Release Notes – Zebra TC70X Android M 01-19-01.4-MG (GMS)

Introduction

Work more efficiently and better serve your customers by giving your employees enterpriseclass handheld computers that survive life in the field or shop floor, communicate and access information in real time.

The TC70x/TC75x is the professional-grade Android device built from the ground up for the enterprise.

- 4G/LTE (TC75x only) and 8.02.11a/b/g/n connectivity for anywhere, anytime access to information
- Zebra's Mobility Extensions (Mx)
- Mobility DNA, a suite of mobility enabling applications, development tools and utilities
- Most advanced scan engine with longer range date capture capability
- Rugged and ready for every day enterprise use inside and outside the four walls

Description

Zebra TC70X Android M GA 01-19-01.4-MG(GMS)

The software update for TC70X (BSP X1-19-01.4-MG-00) 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 and SmartDex.

Known Issues and Limitation

1. LifeGuard updates only apply to the latest maintenance release and access is available to customers with a valid service contract. In this case however, customers will continue to have access to security updates on BSP 15-01 until the next maintenance (BSP) release becomes available. Note: that the next major BSP planned for Android M is expected to be released by September. An incremental update will be posted at that time to facilitate upgrades from BSP 19-01.04 to this next release. As part of the LifeGuard policy, all customers wishing to stay on Android M and receive LifeGuard updates will need to transition to this next BSP when it becomes available.
2. When setting default launcher or any other parameters, **if** your work flow requires a reboot, wait for 20 seconds prior to issuing the command
3. Optimized Scanner beep volume can have only 2 states ON or OFF.

Contents

File Name	Description
ATLAS_FPU_GMS_19_01_4.zip	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	**X1-19-01.4-MG-00**
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)	0.31.0.0
Battery Management	1.3.8
Bluetooth Pairing Utility	3.7.1
RxLogger	4.60.0.0
EHS	2.5.0.9
GMS	R12
NFC	4.3.0_M
PTT	3.1.32
Scanner	18.0.5.0
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/TC70X)
WLAN	FUSION_BA_2_02.0.0.010_M
ActiveEdge	2.5.0
AnalyticsMgr	1.0.2.1768
AppGallery	3.0.1.4
Airwatch / Rapid Deployment	1.00.03
DataWedge	6.3.41
EMDK	6.4.9.709
MX	6.3.0.8
OSX	QCT.60.6.5.1
Simulscan	SimulScanDemo: 2.9 SimulScanRes : 1.14.9
SMARTMU	2.1.1
SOTI / Mobi Control	13.3.0 Build 1059
StageNow	2.7.1.1088
Data Analytics Engine	1.0.2.1859
Elemez-B2M	1.0.0.347
Enterprise Keyboard	1.4.0.3
Zebra Device Diagnostic Tool	1.5
Zebra Volume Control (ZVC)	2.0.0.1

Device Compatibility

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

Device	Operating System
TC700K-0MB22B0-A6	Android M
TC700K-0MB22B0-US	Android M
TC700K-0MB24B0-A6	Android M
TC700K-0MB24B0-US	Android M
TC700K-0MB22B0-IA	Android M

Installation Requirements

Download both Full Package and Reset Packages (Optional)

Special Note when switching between GMS AND AOSP BUILD
- o After Installing Full Package Update, Install Atlas_Cache_Reset
- o Followed by Factory OR Enterprise Reset.

Special Note when Downgrading Software
- o After Installing Full Package Update, Install Atlas_Cache_Reset
- o Followed by Factory OR Enterprise Reset.

Installation Instructions

Using ADB Sideload

Assumptions:
1. ADB installed on PC (the adb drivers and such)

2. TC70X has Developer options enabled

3. USB debugging ON

Note: For Enabling ADB please see user guide

Procedure:

1. Plug the TC70X 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 TC70X 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 TC70X 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 "01-19-01.4-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.

13. Now you are all set to use your TC70X.

Using External SD card

1. Plug the TC70X 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 TC70X 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 TC70X 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.

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    a. Go to "Settings" and scroll down to "About phone" and look at the "Build number". It should start with "**01-19-01.4-MG**". Now you are on the correct BSP.

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Change Notes

SPR Fixed in this Release

1. SPR 30990 Soti Mobicontrol out of box not decoding Scan. 01.12.03

2. SPR 31092 AirWatch deployed EAP-TLS profile and certs are becoming unconnected or missing on TC51. Possible similarity to SPR 31017.

3. SPR 31263 TC51 01.12.03 - 01.12.04.06 - MX5.0 DisplayMgr disabling ScreenShotUsage not working

4. SPR 31293 TC51 01.12.04.06 ADF Rule bug

5. SPR 31574 [BSPA-25537] Device power down without human interactions

6. SPR 31602 "Programmable Back Button" intermittently not waking up the device when device goes into sleep.

7. SPR 31785 Soft.ID Application on TC51 has operational issues.

8. SPR 31824 Proximity sensor is too aggressive.

9. SPR 31825 SIP application audio issue when pushed to the background

10. SPR 31945 TC51 Downgrade - DSD for Wifi Issue

11. SPR 32001 VoIP isn't a fully supported in the BSP.

12. SPR 32004 How to enable access to webserver on Port 87 with native browser on TC51

13. SPR 32011 TC51: Bluetooth Secure Simple Pairing - Numeric Comparison issue

14. SPR 32079 TC51 Chrome Browser left + right scan key navigates tabbed browsing

15. SPR 32113 Customer trying to use a .p12 Cert to encrypt the Android Device Storage is unable to install successfully.

16. SPR 32125 "[BSPA-30529] ENHANCED - When the Tc51 is not used after a while the devices disable the radio totally even when is set to be always on.

17. SPR 32134 [BSPA-32647] TC51 v1.12.04 GMS, EHS 2.5, Launcher Scanner not working after reboot

18. SPR 32185 [BSPA-32004] TC51HC - The ringer fails after initial call

19. SPR 32187 [C00141474] Soti WIRELESS CERTIFICATE INSTALL ERROR

20. SPR 31494 [BSPA-30527] SCANNING INVOKES TOGGLING BETWEEN TAB IN GOOGLE CHROME

21. SPR 32070 "TC75 ISSUE WITH DEX - low level delay in BSP

22. SPR 32089 [BSPA-30757] TC51 01,15,01.7 Patch03 com.android,bluetooth error with BLE beacon

23. SPR 32180 TUT-16995 - TC51 1.12.04.6 GMS AppGallery updates itself upon logging into Play store, no method to prevent or manage

24. SPR 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

App Gallery (Known Issues)

1. Scan to login says email or password invalid without highlighting (in red colour)

    Workaround: Uses is shown an error in blue color text

2. [Push Updates] All the push notifications will be delivered to device instead of sending the latest push message

    Workaround: User must ignore the older push messages and make use of the latest push message

3. Download Count not changing immediately after install is done, page navigation is needed to see the change (Observed in AppDetails Of a Zebra Tech Category Apps).

    Workaround: User must navigate back to Previous page and go to appdetails again to see the update

4. [client] Installed app in All Apps tab is not moved to bottom of the list once the user Navigates to collection tab and come back to All App tab.

    Workaround: User must navigate back to Previous page and go to AllTab again to see the change

5. AppDetails]AppDetails Page must be loaded when download progress is selected from Notification Tray

    Workaround: User must launch AppDetails with in AppGallery