



Release Notes for Zebra Android Oreo 02-52-21.00-ON-U12-STD Release (Non-GMS)

Highlights

The details of the Android NGMS Oreo LifeGuard release 02-52-21.00-ON-U12-STD that covers the family of products including TC51, TC56, TC70x, TC75x, MC3300, MC3300R and VC80x. Please see, Device Compatibility under Addendum Section for more details.

LifeGuard patches are cumulative and include all previous fixes that are part of earlier patch releases.

Software Packages

Package Name	Description
ATLAS_DELTA_UPDATE_02-52-21.00-ON-U12-STD.zip	LG Package Update

Security Updates

This build is Compliant with to [Android Security Bulletin](#) of October 05 2021(Critical Patch Level: October 01, 2023).

Cellular carrier supported.

AT&T, Verizon Wireless, Sprint, and Telstra.

Version Information

Below Table contains important information on versions

Description	Version
Product Build Number	02-52-21.00-ON-U12-STD
Android Version	8.1.0
Security Patch level	October 05, 2021(Critical Patch Level: October 01, 2023)
Linux Kernel	3.10.84
Component Versions	Please see Component Version under Addendum section

LG U12 Update:

- ❖ ATLAS_DELTA_UPDATE_02-52-21.00-ON-U12-STD.zip (GMS)

Updated below mentioned components:

- Android security patch level: October 05, 2021 (Critical Patch Level: October 01, 2023).
- Updating WebView version to 116.0.5845.172
- Adding DW version 8.2.216 ZPK version from pi3.20_datawedge-8.2

Resolved Issues.

- CVE-2023-35673-Patched Fix for integer overflow in build_read_multi_rsp
- SPR47199/SPR50999: Resolved an issue where TC51 and TC70x outputs duplicate scanned data at random times during scanning.
- SPR38651 – Resolved an issue for System Date set to unsupported value after reset.
- SPR: 46691: Resolved an issue where the key state of the orange key was not seen when EHS is installed.
- SPR50811 – Resolved an issue for Intermittent Delay in BLE connection with RFD8500.

LG U09 Update:

- ❖ ATLAS_DELTA_UPDATE_02-52-21.00-ON-U09-STD.zip (GMS)

Updated below mentioned components:

- Android security patch level: October 05, 2021 (Critical Patch Level: July 01, 2023).
- Updating WebView version to 114.0.5735.61

Resolved Issues.

- SPR-50289: Resolved an issue for MC33 SE4850 where scanner was not working on trigger press in U04 build.
- SPR-50112: Resolved an issue to avoid considering random MAC for BLE scanning.

LG U07 Update:

- ❖ ATLAS_DELTA_UPDATE_02-52-21.00-ON-U07-STD.zip (Non-GMS)

Updated below mentioned components:

- Android security patch level: October 05, 2021 (Critical Patch Level: April 01, 2023).
- Updating webview version to 111.0.5563.58

Resolved Issues

- Bug fix for BSPA-233803 : Resolved an issue where Oem info stopped crash was seen while doing enable/disable BT and WI-FI.

LG U06 Update:

- ❖ ATLAS_DELTA_UPDATE_02-52-21.00-ON-U06-STD.zip (Non-GMS)

Updated below mentioned components:

- Android security patch level: October 05, 2021 (Critical Patch Level: Jan 01, 2023).
- Updating webview version to 108.0.5359.61

Resolved Issues

CVE-2020-10367 Patched the missing permissions check vulnerability which could enable Bluetooth core to write memory used by the Wi-Fi core

LG U05 Update:

- ❖ ATLAS_DELTA_UPDATE_02-52-21.00-ON-U05-STD.zip (Non-GMS)

Updated below mentioned components:

- Android security patch level: October 05, 2021 (Critical Patch Level: Oct 01, 2022).
- Updating webview version to 105.0.5195.77
- WorryFree WiFi Analyzer updated to WA_A_2_7.4.0.002_O

Resolved Issues

- SPR46855 - Resolved an issue wherein scanning in HID mode was intermittently causing repetition of characters until the scanner was unplugged

LG U04 Update:

- ❖ ATLAS_DELTA_UPDATE_02-52-21.00-ON-U04-STD.zip (Non-GMS)

Updated below mentioned components:

- Android security patch level: October 05, 2021 (Critical Patch Level: July 01, 2022).
- OSx version: QCT.81.8.16.0
- Scanning Framework : 23.3.8.3

Resolved Issues

- SPR45698 – Resolved an issue wherein MSI Check digit is shown in decoded data even though the MSI Check digit option is not enabled.
- SPR45288/46611– Resolved an issue wherein HW Picklist scanning performance is degraded when device is updated to U23.

- SPR46337 - Changed the Vodafone Portugal Apn settings.
- SPR46069 – Resolved an issue wherein device was going into rescue party mode randomly.
- SPR44489 – Upgraded the touch panel firmware to better calibrate to different touch modes.
- SPR46132 – Resolved an issue wherein device fails to pair with ZQ630 intermittently.
- SPR38958 - Resolved an issue wherein VPN connection was not using Domain name.

LG U03 Update:

- ❖ ATLAS_DELTA_UPDATE_02-52-21.00-ON-U03-STD.zip (Non-GMS)

Updated below mentioned components:

- Android security patch level: October 05, 2021 (Critical Patch Level: April 01, 2022).

Resolved Issues

- SPR45003 – Resolved an issue wherein Bluetooth was crashing when more than 100 devices are paired.
- SPR46125 - Resolved an issue wherein QR code enrollment was not working on U23 onwards.
- SPR45769 - Resolved an issue introduced in LG23 where a WiFi profile using certificate validation would fail to connect after an Enterprise or Factory Reset.

New Features

- Added support for BMI270/ICM42607 Gyroscope/accelerometer Sensors [VC80X supports BMI270 Gyroscope/accelerometer only].

Usage notes

BMI270/ICM42607 Gyroscope/accelerometer sensor devices require 02-52-21.00-ON-U03-STD or higher to ensure full G-sensor functionality.

The installed Gyroscope/Accelerometer sensors can be identified either in SETTINGS or via ADB command:

SETTINGS

- a. Devices with BMI270/ ICM42607 Gyroscope/accelerometer sensor will list sensor type as BMI270/ ICM42607 on "Settings-->About phone-->SW components-->Gyroscope" or "Settings-->About phone-->SW components -->Accelerometer".

ADB

Check the `ro.config.device.gyro` & `ro.config.device.accelerometer` property using **getprop** command from adb.

- a. Devices with **BMI270** Gyroscope/accelerometer sensor will have `ro.config.device.gyro = 32` `ro.config.device.accelerometer=120`

- b. Devices with **ICM42607** Gyroscope/accelerometer sensor will have ro.config.device.gyro = 260 ro.config.device.accelerometer=2052

Installation Requirements

- ADB installed on the PC (including adb drivers)
- USB debugging turned ON (from Developer options)
- Download Full Package

Installation Instructions

Software update procedure

The installation instructions assume user has ADB installed on their PC (the adb drivers etc..) and user device has developer options enabled and USB debugging ON. Instructions on HOW TO enable ADB is also captured in the user guide. Please check following link for more information on installation and setup instructions.

- [Installation and setup instructions](#)

Addendum

Device Compatibility

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

[TC51 Home Page](#)

TC51	
Device Part Number	Operating System
TC510K-2PAZU2P-US	Android O
TC510K-2PAZU2P-A6	Android O
TC510K-2PAZU4P-US	Android O
TC510K-2PAZU4P-A6	Android O
TC510K-2HDZU2P-US	Android O
TC510K-2HDZU2P-A6	Android O
TC510K-2PAZU2P-IA	Android O
TC510K-2PAZU4P-IA	Android O
TC510K-2HDZU4P-US	Android O
TC510K-2HDZU4P-A6	Android O

[TC70x Home Page](#)

TC70x	
Device Part Number	Operating System
TC700K-02B22B0-A6	Android O
TC700K-02B24B0-A6	Android O
TC700K-02B22B0-US	Android O
TC700K-02B24B0-US	Android O
TC700K-02B22B0-IA	Android O

FIPS and TAA Compliant SKUS	
Device Part Number	Operating System
TC510K-2PAZU4P-FT	Android O
TC510K-2HDZU4P-FT	Android O
TC700K-02B24B0-FT	Android O

[TC56 Home Page](#)

TC56	
Device Part Number	Operating System
TC56CJ-2PAZU2P-US	Android O
TC56CJ-2PAZU2P-A6	Android O
TC56DJ-2PAZU2P-A6	Android O
TC56DJ-2PAZU2P-BR	Android O
TC56DJ-2PAZU2P-IA	Android O
TC56DJ-2PAZU2P-CN	Android O
TC56DJ-2PAZU2P-TN	Android O
TC56DJ-2PAZU2P-ID	Android O
TC56CJ-2PAZU4P-US	Android O
TC56CJ-2PAZU4P-A6	Android O
TC56DJ-2PAZU4P-A6	Android O
TC56DJ-2PAZU4P-BR	Android O
TC56DJ-2PAZU4P-IA	Android O
TC56DJ-2PAZU4P-CN	Android O
TC56DJ-2PAZU4P-TN	Android O
TC56DJ-2PAZU4P-ID	Android O

[TC75x Home Page](#)

TC75x	
Device Part Number	Operating System
TC75EK-22B22AB-US	Android O
TC75EK-22B24AB-US	Android O
TC75EK-22F22AB-US	Android O
TC75EK-22B22AF-US	Android O
TC75FK-22B22AD-A6	Android O
TC75FK-22B24AD-A6	Android O
TC75FK-22B22AD-BR	Android O
TC75FK-22B22AD-IA	Android O
TC75FK-22B22AD-ID	Android O
TC75FK-22B22AD-TN	Android O
TC75FK-22F22AD-A6	Android O
TC75FK-22B22AD-TW	Android O
TC75GK-22B22AD-A6	Android O
TC75GK-22B24AD-A6	Android O
TC75GK-22F22AD-A6	Android O

FIPS and TAA Compliant SKUS	
Device Part Number	Operating System
TC56CJ-2PAZU4P-FT	Android O

FIPS and TAA Compliant SKUS	
Device Part Number	Operating System
TC75EK-22B24AB-FT	Android O

[VC80x Home Page](#)

VC80x USA		
	Device Part Number	Operating System
Warehouse	VC80X-10SSRAABBA-U	Android O
Freezer	VC80X-10FSRAABBA-U	Android O
Outdoor	VC80X-10SORAABBA-U	Android O
VC80x Rest of the World		
Warehouse	VC80X-10SSRAABBA-I	Android O
Freezer	VC80X-10FSRAABBA-I	Android O

Outdoor	VC80X-10SORAABBA-I	Android O
VC80x India		
Warehouse	VC80X-10SSRAABBA-IN	Android O
Outdoor	VC80X-10SORAABBA-IN	Android O

MC3300 Home Page

MC3300	
Device Part Number	Operating System
MC330M-RL3SA2RW	Android O
MC330M-RL2SA2RW	Android O
MC330M-RL40A2US	Android O
MC330M-RL3SA2US	Android O
MC330M-RL2SA2US	Android O
MC330M-SL3HA2RW	Android O
MC330M-SL2HA2RW	Android O
MC330M-RL4SA2RW	Android O
MC330M-GL4HA2RW	Android O
MC330M-GL40A2RW	Android O
MC330M-GL3HA2RW	Android O
MC330M-GL2HA2RW	Android O
MC330M-GI4HA2RW	Android O
MC330M-GI4HA2IN	Android O
MC330M-GI3HA2RW	Android O
MC330M-GI3HA2IN	Android O
MC330M-GI30A2RW	Android O
MC330M-GI2HA2RW	Android O
MC330M-RL3HA2RW	Android O
MC330M-SL4HA2US	Android O
MC330M-SL3HA2US	Android O
MC330M-RL4SA2US	Android O
MC330M-RL3HA2US	Android O
MC330M-SN3HA2RW	Android O
MC330M-SI4HA2RW	Android O
MC330M-SI3HA2RW	Android O
MC330M-SI30A2RW	Android O
MC330M-SI2HA2RW	Android O

MC3300	
Device Part number	Operating System
MC330K-GI4HA4US	Android O
MC330K-GI4HA3US	Android O
MC330K-GI3HA3US	Android O
MC330K-GE4HA4US	Android O
MC330K-GE4HA3US	Android O
MC330K-GE3HA3US	Android O
MC330K-GE2HA4US	Android O
MC330K-GE2HA3US	Android O
MC330K-SE2HA3RW	Android O
MC330K-SE4HA3US	Android O
MC330K-SE3HA3US	Android O
MC330K-SE2HA3US	Android O
MC330K-SG3HA4RW	Android O
MC330K-SG2HA4RW	Android O
MC330K-SG4HA4US	Android O
MC330K-SG3HA4US	Android O
MC330K-SG2HA4US	Android O
MC330K-GI3HA3IN	Android O
MC330K-SP2HA4RW	Android O
MC330M-SN3HA2US	Android O
MC330K-SN3HA3US	Android O
MC330M-SN2HA2US	Android O
MC330K-SL3HA3CN	Android O
MC330K-SI3HA3CN	Android O
MC330K-GL3HA3CN	Android O
MC330K-GI3HA3CN	Android O
MC330K-SB2HA4RW	Android O
MC330M-SIMHA2RW	Android O

MC330M-SN4HA2US	Android O
MC330M-SI4HA2US	Android O
MC330M-SI40A2US	Android O
MC330K-GL4HA4RW	Android O
MC330K-GL4HA3RW	Android O
MC330K-GL3HA4RW	Android O
MC330K-GL3HA3RW	Android O
MC330K-GL2HA3RW	Android O
MC330K-GI4HA4RW	Android O
MC330K-GI4HA3RW	Android O
MC330K-GI3HA4RW	Android O
MC330K-GI3HA3RW	Android O
MC330K-GE4HA4RW	Android O
MC330K-GE4HA3RW	Android O
MC330K-GE3HA3RW	Android O
MC330K-GE2HA4RW	Android O
MC330K-GE2HA3RW	Android O
MC330M-SI3HA2US	Android O
MC330K-SL4HA3RW	Android O
MC330K-SL2HA3RW	Android O
MC330K-RL4HA3RW	Android O
MC330K-RL3HA3RW	Android O
MC330K-RL4HA3US	Android O
MC330K-SN4HA3RW	Android O
MC330K-SN3HA3RW	Android O
MC330K-SI4HA3RW	Android O
MC330K-SI3HA3RW	Android O
MC330K-SI2HA3RW	Android O
MC330K-SN4HA3US	Android O
MC330K-SI4HA3US	Android O
MC330K-SI3HA3US	Android O
MC330K-RC4HA4RW	Android O
MC330K-RC3HA4RW	Android O
MC330K-RC4HA4US	Android O
MC330K-RC3HA4US	Android O
MC330M-GL4HA2US	Android O

MC330K-SP2HA3RW	Android O
MC330M-GJ4HA2RW	Android O
MC330M-GJ4HA2IN	Android O
MC330M-GJ3HA2RW	Android O
MC330M-GJ3HA2IN	Android O
MC330M-GJ30A2RW	Android O
MC330M-GJ2HA2RW	Android O
MC330M-SK3HA2RW	Android O
MC330M-SJ4HA2RW	Android O
MC330M-SJ3HA2RW	Android O
MC330M-SJ30A2RW	Android O
MC330M-SJ2HA2RW	Android O
MC330M-SK4HA2US	Android O
MC330M-SJ4HA2US	Android O
MC330M-SJ40A2US	Android O
MC330K-GJ4HA4RW	Android O
MC330K-GJ4HA3RW	Android O
MC330K-GJ3HA4RW	Android O
MC330K-GJ3HA3RW	Android O
MC330M-SJ3HA2US	Android O
MC330K-SK4HA3RW	Android O
MC330K-SK3HA3RW	Android O
MC330K-SJ4HA3RW	Android O
MC330K-SJ3HA3RW	Android O
MC330K-SJ2HA3RW	Android O
MC330K-SK4HA3US	Android O
MC330K-SJ4HA3US	Android O
MC330K-SJ3HA3US	Android O
MC330M-GJ4HA2US	Android O
MC330M-GJ40A2US	Android O
MC330M-GJ3HA2US	Android O
MC330M-GJ2HA2US	Android O
MC330K-SM4HA4RW	Android O
MC330K-SM3HA4RW	Android O
MC330K-SA4HA4RW	Android O
MC330K-SA3HA4RW	Android O

MC330M-GL40A2US	Android O
MC330M-GL3HA2US	Android O
MC330M-GL2HA2US	Android O
MC330M-GI4HA2US	Android O
MC330M-GI40A2US	Android O
MC330M-GI3HA2US	Android O
MC330M-GI2HA2US	Android O
MC330K-SP4HA4RW	Android O
MC330K-SP3HA4RW	Android O
MC330K-SB4HA4RW	Android O
MC330K-SB3HA4RW	Android O
MC330K-SP4HA4US	Android O
MC330K-SP3HA4US	Android O
MC330K-SB4HA4US	Android O
MC330K-SB3HA4US	Android O
MC330K-SE4HA3RW	Android O
MC330K-SE3HA3RW	Android O
MC330K-GL4HA4US	Android O
MC330K-GL4HA3US	Android O

MC330K-SM4HA4US	Android O
MC330K-SM3HA4US	Android O
MC330K-SA4HA4US	Android O
MC330K-SA3HA4US	Android O
MC330K-GJ4HA4US	Android O
MC330K-GJ4HA3US	Android O
MC330K-GJ3HA3US	Android O
MC330K-GJ3HA3IN	Android O
MC330K-SM2HA4RW	Android O
MC330M-SK3HA2US	Android O
MC330K-SK3HA3US	Android O
MC330M-SK2HA2US	Android O
MC330K-SJ3HA3CN	Android O
MC330K-GJ3HA3CN	Android O
MC330K-SA2HA4RW	Android O
MC330K-SP2HA3RW	Android O
MC330K-GI2HA3RW	Android O
MC330K-GJ2HA3RW	Android O
	Android O

MC3300R Home Page

MC3300R	
Device Part Number	Operating System
MC333R-GI2HA4IL	Android O
MC333R-GI2HA4CN	Android O
MC333R-GI4HA4CN	Android O
MC339R-GF4HA4CN	Android O

MC3300R	
Device Part Number	Operating System
MC339R-GE2HA4CN	Android O
MC339R-GF2HA4CN	Android O
MC339R-GE4HA4CN	Android O

Component Versions

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

Component / Description	Version
Product Build Number	02-52-21.00-ON-U12-STD
Android Version	8.1.0
Linux Kernel	3.10.84

Android SDK Level	27
Platform	QC8956
Bluetooth Stack	4.1
Flash Size	16/32GB
RAM Size	2/4GB
Scanning Framework	23.3.8.4
SimulScan	4.0.5
SimulScanEngine	3.0.1
DataWedge	8.2.216
EMDK	9.0.4.3004
MXMF / OSX	MXMF: 10.3.0.29 / OSX: QCT.81.8.16.0
WiFi	FUSION_BA_2_11.1.0.017_O Radio: BA_2_11.1.0.012_O Application: BA_2_11.1.0.006_O Middleware: BA_2_11.1.0.008_O Firmware: w 0: Nov 19 2021 11:52:42 version 7.35.205.8(r)FWID 01-3b5abe16
NFC	NFC_NCIHALx_AR003C.8.3.0_O_OpnSrc
PTT	3.1.54
Touch FW	TC70x/TC75x: 1.9-Stylus-1-0 TC51/TC56: 1.8-Stylus-2-0
RxLogger	5.4.16.0
Bluetooth Pairing Utility	3.16
Zebra Data Service	7.0.2.1047
Files	8.1.0
Stage Now	5.1.0.1
Battery Swap	1.0
User Guide	TC51: 1.0, TC56: 2.0, TC70x/TC75x: 1.0.0
Camera	2.0.002
MSRN	2.01
Zebra Volume Control (ZVC)	2.3.1.12
Battery Manger	1.4.2
ActiveEdge	2.5.16
WorryFree WiFi Analyzer	WA_A_2_7.4.0.003_O
Device Central	2.1.0.17
Zebra Software License Manager	6.0.8
Audio	0.8.0.0
Acoustic Profiles	TC51: General: AO1.1 Cellular: N/A TC51HC: General: AO2.2 Cellular: N/A TC70x: General: BO1.2 Cellular: N/A

	TC56: General: AO3.1 Cellular: AO3.2 TC75x: General: BO2.2 Cellular: BO2.1 VC80x: General: EO1.1 Cellular: N/A MC33x: General: DO1.1 Cellular: N/A
OemInfo	9.0.0.614
Enterprise Keyboard (EKB)	2.2.2.3
Webview	116.0.5845.172
RFID Module	MC3300R: PAAEES00-001-R00
RFID Radio	MC3300R: 2.0.29.0
Zebra RFID Mobile (Demo App)	MC3300R: 1.0.4.1
RFID Manager Application	MC3300R: 2.0.10.3
RFID System Service	MC3300R: 2.0.4.4
Baseband	ATLAS-W220112A-016.1-00064.0
Fingerprint	Zebra/TC51/TC51:8.1.0/02-52-21.00-ON-U00-STD/532:user/release-keys
	Zebra/TC51/TC51HC:8.1.0/02-52-21.00-ON-U00-STD/532:user/release-keys
	Zebra/TC70x/TC70x:8.1.0/02-52-21.00-ON-U00-STD/532:user/release-keys
	Zebra/TC75x/TC75x:8.1.0/02-52-21.00-ON-U00-STD/532:user/release-keys
	Zebra/TC75x/TC75xDF:8.1.0/02-52-21.00-ON-U00-STD/532:user/release-keys
	Zebra/TC56/TC56:8.1.0/02-52-21.00-ON-U00-STD/532:user/release-keys
	Zebra/MC33/MC33:8.1.0/02-52-21.00-ON-U00-STD/532:user/release-keys
	Zebra/MC33/MC33C:8.1.0/02-52-21.00-ON-U00-STD/532:user/release-keys
Security Patch Level	Zebra/VC80x/VC80x:8.1.0/02-52-21.00-ON-U00-STD/532:user/release-keys
	October 05 2021 (Critical Patch Level: October 01, 2023)

Important Links

- <https://techdocs.zebra.com/datawedge/8-1/guide/about/>
- <https://techdocs.zebra.com/emdk-for-android/8-0/guide/about/>
- <https://techdocs.zebra.com/stagenow/4-2/about/>
- <https://techdocs.zebra.com/mx/>
- <https://techdocs.zebra.com/rxlogger/5-4/guide/about/>

Revision History

REV	DESCRIPTION	DATE
1.0	Initial Release	October 21, 2023