Release Notes – Zebra Android 10

10-16-10.00-QG-U86-STD-HEL-04 Release (GMS)

Highlights

This Android 10 GMS release 10-16-10.00-QG-U86-STD-HEL-04 covers ET51 and ET56 family of products. Please see, Device Compatibility under Device Support 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
HE_DELTA_UPDATE_10-16-10.00-QG-U86-STD-HEL-04.zip	LG Package Update

Security Updates

This build is Compliant up to Android Security Bulletin of May 01, 2021.

LifeGuard Update 86 (Released only for ET51 and ET56)

➢ This LG patch is applicable for 10-16-10.00-QG-U00-STD-HEL-04 BSP version.

- o **New Features**
  - • Added support for display IC G101QAN01.1 on ET51/ET56 10" devices.

- o **Resolved Issues**
  - • None

- o **Usage Notes**
  - • ET51/ET56 10" devices with display IC G101QAN01.1 cannot be downgraded to BSPs below 10-16-10.00-QG-U00-STD-HEL-04 and require 10-16-10.00-QG-U86-STD-HEL-04 as a mandatory update.

    To identify display type, users can check 'ro.config.device.display' property using getprop command from adb.
    - o Devices with display IC G101QAN01.1 will have [ro.config.device.display] = 702
    - o Devices with display IC G101QAN01 will have [ro.config.device.display] = 701

LifeGuard Update 79

➢ This LG patch is applicable for 10-16-10.00-QG-U00-STD-HEL-04 BSP version.

  o This LG Patch includes following updated components.
    - Scanning Framework: 28.11.2.0
    - WiFi: FUSION_QA_2_1.3.0.032_Q
    - WorryFree WiFi Analyzer: WFW_QA_2_6.0.0.006_Q
    - Audio: 0.33.0.0
    - DataWedge: 8.2.308
    - EMDK: 9.1.0.3200
    - MXMF: 10.4.0.18
    - OSX: QCT.100.10.6.58
    - StageNow: 5.2.0.4
    - Zebra Data Service: 10.0.3.1001
    - MSRN: 2.02
    - OemInfo: 9.0.0.331
    - Bluetooth Pairing Utility: 3.23

  o **New Features**
    - Added support for LSM6DSM Gyroscope/accelerometer Sensor on TC72/TC77,TC52/57 and TC52x/TC57x devices. This LifeGuard patch supports the different pin configuration of the new G-sensor (LSM6DSM). In testing, the combination of new G-sensor with earlier versions of Android has not shown any performance, functionality, or device degradation.

    - Dotcode Erasure Parameter Support is added.

    - Dot Code Decoder Support is Added for RS5100 BT Scanner.

    - Added Support for NG SimulScan using Camera.

    - PL5000 Zback Scanner support is added for ET51/ET56 devices.

    - Added support for Integrated Scanner Frame SKUs ET51CE-G21E-SFA6,

      ET51CE-G21E-SFNA and ET51CE-G21E-SFIA with Zebra PL5000 decoder, which replaces the Zebra PL3307 decoder.

    - Added Feature in ZDS to support the collection of top RAM consumption per application.

    - Added Feature in ZDS to support the collection of identity of the application that initiated the scan.

    - Remove dependency on Enterprise partition in OEMInfo application to reduce the security risk.

    - Added support for VoIP on CC6000.

    - Added integrated licensing feature for VoD Application. User needs to apply valid license to use the app.

    - WFW VoIP Analysis - SIP-RTP Enhancement.

    - Granting Special permissions for EMM Device Owner application while Provisioning device.

    - Added support to provide location updates based on the specified minimum distance travelled for both WGS84 and non WGS84 formats.

    - Integration of custom feature CSP to add ability to enable or disable custom features.

- Added a feature to handle the network issue of ARP Requests not getting response from backend network.
- Added a feature to detect low RSSI conditions and scenarios and allow device to do quick recovery from the low RSSI state.
- Added support to enable/disable eSIM provisioning feature using CellularMgr CSP.

o **Resolved Issues**

- SPR41891 - Resolved an issue where device disables the profiles permanently when wrong credentials are entered.
- SPR41911 - Resolved an issue where it was not possible to set "false" value to protector param in TouchMgr CSP.
- SPR41725 - Resolved an issue where intermittently DataWedge would scan barcodes even when in suspend state.
- SPR41886 - Resolved an issue where Latin character set QR barcodes were not being decoded.
- SPR41912 - Resolved an issue where Intermittent print failures were observed using LinkOS SDK application.
- SPR42980 - Resolved an issue where device was not able to read Mifare classic 4K card.
- SPR40219 - Resolved an issue where MSI barcodes were not getting decoded.
- SPR41824 - Resolved an issue where WWAN data connection failures were reported due to incorrect APN configuration settings.
- SPR43359 - Resolved an issue where display would intermittently fail to turn on upon power key press.
- SPR41623 - Resolved an issue where TC52 was displaying incorrect magnetometer values.
- SPR41881 - Resolved an issue where a permission that was not supported originally on OS was not regranted to application upon newer OS update that supported those permissions.
- SPR41003 - Resolved an issue where BlueParrott headset connected to ET51 was picking up voice from a farther distance.
- SPR43717 - Resolved an issue where intermittently Airplane mode was enabled after an improper Battery Swap.
- SPR41841 - Resolved an issue where Keyboard volume notification level icon was missing in MC33 Brick SKUs.
- SPR43358 - Resolved an issue where first created profile using WIFI CSP after deleting the default profile, does not connect automatically.
- SPR41400 - Resolved an issue where key remapping was not working for modifier keys in Bundle mode for OEMCONFIG.
- SPR41116 - Resolved an issue where user was unable to configure Code128 Ignore FNC4 param from Datawedge on ET51, ET56 with Zback and Integrated Scanner.
- SPR43533 - Resolved an issue where display goes black on TC72 and TC77 with 4770 scan engines.

- Integrated a VPN security fix for Common Criteria mode.
- Default password for MSRN App has been set to empty.

  o **Usage Notes**

  ➤ To identify the LSM6DSM Gyroscope/accelerometer sensor on the device users can check the **ro.config.device.gyro** property using getprop command from adb.
    a. Devices with LSM6DSM sensor will have [ro.config.device.gyro] = 8.
    b. Devices with LSM6DSM sensor will list sensor type as LSM6DSM on "Settings-->About phone-->SW components-->Gyroscope" or "Settings-->About phone-->SW components -->Accelerometer".

  ➤ Support for Zebra PL5000 decoder with integrated scanner frame requires 10-16-10.00-QG-U79-STD-HEL-04 or higher to ensure full scanner functionality.

LifeGuard Update 72 (Released only for ET51 and ET56)

➤ This LG patch is applicable for 10-16-10.00-QG-U00-STD-HEL-04 BSP version.

  o This LG Patch includes following updated components.
    - Scanning Framework: 28.10.0.0

  o **New Features**
    - Added support for Zebra Scanner Expansion Back - ZBK-ET5X-10SCN7-02, ZBK-ET5X-8SCN7-02, that supports the SE4770 scan engine.

  o **Resolved Issues**
    - None

  o **Usage Notes**
    - None

LifeGuard Update 70 (Not Released for ET51 and ET56)

➤ This LG patch is applicable for 10-16-10.00-QG-U00-STD-HEL-04 BSP version.

  o **New Features**
    - None

  o **Resolved Issues**
    - None

o **Usage Notes**

  • None

LifeGuard Update 44 (Not Released for ET51 and ET56)

➢ This LG patch is applicable for 10-16-10.00-QG-U00-STD-HEL-04 BSP version.

  o This LG Patch includes following updated components.

  • Audio: 0.31.0.0
  • Bluetooth Pairing Utility: 3.20
  • DataWedge: 8.2.211
  • EMDK: 9.0.3.3003
  • License Manager and License Agent: 5.0.0 and version 5.0.0. 5.0.0
  • MXMF: 10.3.0.18
  • OSX: QCT.100.10.5.58
  • Scanning Framework: 28.9.8.0
  • StageNow: 5.1.0.1

  o **New Features**

  • Added support for Keyboard Audible Feedback feature on MC3300x, MC3300xR, MC9300, MC2200, MC2700 and VC8300 and ability to control volume of Keyboard Audible Feedback by MDM.

  • Added support to enable/disable DHCPv6 feature using DHCPOptionMgr CSP. Stateful DHCPv6 helps Admins track and block network abuses. With stateful DHCPv6 a client is likely to keep a stable IP as long as it stays on the same network.

  • Added support to see SAM Bridge FW Version in SW Component.

  • Added support to enable Low level NFC NCI Logging to get detailed logs for NFC scenarios for debugging purpose, logs are included as part of RxLogger logs.

  • Added support in OemInfo to allow customer applications and sideloaded applications to read BT MAC address.

  • Provided additional option for the user to change the touch panel mode configuration from Power Menu without going into settings menu once it is enabled using the CSP file.

  • Added support for Multibarcode - Automatic group identification.

  • Added support for Multibarcode - Read only specific barcodes.

  • Added support to remove Bluetooth pairing list.

  • Added support to pair BT Scanner at Google Setup Wizard (Welcome screen) to efficiently stage the device for devices without inbuilt scanner.

  o **Resolved Issues**

  • SPR-40819 : Resolved an issue wherein 7-bit ASCII encoded data matrix code was not getting decoded.

  • SPR-41039 : Updated the APN details for Bulgarian operator A1.

- SPR-40216 : Resolved an issue wherein flash LED temperature was very high when torch was turned ON for a longer duration.

- SPR-38667 : Resolved an issue wherein user was unable to remotely browse files over VPN.

- SPR-40400 : Resolved an issue wherein device was losing WWAN connectivity at higher temperatures.

- SPR-41255 : Resolved an issue wherein devices were getting struck in recovery screen during MDM enrollment.

- SPR-41056 : Resolved an issue wherein SIM not detected toast message used to appear even with a valid SIM.

- SPR-39513 : Resolved an issue wherein intermittently display would not turn on upon wakeup from suspend.

- SPR-39544 : Resolved an issue where eMMC health was not being retrieved correctly on certain flash part.

- SPR-41094 : Resolved an issue wherein during a call, user gets echo while the other user was on speaker mode.

- SPR-41144 : Resolved an issue wherein the EMM Enrollment was not working over ethernet connection.

- SPR-41622 : Resolved an issue wherein additional touch events were occurring for a single touch press.

- SPR-38739 : Resolved an issue wherein streaming of certain MP3 files used to fail.

- SPR-41400 : Resolved an issue wherein key remapping was not working for CTRL and other advanced key modifiers using OemConfig.

- SPR-41578 : Added support for enabling/disabling "key press sounds" via StageNow.

- SPR-41397 : Resolved an issue wherein intermittently WLAN failed to turn On.

- SPR-39082 : Resolved an issue wherein Intermittent loss of Ethernet connection is observed.

- SPR-41260 : Resolved an issue wherein third-party VPN Apps were unable to access certificates (installed via StageNow/MX) on the device resulting in not able to connect to the server.

- SPR-41915 : Enabled Serial Port Comm API support.

- Fixed an issue wherein device crash was seen when STC SIM was inserted.

o **Usage Notes**
- None

LifeGuard Update 28 (Not Released for ET51 and ET56)

➢ This LG patch is applicable for 10-16-10.00-QG-U00-STD-HEL-04 BSP version.

o **New Features**
- None

- o **Resolved Issues**
  - • None

- o **Usage Notes**
  - • None

LifeGuard Update 26 (Not Released for ET51 and ET56)

➢ This LG patch is applicable for 10-16-10.00-QG-U00-STD-HEL-04 BSP version.

- o **New Features**
  - • None

- o **Resolved Issues**
  - • None

- o **Usage Notes**
  - • None

LifeGuard Update 16 (Not Released for ET51 and ET56)

➢ This LG patch is applicable for 10-16-10.00-QG-U00-STD-HEL-04 BSP version.

- o **New Features**
  - • None

- o **Resolved Issues**
  - • None

- o **Usage Notes**
  - • None

Version Information

Below Table contains important information on versions

Description	Version
Product Build Number	10-16-10.00-QG-U86-STD-HEL-04
Android Version	10

Security Patch level	May 1, 2021
Component Versions	Please see Component Versions under Addendum section

Known Constraints

- Picture quality of the image taken with 'Night Mode' in low-light conditions is poor.
- Trigger Modes: Presentation Read Mode is preferred over Continuous Read Mode. If using Continuous Read mode, use a lower illumination brightness setting (e.g., 2) to ensure the scanner can work without interruption.
- "Red Eye Reduction" feature disables the camera flash in the device. Hence, to enable the camera flash please disable the 'Red Eye Reduction' feature.
- EMM does not support agent persistence in OS dessert downgrade scenario.
- Reset packages of Oreo and Pie should not be used on devices running with A10 software.
- In-order to avoid any inconsistencies in Settings UI it is recommended to wait for a few seconds after the device boots up.
- Transparent blue overlay in camera view –numeric, character or ENTER key presses in camera view will make this blue overlay appear. The camera is still functional; however, the view is covered with the blue overlay. To clear this, press the TAB key to move the control to a different menu item or close the camera app.
- In case of an OS upgrade from a s/w version having higher security patch level to a s/w version having lower security patch level, user data will be reset.
- TC5x flash LED temperature is too high when torch is on for long time.
- Unable to scan remote company network using ES file explorer over VPN.
- In case USB flash drives are not getting detected on VC8300 after reboot on USB-A port, re-insert the USB flash drive after the device is fully powered up & on home screen.
- On WT6300 with RS4000 & RS5000 usage, the DataWedge option "Keep enabled on suspend" (in Profiles > Configure scanner settings) shall NOT be set, user can set "Trigger Wakeup and Scan"(in Profiles > Configure scanner settings > Reader params) for single trigger wake and scan functionality.
- When phone app is being disabled using MDM and user tries to reboot the device, user might see **Recovery Screen** with "Try again" and "Factory data reset" options. Select option "Try again" to continue the reboot process. Do not select option "Factory data reset", as it will erase the user data.
- AppManager actions only apply to the applications on the device at the time "DisableGMSApps" is called. New GMS applications present in any new OS update will not be disabled following that update
- After upgrading from Oreo to A10, Device shows "SD card setup" notification, which is expected behavior from AOSP.
- After upgrading from Oreo to A10, staging fails on few packages, user must update package names accordingly and make use of the profiles or create new staging profiles.
- At the very first time, DHCPv6 enable through CSP is not reflecting until user disconnect/reconnect to the WLAN profile.
- Support for ZBK-ET5X-10SCN7-02 and ZBK-ET5X-8SCN7-02 (SE4770 scan engine devices) is not available with software released before 10-16-10.00-QG-U72-STD-HEL-04.

Important Links

- Installation and setup instructions (if the link does not work please copy It to browser and try)

  Note:

  "As part of IT security best practices, Google Android enforces that the Security Patch Level (SPL) for the new OS or patch must be the same level or a newer level than the OS or patch version currently on the device. If the SPL for the new OS or patch is older than the SPL currently on the device, then the device will enterprise reset and wipe all user data and settings including user network configurations and remote management tools which would render the device inaccessible over a network."

- Zebra Techdocs

- Developer Portal

Device Support

Device Compatibility

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

Device Family	Part Number		Device Specific Manuals and Guides
ET51	ET51CT-G21E-00A6 ET51CT-G21E-00NA ET51CE-G21E-00NA ET51CE-G21E-00A6	ET51CE-G21E-00IA ET51CE-G21E-SFA6 ET51CE-G21E-SFNA ET51CE-G21E-SFIA	ET51 Home Page
ET56	ET56DT-G21E-00NA ET56ET-G21E-00A6 ET56ET-G21E-00IA	ET56DE-G21E-00A6 ET56DE-G21E-00NA	ET56 Home Page

Addendum

Component Versions

Component / Description	Version
Linux Kernel	4.4.205
AnalyticsMgr	2.4.0.1254
Android SDK Level	29
Audio (Microphone and Speaker)	0.33.0.0
Battery Manager	1.1.7

Bluetooth Pairing Utility	3.23
Camera	2.0.002
DataWedge	8.2.308
EMDK	9.1.0.3200
Files	10
License Manager and License Agent	version 5.0.0 and version 5.0.0.5.0.0
MXMF	10.4.0.18
NFC	NFC_NCIHALx_AR18C0.a.3.0
OEM info	9.0.0.331
OSX	QCT.100.10.6.58
RXlogger	6.0.4.0
Scanning Framework	28.11.2.0
StageNow	5.2.0.4
WLAN	FUSION_QA_2_1.3.0.032_Q
Baseband	W210420A_014.1-00863
Zebra Bluetooth Settings	2.3
Zebra Data Service	10.0.3.1001

Revision History

Rev	Description	Date
1.0	Initial release	July 12, 2021