

Release Notes – Zebra TC51 and TC56 Android M 01-21-04.1-MN (AOSP)

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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/TC56 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. The TC56 offers 4G LTE and 3G coverage for N. America including AT&T, Verizon, and 4G and 3G coverage for the rest of the world. Built for the new business world, the TC51 & TC56 offer an industrial design that looks and feels like the most popular consumer-style smartphones and fully meets Enterprise management and worker expectations -- durability, WWAN and WiFi performance, power, security, life cycle, manageability and more.

Description

Zebra TC51/TC56 Android M GA 01-21-04.1-MN (AOSP)

The software update for TC51 and TC56 will deliver fixes, updated security and many feature enhancements; including improvements in WLAN (802.11kr), Voice roaming, VoIP support, Active Edge, Native Dialer capability, PowerPrecision+ battery performance, Wideband Audio, SimulScan, FIPS/TAA and SmartDex

This software version will support Life Guard Security updates.

Known Issues and Limitation

1. When setting default launcher or any other parameters, if your work flow requires a reboot, wait for 20 seconds prior to issuing the command.

Contents

File Name	Description
ATLAS_FPU_AOSP_21_04_1	Full Package Update includes all components (Mandatory)
Atlas_Fac_Reset	Factory Reset (Erases Data, Enterprise, Modem ST1/ST2 Partitions)
Atlas_Ent_Reset	Enterprise Reset (Erases Data Partitions)
Atlas_Cache_Reset	Erases Cache Partition

Component Version Numbers

Component / Description	Version
Product Build Number	X1-21-04.1-MN-00
Android Version	6.0.1
Linux Kernel	3.10.84
x-loader	NA
u-boot	NA
Android SDK Level	23
Platform	QC 8956
Bluetooth Stack	NA
Partition Table	NA
Flash Size	16GB
RAM Size	2GB
Active Edge	2.5.13
Airwatch / Rapid Deployment	1.01.04
Analytics Mgr	1.0.2.1768
App Gallery	3.0.1.7
Audio (Microphone and Speaker)	0.31.3.0
Battery Management	1.3.8
Bluetooth Pairing Utility	3.7.1
Data Analytics Engine	1.0.2.1969
DataWedge	6.4.18
EHS	2.5.0.9

Elemesz-B2M	1.0.0.347
EMDK	6.5.12.812
Enterprise Keyboard	1.4.0.3
GMS	R12
MX	6.3.0.801
NFC	4.3.0_M
OSX	QCT.60.6.7
PTT	3.1.32
RxLogger	4.60.2.0
Scanner	18.0.20.0
SimulScan	SimulScanDemo: 2.9 SimulScanRes : 1.14.10
SMARTMU	2.1
SOTI / MobiControl	13.3.0 Build 1059
StageNow	2.7.2.1039
Touch Panel	1.8-Stylus-2-0, 1.8-Glove-2-0 (TC51/56) 1.9-Stylus-1-0, 2.0-Glove-1-0 (TC75X/70X)
WLAN	FUSION_BA_2_02.0.4.012_M
WWAN (Data or Voice)	FALCON-W160411A-228.1-00101.47
Zebra Device Diagnostic Tool	1.5
Zebra Volume Control (ZVC)	2.0.0.7

Device Compatibility

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

Device	Operating System
TC510K-2PAZU2P-US	Android M
TC510K-2PAZU2P-A6	Android M
TC510K-2PAZU4P-US	Android M
TC510K-2PAZU4P-A6	Android M
TC510K-2PAZU4P-FT	Android M
TC510K-2HDZU4P-FT	Android M
TC510K-2HDZU2P-US	Android M
TC510K-2HDZU4P-US	Android M
TC510K-2HDZU2P-A6	Android M
TC510K-2HDZU4P-A6	Android M
TC56CJ-2PAZU2P-A6	Android M
TC56CJ-2PAZU4P-A6	Android M
TC56DJ-2PAZU2P-A6	Android M
TC56DJ-2PAZU4P-A6	Android M

TC56DJ-2PAZU2P-IA	Android M
TC56DJ-2PAZU4P-IA	Android M
TC56DJ-2PAZU4P-BR	Android M
TC56DJ-2PAZU2P-BR	Android M
TC56DJ-2PAZU2P-CN	Android M
TC56DJ-2PAZU4P-CN	Android M
TC56DJ-2PAZU4P-ID	Android M
TC56DJ-2PAZU2P-ID	Android M
TC56CJ-2PAZU4P-FT	Android M
TC56CJ-2PAZU2P-US	Android M
TC56CJ-2PAZU4P-US	Android M

Installation Requirements

Download both Full Package and Reset Packages (Optional)

Special Note when switching between GMS AND AOSP BUILD

- After Installing Full Package Update, Install Atlas_Cache_Reset
- Followed by Factory OR Enterprise Reset.

Special Note when Downgrading Software

- After Installing Full Package Update, Install Atlas_Cache_Reset
- Followed by Factory OR Enterprise Reset.

Installation Instructions

Using ADB Sideload

Assumptions:

1. ADB installed on PC (the adb drivers and such)
2. TC51/TC56 has Developer options enabled
3. USB debugging ON

Note: For Enabling ADB please see [user guide](#)

Procedure:

1. Plug the TC51/TC56 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.
- ❖ Download Image
 - a. Full Package Update File and any applicable patches listed above in content section
 - b. Reset files (Optional)
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/TC56 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. With your Command Prompt open, type *"adb sideload"* and add a space and then drag and drop the update file the Full Package date zip file 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 above steps for all mandatory packages.
9. *"Reboot system now"* is highlighted. Press the Power Key to Reboot.
10. 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/TC56 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.

11. 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.
12. 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 “01-21-04.1-MN”. 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.
13. Now you are all set to use your TC51/TC56.

Using External SD card

1. Plug the TC51/TC56 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. Download Images FullPackageZip file, any applicable patches listed above in content section and Reset Files (Optional) and drag & drop the files on External SD card
4. Entering into Recovery Mode
 - a. Reset and hold PTT key
 - b. When Zebra Technologies logo appears on the screen Release the PTT Key
5. Your TC51/TC56 will reboot and put you on the Android Recovery screen.
6. 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 (Full Package Update Zip file) and press the Power Key to select it.

- c. Repeat above steps for all mandatory packages.
- 7. *“Reboot system now”* is highlighted. Press the Power Key to Reboot.
- 8. 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/TC56 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.
- 9. 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.
- 10. 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 *“01-21-04.1-MN”*. 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.
- 11. Now you are all set to use your TC51/TC56.

Change Notes

SPR Fixed in this Release

SPR#	Synopsis
32510	Device can't connect to DHCP wireless and LAN connection but no issue with STATIC connectivity.
32593	Unable to turn off the notifications by swiping down and up the pull down bar.
32611	Disconnects from WLAN network.

32632	Stability Issue occurred while using serial connection to DEX
32699	Take 4 minutes to connect WIFI after undock from Ethernet cradle
32403	Scanning button press results in Toggling between tab when using Google Chrome Browser.
32515 32647	Wireless connection lock / drop when SIP client running observed in some networks.
32613	Device is creating duplicate app shortcut in launcher.
31862	Reduced the communication from host device to PP+ battery when the battery swap process starts. With this change, if user removes battery too quickly during this time, random and invalid accesses to battery memory are avoided