Release Notes – Zebra MC33x 01-01-48-NG-00-A Release for GMS

Introduction

Zebra MC33x is the next generation key-based, rugged mid-range hand-held mobile computing device. MC33x supports multiple form-factors offering a combination of different physical keys, data capture and memory options. Running on a stable Android-N (7.1.2) OS, MC33x offers the Zebra Value Adds software solutions to enhance your Enterprise workflow.

The MC33x is the professional-grade Android device built from the ground up for the Enterprise.

- 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

Android N 01-01-48-NG-00-A (GMS) is the first OS release to support MC33x.

This release documentation contains the details of this OS release – features, instructions, component details, part numbers supported and known issues/limitations.

Zebra Value Adds Feature List

Components	New Features	Comments
BT	Bluetooth Silent pairing CSP	
RxLogger	Chathead Overlay for Log Viewing & RX Logger Utility	
WLAN	a. 802.11ac (2x2 MIMO) b. WPS c. Wi-Fi Direct d. Cast	
Data Analytics	DCA's added: Battery, WWAN, WWAN Location, Device info, Application, Traffic, WLAN, App usages, GPS, Flash Stats and Scanner.	Replaces B2M
Scanner	Imager as Camera	
Audio	Quick sound Control	
MX		
APPMGR	1) Battery Optimization (New API), Add/Remove Apps for Battery Optimization	
BluetoothMgr	1) AllowSilentPairing (New API)	1) Specify whether to allow silent pairing of certain configured remote Bluetooth devices
	2)SilentPairingAction(New API)	2)Silent pairing action to take
	3) SilentPairingName(New API)	3)Bluetooth Device Name, Provide Name along with CoD/UAP for adding a new rule
	4) SilentPairingCoD (New API)	4)Class of Device of Silent Pairing device.

		Bluetooth settings lists CoD for each available device
	5) SilentPairingUAP (New API)	5)Upper Address Part - First 3 bytes of Bluetooth MAC Address, of Silent pairing device. Bluetooth settings lists UAP for each available device
BugReportMgr	1)EnableScreenshot(New API)	1) Specify whether to enable taking screenshot
	2)EnableIntent(New API)	2) Specify whether to enable triggering bug report via intent
FileMgr	1) SourceURI (No API only DSD Change)	Modification to Existing API Enable Encryption in SourceURI
Intent	1) QueryDeviceOwner (New API implementation)	1) Query to get the Details of the Device Owner
Datawedge	1. Cross device configuration importing support.	
	2. Extend DataWedge Intent APIs	a. Get disabled application list b. Set disabled application list c. Switch scanner d. Switch scanner params at runtime e. Get configuration of a profile i. Barcode input ii. Intent output iii. Keystroke

		output iv. Basic data formatting for each output plugin
	3. Configuration import reporting	
	4. DS3608 scanner support.	
	5. Extend DataWedge Intent APIs.	a. Introduced scanner type to set and get configuration intent api b. Switch scanner intent API can use the scanner type instead of the scanner index c. Enumerate scanners api returns the scanner type for each scanner supported in the device. d. Configure multiple plugin configuration by single intent.

Device Compatibility

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

Device	Operating System
MC330M-GL3HG2RW	Android N
MC330M-GL4HA2RW	Android N
MC330M-GL40A2RW	Android N
MC330M-GI4HA2IN	Android N
MC330M-GI4HA2RW	Android N
MC330M-GI2HA2US	Android N
MC330M-GI2HA2RW	Android N
MC330K-GI3HA3US	Android N

MC330K-GI3HA3RW	Android N
MC330K-GI4HA3US	Android N
MC330K-GL2HA3RW	Android N
MC330K-GI3HA4RW	Android N
MC330K-GI4HA4US	Android N
MC330K-GL3HA4RW	Android N
MC330K-GE4HA4US	Android N
MC330M-GL2HA2US	Android N
MC330M-GL2HA2RW	Android N
MC330M-GL3HA2US	Android N
MC330M-GL3HA2RW	Android N
MC330M-GI30A2RW	Android N
MC330M-GI3HA2IN	Android N
MC330M-GI3HA2US	Android N
MC330M-GI3HA2RW	Android N
MC330M-GI3HG2RW	Android N
MC330M-GI40A2US	Android N
MC330M-GL40A2US	Android N
MC330M-GL4HA2US	Android N
MC330K-GI4HA3RW	Android N
MC330K-GI4HG3US	Android N
MC330K-GI4HG3RW	Android N
MC330K-GL3HA3RW	Android N
MC330K-GL4HA3US	Android N
MC330K-GL4HA3RW	Android N
MC330K-GL4HG3RW	Android N
MC330K-GI4HA4RW	Android N
MC330K-GI4HG4US	Android N
MC330K-GI4HG4RW	Android N
MC330K-GL4HA4US	Android N
MC330K-GL4HA4RW	Android N
MC330M-GI4HA2US	Android N
MC330M-GI4HG2US	Android N
MC330K-GE3HA3US	Android N
MC330K-GE4HA3US	Android N
MC330K-GE4HA3RW	Android N
MC330K-GE3HA3RW	Android N
MC330K-GE4HA4RW	Android N

Component Contents

Package Name	Description
AT_N_FPU_GMS_01_48.zip	Full Package Update includes all components
Atlas_N_Ent_Reset.zip	Enterprise Reset (Erases Data Partitions)
Atlas_N_Fact_Reset.zip	Factory Reset (Erases Data & Enterprise Partitions)

Component Version Info

Component / Description	Version(Non-GMS)
Product Build Number	01-01-48-NG-00-A
Android Version	7.1.2
Linux Kernel	3.10.84
Android SDK Level	25
Platform	QC8956
Bluetooth Stack	1.1
Flash Size	16/32GB
RAM Size	2/4GB
Scanning	19.0.22.0
DataWedge	6.6.50
EMDK	6.7.10.1010
MXMF / OSX	MXMF-7.1.2.1 / OSX-QCT.71.7.4.7

WiFi	FUSION_BA_2_10.0.1.012_N Application: BA_2_10.0.0.008_N Radio: BA_2_10.0.1.012_N Middleware: BA_2_10.0.1.008_N Firmware: 7.35.205.8_20171114
PTT	3.1.35
Touch FW	V14
RxLogger	5.4.10.0
Bluetooth Pairing Utility	3.10
DataAnalytics	3.0.0.1217
File Browser	1.19.1.0
Stage Now	2.9.1.1362
App Gallery	3.0.1.7
User Guide	1.0
Sensors (Accel, Gyro)	2061000, 2061000
Camera	2.0.002
MSRN	0.01
MobiControl	NA
ZVC	2.0.0.12
Battery Manger	1.3.8
ActiveEdge	2.5.16
SmartMU	2.3.12
Device Central	1.0.4.8
Audio	0.19.0.0
Diagnostic Tool	1.15.0.6
FingerPrint	Zebra/MC33/MC33:7.1.2/01-01-48-NG-00-A/59:user/release-keys

Android security patch Level	December 5,2017
GMS Version	7.1_r8

Installation Requirements

Download both Full Package and Reset Packages (Optional)
Note1: Using External SD card update is NOT Supported via SOTI MDM

Note2: When switching between GMS and NGMS BUILD

- After Installing Full Package Update, you need to Install Factory OR Enterprise Reset.

Installation Instructions

Using ADB Sideload

The installation instructions assume you have ADB installed on your PC (the adb drivers and such) and your MC33x has Developer options enabled and USB debugging ON: Instructions on HOW TO enable ADB is also captured in user guide.

1. Connect the MC33x to the PC using the USB data cable or through the cradle.
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 to next step
   If not please 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 MediaPlayer. this can be ignored.
5. Download Image
   a. Full Package Update File and any applicable patches listed above in content section
   b. Reset files (Optional)

6. Entering into Recovery Mode
   a. Option 1: In Command Prompt, type *“adb reboot recovery” and click enter*.
   b. Option 2:

- Reboot the device and keep the GUN (grip) trigger held.
- When Zebra Technologies logo appears on the screen release the trigger

7. MC33x will reboot and land up on the Android Recovery screen.

8. If applying update via sideload method

    a. Use UP and DOWN keys on the keypad to navigate up/down highlight item
    b. Use ENTER key on the keypad to select menu item – "Apply update via adb sideload"

9. With your Command Prompt, open, type "adb sideload" and add a space and then drag and drop the update 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
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 MC33X 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 "01-01-48-NG-00-A". 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 MC33X.

Using External SD card

1. Plug the MC33X into the USB & Charging Cable and then the Cable to the PC. If you have a Cradle with USB connectivity, you may use that as well.

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 FullPackageUpdate.Zip 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

    - Reboot the device and keep the GUN (grip) trigger held.
    - When Zebra Technologies logo appears on the screen release the trigger

5. Your MC33X will reboot and land up on the Android Recovery screen.

6. Applying update via External SD card

    a. Use UP and DOWN keys on the keypad to navigate up/down highlight item

    b. Use ENTER key on the keypad to select menu item – “Apply update from External SDCard”

    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 MC33X 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 “01-01-48-NG-00-A”. 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 MC33X.

Known Issues and Limitations

1. Limitation: After swapping battery and resuming the device, devices takes 15 seconds to update the correct battery State of Charge percentage.
2. Limitation: The com.wavelink.velocity folder is not created by OS until the Velocity application is opened at least once. In order to push a wldep profile before launching velocity application, user needs to create the folder manually or via MDMs.
3. Limitation: During battery swap, there will not be any LED indications.
4. BUG: Since device keypad is active (low power) during the suspended state, there are chances of accidental key presses reaching the foreground application after the device resumes - if there is no lock screen set.
5. BUG: BT connection state does not persist across reboots, if location settings is in enabled state

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