



# TC51 OPERATING SYSTEM ANDROID M GA+30 01-12-04.6-MG (GMS) RELEASE NOTES

## INTRODUCTION

Today's Enterprise Mobility IT professionals and workers want a device that is every bit as contemporary and easy to use as the personal smartphone they use every day. But they also need a device that is durable, secure and built with all the mission-critical Enterprise features needed to enable them to achieve peak productivity every day – day after day. Now you can have it all — beauty, brawn and brains. The TC51 Touch Computer from Zebra — it's everything your workers want, with everything your business needs.

No more compromising device design for enterprise functionality — or enterprise functionality for device design. Built for the new business world, the TC51 offers an industrial design that looks and feels like the most popular consumer-style smartphones and also fully meets Enterprise management and worker expectations -- durability, WiFi performance, power, security, life cycle, manageability and more.

## DESCRIPTION

Zebra TC51 Android M GA+30 01-12-04.6-MG (GMS)

## CONTENTS

File	Description	Details
T51N0M3XCPUEF012046.zip	SFW: FullPkgUpd,AND,MM,v1204.6,RELEASE	Full Update of Device
T51N0MXXXRExx01203.zip T51N0MXXXRFxx01203.zip	Reset Packages	Reset packages from 12-03 Baseline can be used



## COMPONENT VERSION NUMBERS

Component / Description	Version
Product Build Number	<b>01-12-04.6-MG-00</b>
Android Version	6.0.1
Linux Kernel	3.10.84
x-loader	NA
u-boot	NA
Android SDK Level	23
Platform (TI/MPA/ etc)	QC 8956
Bluetooth Stack	NA
Partition Table	NA
Flash Size	16GB
RAM Size	2GB
Audio (Microphone and Speaker)	0.11.0.0
Battery Management	1.3.4
Bluetooth Pairing Utility	3.7.1
Rxlogger	4.59.2.0
EHS	2.5.0.9
GMS	R8
NFC	4.3.0_M



PTT	3.1.31
Scanner	16.2.42.0
Touch Panel	1.7-Stylus-2-0, 1.8-Golve-2-0
WLAN	FUSION_BA_2_00.0.0.023
WWAN (Data or Voice)	FALCON-W160307A-228.1-00101.23
App Gallery	2.8.4.12
Airwatch / Rapid Deployment	1.00.03
Datawedge	6.0.16
EMDK	6.0.7.307
MX	6.1.0.7
OSX	QCT.60.6.2.5
SOTI / Mobi Control	13.3.0 Build 1059
StageNow	2.5.1.1037
Data Analytics Engine	1.0.2.1813
Elemesz-B2M	1.0.0.331
Enterprise Keyboard	1.2.1.0

## DEVICE COMPATIBILITY

This software release has been approved for use with the following Zebra devices.

Device	Operating System
TC510K-1PAZU2P-US	Android M
TC510K-1PAZU2P-A6	Android M



## INSTALLATION REQUIREMENTS

These installation instructions are assuming you have ADB installed on your PC (the adb drivers and such) **and** your TC51 has Developer options enabled and USB debugging ON:

## INSTALLATION INSTRUCTIONS

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

**BSP Recovery Update Procedure for TC51 to latest BSP**

1. Plug the TC51 into the USB & Charging Cable and then the Cable to the PC. If you have a Cradle with USB connectivity, connect it now.
2. You may need to pull down the top menu and if you see “USB for charging”, touch it and then change it to “File transfers”.
3. Open Command Prompt, run “*adb devices*” and check to see if you are able to see the device’s serial number... If yes, proceed... if not you will need to get the PC set up with the proper drivers or install an External SD Card.
4. You may also get a pop up on your PC (Win 7) that you will be connected as a Portable Media Player... this can be ignored.

**a. Note: If you have an External SD Card installed, you can drag & drop the files on that card to perform the Recovery update that way... if not, continue with the ADB Sideload.**

Download Image T51N0M3XCPUEF01204.6.zip

5. Entering into Recovery Mode
  - a. Choice 1: In Command Prompt, type “*adb reboot recovery*” and click enter.
  - b. Choice 2:
    - Reset and hold PTT key
    - When Zebra Technologies logo appears on the screen Release the PTT Key
6. Your TC51 will reboot and put you on the Android Recovery screen.
7. if applying update via Sideload Method
  - a. Use the Volume + and – to highlight, “*Apply update from ADB*” and press the Power Key to select it
8. if applying update via External SD card



- a. Use the Volume + and – to highlight select option to “Apply update from SD card” and press the Power Key to select it
  - b. Use the Volume + and – to highlight package to be installed (Eg: T51N0M3XCFREF01204.6.zip) and press the Power Key to select it.
  - c. Repeat above steps (a) to install all the packages
  - d. Go to Step 10 once above steps are completed
9. With your Command Prompt open, type “*adb sideload*” and add a space and then drag and drop the on to it and click enter.
- a. Your PC screen will show files being installed and a little blue horizontal progress bar on your device will show status... and after about 6 minutes (*could be 10+ minutes if installing GMS*) it should be done and you should be back at the Android Recovery screen.
  - b. Repeat Step 9 for all packages.
10. “*Reboot system now*” is highlighted. Press the Power Key to Reboot.
11. Device reboots and you see Zebra on top and POWERED BY android at the bottom and after about 1 minute will transition to the TC51 Touch Computer splash screen with 5 dancing white dots at bottom... it will stay at this screen for a little over another minute (*could be another 7+ minutes if installing GMS*) and then you are at the Factory “Welcome” screen.
12. If you installed a GMS BSP, you will need to complete the process by setting up Wi-Fi and E-mail accounts and such. If on AOSP (non-GMS), there is no process to follow.

13. At the Home Screen, we need to verify that the BSP upgrade took place and set the Date & Time.

- a. Go to “Settings” and scroll down to “About phone” and look at the “Build number”. It should start with “**01-12-04.6-MG**”. Now you are on the correct BSP.
- b. Setting the Date and Time. If you associate to a WLAN AP, do so now, as it should automatically set the time and date... the only thing left is to set the time zone. Go to “Settings” and scroll to and select “Date & time”. Scroll down to and select “Select time zone”, and scroll down to and select the appropriate time zone and you are done.

14. Now you are all set to use your **TC51**.

## CHANGES AND FIXES

Device may not power up when battery is <20% capacity. NOTE: The device must be completely powered down via the “Power Off” icon after holding the power button for 3 seconds



User is unable to power on a device and there is no LED "Low Battery" indicator telling the User the device needs a charge.

While the unit is operating, the "High Temperature Charging" warning is displayed.

Battery with 10% capacity on boot up shows as 50% capacity

Battery charge does not change after battery swap. Device still shows the previous battery capacity and not the new battery capacity.

User sees reduced battery life (~20%-40%) when:

- 1) Airplane mode
- 2) Camera in Med/Low Brightness setting
- 3) Suspend/resumes not enabled

Cannot set the proxy for Open Network through proxySettings.xml.

Threat Manager is not locking down device.

### **Special Note when switching between GMS AND NON-GMS BUILD**

- Follow Instructions to update the Software

- Do Factory OR Enterprise Reset. (saves enterprise persist data)

## **PART NUMBER AND RELEASE DATE**

TC510K-1PAZU2P-US

TC510K-1PAZU2P-A6

Dec 16, 2016