



# Release notes for TC70 Android Lollipop to KK BSP 1903 Downgrade Package - LifeGuard Update 05 - NON-GMS

June 2020

## Description

This release contains the following software package which is compatible with the TC70 NON-GMS product. Recovery package includes a forced enterprise reset upon installation. This Package can be used to downgrade OS from Android L to Kitkat.

## Component Contents

Package Name	Package Description
FPD-TC70XX-K-XX-001903-N-00-05.zip	Full OS Software Downgrade Recovery package for NON-GMS Update 05 – with Enterprise Reset

## Component Version Info

Component / Description	Version
Product Build Number	01-23257-K-19-03-00-MV release-keys (NON-GMS)
Android Version	4.4.3
Linux Kernel	3.4.0
Android security patch level	April 2017 (Critical Patch Level: Dec 2017)
Platform	QC 8960 Pro
Wi-Fi	FUSION_QA_1.02.0.0.049
OSX / MXMF Version	4.4 / 6.3.2.0
Zebra Patch Version	CFE-TC70XX-K-XX-001903-X-00-05
Datawedge	6.5.61
StageNow	2.7.2.1039



EMDK Service	6.6.14.914
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This release packages **FPD-TC70XX-K-XX-001903-N-00-05.zip** contains the following fixes and patches.

❖ **Android Security Patch Level: April 2017 (Critical Patch Level: Dec 2017)**

Use the link below to see the Android Security bulletin for more information:

<https://source.android.com/security/bulletin/>

- Added support for Tianma display panel.
- SPR 35766- Resolved an issue wherein device takes longer time to connect when deployed in a denser SSID environment.
- SPR 34909 - Resolved a connection issue where Mesh BSSID was enabled in Infrastructure.
- SPR33487/33718 - Resolved an issue wherein the device was unable to connect to web address after removal from cradle.
- SPR34975 - Resolved an issue where crash observed when device was taken from cradle and moved to a non-coverage area.
- SPR32676 - Resolved an issue wherein DataWedge App crashes when Velocity App tries to send an Intent to enable the scanner plugin.
- SPR34472 - Resolved an issue wherein binder exceptions were seen when transaction messages were of large size
- SPR35313 - Resolved an issue wherein devices out of the box intermittently failed to get staged via StageNow.

## Device Compatibility

This Full OS Software Downgrade Recovery package release has been approved for use with the following Zebra devices.

Device	Operating System
TC700HGC11ESNA	Android 4.4.3
TC700HGC11ESIN	Android 4.4.3
TC700HKC11ESNA	Android 4.4.3
TC700HKC11ESIN	Android 4.4.3



## Installation Requirements

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This Software should be used with compatible devices listed above

- ADB installed on the PC (including adb drivers)
- USB debugging turned ON (from Developer options)

## Installation Instructions

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**Tianma display devices are not allowed to downgrade to any of the older BSPs or Patches**

- To identify the display type on TC70 devices user can check the 'persist.sys.hw.display.id' property using adb getprop command.
  - For TC70 Innolux device [persist.sys.hw.display.id]: [600]
  - For TC70 Tianma device [persist.sys.hw.display.id]: [512]

BEFORE UPDATING THE OS IMAGE, EXTERNAL POWER MUST BE APPLIED TO THE TERMINAL VIA USB CHARGING CABLE OR CRADLE.

PLEASE ENSURE BATTERY LEVEL IS > 30%

### Downgrade software package update procedure for TC70:

1. Connect the USB cable from your PC to the device.
2. On your PC, you should see REMOVABLE DISK appearing in the File Explorer. copy the FPD-TC70XX-K-XX-001903-G-00-05.zip file on storage.
3. Long press power button and select reset option.
4. Keep holding down Trigger button after selecting reset option.
5. Wait till the device boot into recovery mode. Do not release the trigger button.
6. Click on Vol+ or Vol- to navigate and select appropriated storage. Release the PTT button.
7. Click on PTT Trigger to select the option.
8. Click on Vol+ or Vol- to navigate to the FPD-TC70XX-K-XX-001903-N-00-05.zip file.
9. Click on PTT Trigger to select the FPD-TC70XX-K-XX-001903-N-00-05.zip file.
10. Click on Vol+ or Vol- to navigate to 'reboot system now' and Click on PTT key to reboot the device.

There are two ways to Check the Zebra Patch Level after installing the downgrade software package in the device,

- ✓ Settings->About Device-> Zebra Patch Version: CFE-TC70XX-K-XX-001903-X-00-05
- ✓ Run "getprop persist.sys.cfe. patchver" command in ADB Shell.  
CFE-TC70XX-K-XX-001903-X-00-05

Last Revised: 29<sup>th</sup> June 2020