystemUIQBCallback to modify intent of starting system ui.
- Add to run Looper before call AfterQBSysCallback2 and AfterQBSysCallback3.
- Include various services (system ui, ui mode, status bar...) in snapshot image to optimize quick boot.
- Change default setting of lock screen to false (AVN Only).

### 3 Quickboot v1.02 Release

#### 3.1 New feature

In the JellyBean 4.2 Quick-boot v1.02 added new feature, refer to the following description.

No	Chips	Description
1	TCC8930 MID	Support prebuilt “apk” (without odex) on system application
2	TCC8930 STB	
3	TCC8935 Dongle	
4	TCC8920 MID	
5	TCC8920 STB	
6	TCC8925 Dongle	

[table 1. Supported Chip in Jelly Bean Quick-boot v1.02 Release]

#### 3.2 Known Issue

In the Jelly Bean Quick Boot Official Release, there is some Known Issue. And for more information, refer to the following description.

Function	Description
WI-FI	WI-FI do not connect when device auto reboot after making quick-boot image in the <b>TCC8925 and TCC8935 dongle</b> . We used software reset in order to reboot after making quick-boot image. WI-FI module do not initialize with software reset because we can't fix this issue. If you have the HW RESET PIN of WI-FI module, this issue does not occurs.
Shutdown	Sometimes hang up happened on shutdown when you select factory reset or erasing quick-boot image menu. It happened in the <b>TCC8930 MID and STB</b> only.

[table 3. Known Issue in Jelly Bean Quick Boot v1.02 Release]

#### 3.3 Change History

- Add to support prebuilt apk (without odex) on system application, please detail information refer to the “How to prebuilt “apk” file on system application” topic of TCCxxx-Android-V0.05-Quickboot.pdf.
- Add to skip loading snapshot image when you input ‘s’ key via serial console on boot loader.
- [Bug fixed] The screen lock do not disappear when screen lock disable and boot up with snapshot image.
- Add calling AfterQBSysSystemCallbacks in SystemServer for consistency of source code.
- [Bug fixed] The ADB debug option do not apply when you change the ADB Debug option and boot up with snapshot.

## 4 Quickboot v1.01 Release

### 4.1 New feature

In the JellyBean 4.2 Quick-boot v1.01 added new feature, refer to the following description.

No	Chips	Description
1	TCC8930 MID	Support displaying last frame buffer image(It displayed image before making quickboot image)
2	TCC8930 STB	
3	TCC8935 Dongle	
4	TCC8920 MID	
5	TCC8920 STB	
6	TCC8925 Dongle	

[table 1. Supported Chip in JellyBean Quick-boot v1.01 Release]

### 4.2 Known Issue

In the Jelly Bean Quick Boot Official Release, there is some Known Issue. And for more information, refer to the following description.

Function	Description
Un-mount user-data Partition	In order to run check disk, we need to un-mount user data & cache partition. If just add "apk" file only in /system/app folder, used data un-mount issue will be happen. To avoid this problem, "apk" file and "odex" file should exist together. That means, there is no problem, if you use Android Build System. In case of occur issues, when user make the Rom Image by just copy "apk" file, user data un-mount issue will be occurs.
WI-FI	WI-FI do not connect when device auto reboot after making quick-boot image in the <a href="#">TCC8925 and TCC8935 dongle</a> . We used software reset in order to reboot after making quick-boot image. WI-FI module do not initialize with software reset because we can't fix this issue. If you have the HW RESET PIN of WI-FI module, this issue does not occurs.
Shutdown	Sometimes hang up happened on shutdown when you select factory reset or erasing quick-boot image menu. It happened in the <a href="#">TCC8930 MID and STB</a> only.

[table 3. Known Issue in Jelly Bean Quick Boot v1.01 Release]



#### 4.3 Change History

- [bug fix] "Making quickboot image" screen shift in the TCC8925 dongle and TCC8935 dongle.
- [bug fix] Cannot make quickboot image when build with user mode.
- Add GPU clock control on freeze() / thaw()
- Remove duplicated calling reboot function when making quickboot image.
- user&cache partition mount in init process when boot with snapshot image.  
If you want to change mount option, modify device/telechips/tcc89??/init.quickboot.tcc89??.rc file.
- Add NFC suspend/resume in tcc892x when boot with snapshot image.
- Add watchdog reset feature while reloading services on quickboot.
- Remove to kill process when making quickboot image.
- Modify to reload the sync manager service

## 5 Official Release

### 5.1 New feature

In the JellyBean 4.2 Quick-boot Official version added new feature, refer to the following description.

No	Chips	Description
1	TCC8930 MID	Support runnable callback for user added new services Support rle format of the "make quickboot image" ui For detailed information, please refers to the quick-boot user guide.
2	TCC8930 STB	
3	TCC8935 Dongle	
4	TCC8920 MID	
5	TCC8920 STB	
6	TCC8925 Dongle	

[table 1. Supported Chip in JellyBean Quick-boot Official Release]

### 5.2 Known Issue

In the Jelly Bean Quick Boot Official Release, there is some Known Issue. And for more information, refer to the following description.

Function	Description
Un-mount user-data Partition	In order to run check disk, we need to un-mount user data & cache partition. If just add "apk" file only in /system/app folder, used data un-mount issue will be happen. To avoid this problem, "apk" file and "odex" file should exist together. That means, there is no problem, if you use Android Build System. In case of occur issues, when user make the Rom Image by just copy "apk" file, user data un-mount issue will be occurs.
WI-FI	WI-FI do not connect when device auto reboot after making quick-boot image in the <b>TCC8925 and TCC8935 dongle</b> . We used software reset in order to reboot after making quick-boot image. WI-FI module do not initialize with software reset because we can't fix this issue. If you have the HW RESET PIN of WI-FI module, this issue does not occurs.
Shutdown	Sometimes hang up happened on shutdown when you select factory reset or erasing quick-boot image menu. It happened in the <b>TCC8930 MID and STB</b> only.
Screen shift	"Making quickboot image" screen shift in the TCC8925 dongle and TCC8935 dongle.

[table 3. Known Issue in Jelly Bean Quick Boot Official Release]

### 5.3 Change History

- Support runnable callback feature for user added new services.
- Support rle format of "making quick-boot image" ui.
- [bug fixed] hang up happened sometimes when boot with snapshot image in tcc8930.
- [bug fixed] booting delay happened sometimes when boot with snapshot image in tcc8920/tcc8930 STB.
- [bug fixed] some application such as youtube appeared error popup that unfortunately youtube has stopped when you installed it and reboot.
- [bug fixed] hang up happened in suspend & resume after boot with snapshot image. It happened in the TCC8930 STB.
- [bug fixed] USB 3.0 Device do not recognize in the TCC8930 STB.
- [bug fixed] "Unfortunately, Settings has Stopped" popup happened when you select settings->more menus.

## 6 Beta +Patch Release

### 6.1 New feature

In the JellyBean 4.2 Alpha version added new feature, refer to the following description.

No	Chips	Description
1	TCC8930 MID	Quick boot feature is supported.
2	TCC8930 STB	Quick boot feature is supported.
3	TCC8935 Dongle	Quick boot feature is supported.
4	TCC8920 MID	Quick boot feature is supported.
5	TCC8920 STB	Quick boot feature is supported.
6	TCC8925 Dongle	Quick boot feature is supported.

[table 1. Supported Chip in JellyBean Quickboot Beta +Patch Release]

### 6.2 Known Issue

In the Jelly Bean Quick Boot Beta +Patch Release, there is some Known Issue. And for more information, refer to the following description.

Function	Description
Booting	Rebooting Test Result TCC8930 STB(NAND) : Fail(1/200) - The system hangs after loading snapshot image. TCC8935 Dongle(NAND) : <a href="#">Pass</a> (0/1000) TCC8930 MID(NAND) : Fail(1/200) - The system hangs after loading snapshot image. - It occurs according to a CPU board. TCC8930 MID(EMMC) : <a href="#">Pass</a> (0/10000) TCC8920 STB(NAND) : <a href="#">Pass</a> (0/1000) TCC8925 Dongle(NAND) : <a href="#">Pass</a> (0/1000) TCC8920 MID(NAND) : <a href="#">Pass</a> (0/1000)
Reloading settings	Reloading the NFS setting do not supported yet.
Increase boot time (new)	Sometime booting is delayed in the tcc8920/tcc8930 STB. Test Result TCC8930 MID : <a href="#">pass</a> (0/200) TCC8930 STB : fail(1/200) TCC8935 Dongle : <a href="#">pass</a> (0/200) TCC8920 MID : <a href="#">pass</a> (0/200)

	TCC8920 STB : fail(1/200) TCC8925 Dongle : <a href="#">pass</a> (0/200)
<b>Reloading User Application</b>	Reloading a user application is supported. We find a error message that unfortunately youtube has stopped. This issue can reproduce the youtube 4.4.11 only.
<b>Optimize</b>	Loading a snapshot image in boot loader do not optimized in tcc893x.
<b>Un-mount user-data partition</b>	In order to run check disk, we need to un-mount user data & cache partition. If just add "apk" file only in /system/app folder, used data un-mount issue will be happen. To avoid this problem, "apk" file and "odex" file should exist together. That means, there is no problem, if you use Android Build System. In case of occur issue, when user make the Rom Image by just copy "apk" file, user data un-mount issue will be occur.

[table 3. Known Issue in Jelly Bean Quick Boot Beta +Patch Release]

### 6.3 Change History

- [bug fixed] Sometime loading launcher failed. When it fails, booting time is added about 10 seconds.
- [bug fixed] If you enable composite, you meet to display slowly UI. This issue fixed already in 13.05.
- For stability of system, we remove a code that set max IO clock while snapshot image is loading.

## 7 Beta Release

### 7.1 New feature

In the JellyBean 4.2 Alpha version added new feature, refer to the following description.

No	Chips	Description
1	<b>TCC8930 MID</b>	Quick boot feature is supported.
2	<b>TCC8930 STB</b>	Quick boot feature is supported.
3	<b>TCC8935 Dongle</b>	Quick boot feature is supported.
4	<b>TCC8920 MID</b>	Quick boot feature is supported.
5	<b>TCC8920 STB</b>	Quick boot feature is supported.
6	<b>TCC8925 Dongle</b>	Quick boot feature is supported.

[table 1. Supported Chip in JellyBean Quickboot Beta Release]

### 7.2 Known Issue

In the Jelly Bean Quick Boot Pre-Alpha Release, there is some Known Issue. And for more information, refer to the following description.

Function	Description
<b>Bootng</b>	Rebooting Test Result  TCC8930 STB : Pass(0/1000) TCC8935 Dongle : Pass(0/1000) TCC8930 MID : Fail(1/100) - The system hangs after loading snapshot image. TCC8920 STB : Pass(0/1000) TCC8925 Dongle : Pass(0/1000) TCC8920 MID : Pass(0/1000)
<b>Reloading settings</b>	Reloading the NFS setting do not supported yet.
<b>Launcher Loading</b>	Loading launcher failed Sometime(1/50). When it fail, booting time is added about 10 seconds.
<b>Reloading User Application</b>	Reloading a user application is supported. We find a error message that unfortunately youtube has stoped. This issue can reproduce the youtubu 4.4.11 only.
<b>Optimize</b>	Loading a snapshot image in boot loader do not optimized in tcc893x.
<b>Composite</b>	If you enable composite, you meet to display slowly ui.
<b>Un-mount user-data partition</b>	In order to run check disk, we need to un-mount user data & cache partition. If just add "apk" file only in /system/app folder, used data un-mount issue will be happen. To avoid this problem, "apk" file and "odex" file should exist together. That means, there is no problem, if you use Android Build System. In case of occur issue, when user make the Rom Image by just copy "apk" file, user data un-mount issue will be occur.

[table 3. Known Issue in Jelly Bean Quick Boot Beta Release]

## 8 Pre-Alpha Release

### 8.1 New feature

In the JellyBean 4.2 Alpha version added new feature, refer to the following description.

No	Chips	Description
1	<b>TCC8930 MID</b>	Quick boot feature is supported.
2	<b>TCC8930 STB</b>	Quick boot feature is supported.
3	<b>TCC8935 Dongle</b>	Quick boot feature is supported.

4	<b>TCC8920 MID</b>	Quick boot feature is supported. It has not been tested yet.
5	<b>TCC8920 STB</b>	Quick boot feature is supported. It has not been tested yet.
6	<b>TCC8925 Dongle</b>	Quick boot feature is supported. It has not been tested yet.

[table 1. Supported Chip in JellyBean Quickboot Pre-Alpha Release]

## 8.2 Known Issue

In the Jelly Bean Quick Boot Pre-Alpha Release, there is some Known Issue. And for more information, refer to the following description.

Function	Description
<b>Bootimg</b>	The system rarely hangs after loading snapshot image.
<b>USB</b>	If you connect an USB cable to computer and make snapshot image, fails to resume from suspend.
<b>HDMI</b>	The HDMI screen was occasionally moved to side when boot with snapshot image.
<b>Reloading settings</b>	Reloading the time setting do not supported yet. Reloading the NFS setting do not supported yet.
<b>Optimize</b>	Loading a snapshot image in boot loader do not optimized in tcc893x.

[table 3. Known Issue in Jelly Bean Quick Boot Alpha Release]

*This version is a first release version, so there is no history.*