
Release Notes – TC20 Android N Rev A 01-08-21-0-NG-00-M1 (GMS)

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Introduction

The TC20 enterprise mobile computer is designed for small-medium sized businesses in the retail, hospitality and small footprint warehousing industries! TC20 is a WLAN only device ideal for customers who need inventory management, price checking, and basic clientele applications.

The TC20 series is positioned as the rugged everyday business tool, in the entry-level segment of Zebra's mobility portfolio, with a differentiated and comprehensive set of new features, including:

- Ergonomic smartphone-like form factor that is small enough to fit in your pocket, yet powerful enough to multi-task, manage inventory, price check, and preform back of store applications
- High capacity 3000 mAh internal battery designed to support a full shift plus an optional snap on PowerPack for continuous use
- Pre-installed Workforce Connect Push-To-Talk communication solution
- Ambidextrous scan buttons on left and right side of the device
- Android 7.1.2 (Nougat) OS at launch with the ability to support OS upgrades in the future
- Extensive accessory eco-system, including 1-Slot cradles for charging and data communication, 5-slot cradles for large charging deployments, a field detachable trigger handle and a unique snap on PowerPack

Description

This is the initial software release for TC20 Mobile Computer. This release contains software packages for Android Nougat GMS operating system for TC20.

Device Compatibility

This software release has been approved for Android TC20 Nougat GMS models mentioned below.

Device	Operating System
TC200J-10C112A6	Android N GMS ROW – EMEA, LATAM, APAC & Canada
TC200J-10C112US	Android N GMS US Only

Component Contents

Component	Version
Build_version	01-08-21-0-NG-00-M1 (GMS)
Android_version	7.1.2
Android_SDK_Level	25
Android Security Patch Level	July 5, 2017
Linux_kernel	3.18.31
Wifi	FUSIONLITE_QA_1_0.0.0.008_N
Platform	Qualcomm MSM8937
Scanning_Framework	19.0.3.1
DWDDemo	2.0.12
OSX	QCT.71.7.2.2.UL
MXMF	7.0.1.0
Touch	Focaltech V1.1 20161103 (fw:0x18)
Bluetooth_Stack	CNSS.PR.4.0-00388/01050102
Flash_Size	16G
RAM_Size	2G
BT_Pairing_Utility	3.8
Datawedge	6.5.58
Camera	LA.UM.5.6.r1-04600-89xx.0-1
PTT	3.1.35

RxLogger	5.2.8.0
StageNow	2.8.1.1221
Data_Analytics	3.0.0.1044

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 Nougat 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.

Installation Requirements

HW Requirements

- Windows PC running Windows 7/10 32/64 bits
- USB Type C Cable
- Micro SD Card with at least 2GB capacity (optional)

SW Requirements

Please make sure following components are installed on your computer before commencing OS installation.

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

Image Compatibility

Please note that GMS full package update file is not compatible with China based SKUs hence China based SKUs will not allow to download GMS 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 say “USB charging this device”, and then 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. Reset 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. 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 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 “About phone” and look at the “Build number”. It should state “01-08-21-0-NG-00-M1”.
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 say “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. Reset 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 update 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 “About phone” and look at the “Build number”. It should state “01-08-21-0-NG-00-M1”.
 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.

Downloadable Software Included in this Release

Filename	Description
T200JN30CPUWW10821.zip	GMS full package update image which, updates complete software.
T200JNXXXRExx10821.zip	Enterprise Reset package (Resets /Data partition)
T200JNXXXRFxx10821.zip	Factory Reset package (Resets /Data and /Enterprise partitions)
T200JNXXXRWxx10821.zip	Full Factory package (Resets /Data, /Enterprise and External SD Card)

Last Revised: 09-25-2017