Release Notes for Zebra TC20 Android Oreo 01-28-07.00-OG-U02-STD Release (GMS)

Highlights

The details of the Android GMS Oreo release 01-28-07.00-OG-U02-STD that covers family of products including TC20. Please see, Device Compatibility under Addendum Section for more details.

Software Packages

Package Name	Description
IRIS_DELTA_UPDATE_01-28-07.00-OG-U02.zip	Delta Package Update

Security Updates

This build is Compliant up to Android Security Bulletin of June 01 2020.

LifeGuard Update 02:

➢ This LG patch is applicable for 01-28-07.00-OG-U00-STD BSP version.
The LG Patch includes the following updated components.

- FUSIONLITE_QA_1_0.0.0.026_O
  Radio: QA_1_00.0.0.020_O
  Application: QA_1_00.0.0.009_O
  Middleware: QA_1_00.0.0.013_O

Fixes

- SPR38643 – Added support for "Send Characters As Events" option.
- SPR38723 – Resolved an issue wherein the DST time zone for Sao Paolo was shown incorrect.

Version Information

Below Table contains important information on versions

Description	Version
Product Build Number	01-28-07.00-OG-U02-STD
Android Version	8.1.0

Security Patch level	June 1, 2020
Linux Kernel	3.18.71
Component Versions	Please see Component Version under Addendum section

Installation Requirements

- Zebra Android USB Driver V2.2 or higher
- Android Debug Bridge (ADB) version 1.0.39 or higher
- TC20 GMS Android OS Release Images

Installation Instructions

Using the "adb sideload" method

Assumptions
1. ADB installed on PC
2. TC20 has Developer options enabled
3. USB debugging ON

Procedure
1. Plug the TC20 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 notification bar, and tap on the notification which says, "USB charging this device", and change it to "Transfer files".
3. Open Command Prompt on PC, run "adb devices" and check to see if you can 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.
5. Entering Recovery Mode
   a. Choice 1: In Command Prompt, type "adb reboot recovery" and click enter.
   b. Choice 2:
      i. Reboot and hold PTT key
      ii. When Zebra Technologies logo appears on the screen Release the PTT Key
6. Your TC20 will reboot and take you to Android Recovery screen.
7. To select Sideload Method
   a. Use the Volume + and – to highlight, "Apply upgrade 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 zip file which you want to apply to the device and press enter.

a. When the file download starts, the command window will show progress with a percentage completed.

b. Device display will show a series of messages indicating it is downloading, verifying and installing the image on to the device.

9. After successful update, the device will auto reboot and you see Zebra on top and POWERED BY android at the bottom and after about 10 second will transition to the TC20 Touch Computer splash screen with 5 dancing white dots at bottom… it will stay at this screen for up to 4 minutes and then present the "Welcome Screen".

10. After this you will need to complete the process by setting up Wi-Fi and E-mail accounts and such.

11. To make sure the OS Update took place, once the initial setup is complete;

a. Go to "Settings" and scroll down to "System" and navigate to "About phone" and look at the "Build number". It should state "01-28-07.00-OG-U02-STD".

12. Setting the Date and Time. If you associate the device to a WLAN AP, it should automatically set the date and time. 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 TC20.

Using External SD Card

1. Plug the TC20 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 notification bar, and tap on the notification which says "USB charging this device", and then change it to "Transfer files".

3. 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.

4. Copy the required files to the SD Card. This can be done in two ways

a. Copy the files to the Micro SD card with the help of a SD Adapter which gets inserted to the SD slot of your PC/Laptop/SD Writer.

b. Directly transfer files to the Micro SD card which is inserted in to the back of the device. Please refer to the user guide on how to open the back door and inserting the SD card to the device.

5. Entering Recovery Mode

a. Choice 1: In Command Prompt, type "adb reboot recovery" and click enter.

b. Choice 2:

i. Reboot and hold PTT key

ii. When Zebra Technologies logo appears on the screen Release the PTT Key

6. Your TC20 will reboot and take you to Android Recovery screen.

7. Applying update via External SD card

a. Use the Volume + and – to highlight select option to "Apply upgrade from SD card" and press the Power Key to select it

b. Use the Volume + and – to highlight package to be installed (downloaded Zip file) and press the Power Key to select it.

8. After successful update the device will auto reboot and you see Zebra on top and POWERED BY android at the bottom and after about 10 second will transition to the TC20 Touch Computer splash screen with 5 dancing white dots at bottom… it will stay at this screen for up to 4 minutes and then present the "Welcome Screen".

9. After this you will need to complete the process by setting up Wi-Fi and E-mail accounts and such.
10. To make sure the OS Update took place, once the initial setup is complete.
    a. Go to "Settings" and scroll down to "System" and navigate to "About phone" and look at the "Build number". It should state "01-28-07.00-OG-U02-STD".
11. Setting the Date and Time. If you associate the device to a WLAN AP, it should automatically set the date and time. 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.
12. Now you are all set to use your TC20.

NOTE:

For Enterprise Mobile Device Management, most EMM vendors such as SOTI, AirWatch, MobileIron, etc. WILL require an updated device management agent to support this OREO enterprise device.   Do NOT use your existing device management agent and console with this device without first contacting your EMM vendor to understand when the agent supporting this device is available and whether a console upgrade is required as well.   Attempting to enroll with an agent that is not validated to support the device will result in errors.

Addendum

Device Compatibility

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

TC20	
Device Part Number	**Operating System**
TC200J-10C112A6	Android O GMS ROW – EMEA, LATAM, APAC & Canada
TC200J-10C112US	Android O GMS US Only
TC200J-10A111US	Android O GMS US Only
TC200J-10A111A6	Android O GMS ROW – EMEA, LATAM, APAC & Canada
TC200J-10C213A6	Android O GMS ROW – EMEA, LATAM, APAC & Canada (Premium SKU)
TC200J-10C213US	Android O GMS US Only (Premium SKU)
TC200J-10A111TN	Android O GMS TUNISIA Only
TC200J-10C112TN	Android O GMS TUNISIA Only
TC200J-10C213IA	Android O GMS INDIA (Premium SKU)
TC200J-10C112IA	Android O GMS INDIA
TC200J-10A111IA	Android O GMS INDIA
TC200J-1KC111A6	Android O GMS ROW EMEA, LATAM, APAC & Canada (Keyboard SKU)
TC200J-1KC111IA	Android O GMS INDIA (Keyboard SKU)
TC200J-1KC111TN	Android O GMS TUNISIA (Keyboard SKU)

TC200J-1KC111US	Android O GMS US (Keyboard SKU)
TC200J-10C213AZ	Android O GMS Australia/New Zealand (Premium SKU)

Component Versions

For detailed release notes, please refer techdocs.zebra.com, developer.zebra.com

Component / Description	Version
Build_version	01-28-07.00-OG-U02-STD
Android_version	8.1.0
Android_SDK_Level	26
Android Security Patch Level	June 1, 2020
Linux_kernel	3.18.71
Wifi	FUSIONLITE_QA_1_0.0.0.026_O Radio: QA_1_00.0.0.020_O Application: QA_1_00.0.0.009_O Middleware: QA_1_00.0.0.013_O Firmware: CNSS-PR-4-0-00674
Platform	Qualcomm MSM8937
Scanning_Framework	23.1.9.0
DWDemo	2.0.15
OSX	QCT.81.8.10.3.UL
MXMF	9.0.13.1
Touch	Focaltech V1.1 20161103 (fw:0x24)
Acoustic Profiles	General: CO4.2 Cellular: CO4.2
Bluetooth_Stack	CNSS-PR-4-0-00674/01050102
Flash_Size	16G /32G
RAM_Size	2G
GPS	MPSS.JO.3.0-00431-8937_GENNS_PACK-1
MMS	8.1.0
RIL_Version	Qualcomm RIL 1.0

BT_Pairing_Utility	3.15
Datawedge	7.3.34
Camera	2.0.002
PTT	3.1.39
RxLogger	5.4.12.0
StageNow	3.3.1.2001
Zebra Data Service	7.0.0.1005
Zebra Software License Manager	3.2.0
EMDK	7.3.23.2323
IMEI SV Number	11
OEM Config	8.1.0.9
DDT	V1.17.0.9
GMS Version	8.1_201812
Fingerprint	Zebra/TC20/TC20RT:8.1.0/01-28-07.00-OG-U02-STD/200608:user/release-keys, ZebraTC20/TC20RD:8.1.0/01-28-07.00-OG-U02-STD/200608:user/release-keys, Zebra/TC20/TC20KB:8.1.0/01-28-07.00-OG-U02-STD/200608:user/release-keys,

Important Links

- https://techdocs.zebra.com/datawedge/7-3/guide/about/
- https://techdocs.zebra.com/emdk-for-android/7-3/guide/about/
- https://techdocs.zebra.com/stagenow/3-3/about/
- https://techdocs.zebra.com/mx/
- https://techdocs.zebra.com/ddt/1-1/guide/about/
- https://techdocs.zebra.com/rxlogger/5-4/guide/about/

Known Issues and Workarounds

- OS downgrade behavior has changed in Oreo. Automatic enterprise data reset is performed when the system detects OS downgrade operation. Following are the examples of OS downgrade operations:
  - Oreo (GMS/NGMS) to Nougat (GMS/NGMS)
  - Downgrading to lower patch version within Oreo.
- To avoid text cropping in some applications, accessibility options can be used to change the display size to small.
- An issue wherein period key was not working on Remote connections (RDP / Horizon / Citrix)
  User needs to push an empty file namely SPR36457.txt and copy it into /enterprise/usr/persist/ and reboot the device for this functionality to get enabled.

Revision History

REV	DESCRIPTION	DATE
1.0	Initial Release	June 15, 2020