



# Release Notes – Zebra Android Oreo 01-30-04.00-ON-U20-STD Release (AOSP)

## Highlights

The details of the Android AOSP Oreo release 01-30-04.00-ON-U20-STD that covers family of products including ET51 and ET56. 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_01-30-04.00-ON-U20-STD.zip	LG Package Update

## Security Updates

This build is Compliant up to [Android Security Bulletin](#) of February 01, 2021.

## LifeGuard Update 20:

- This LG patch is applicable for 01-30-04.00-ON-U00-STD BSP version. The LG Patch includes the following updated components.

- DataWedge 8.2.211
- StageNow 5.1.0.1
- EMDK 9.0.3.3003
- MXMF: 10.3.0.18/ OSX: QCT.81.8.25.21
- Scanning framework: 23.01.22.00

## Fixes

- SPR41440: Added support to retrieve logs when device goes into rescue party mode.
- SPR40468: Resolved an issue wherein some part of barcode data was getting lost when used along with DS3678 in HID mode.
- SPR39238: Updated Chromium browser to v85 for AOSP BSP only to resolve same site cookie vulnerability.
- SPR40219: Resolved an issue wherein MSI barcodes were not getting decoded.
- SPR40672: Resolved an issue wherein CTRL key was not able to be suppressed using stage Now in VC83.
- SPR40400: Resolved an issue wherein WWAN was disconnecting at high temperatures.
- SPR41037: Updated the APN details for Movistar operator.
- SPR41038: Updated the APN details for Telenor operator.
- SPR40859: Resolved an issue wherein frequent drops in LTE data drop was being reported.
- SPR41400: Resolved an issue wherein key remapping was not working for CTRL and other advanced key modifiers using OemConfig.

- SPR40906/SPR40819: Resolved an issue wherein 7-bit ASCII encoded data matrix code was not getting decoded.
- SPR41116: Resolved an issue wherein user was unable to configure Code128 Ignore FNC4 param from Datawedge on ET51, ET56 with Integrated scanner.
- SPR41056: Resolved an issue where device boots with the active SIM card the message popup shows "No SIM detected"
- Resolved an issue where device failed to perform sim slot switching and crashed.

## Features

- Added support for Zebra Scanner Expansion Back - ZBK-ET5X-10SCN7-02, ZBK-ET5X-8SCN7-02, that supports the SE4770 scan engine.
- Added support for Multibarcodes feature - Read only specific barcodes
- Added support in OemInfo to allow customer applications and sideloaded applications to read BTMAC address.
- Added support for SAM Bridge FW Version in Settings App.
- Added support for A/B Streaming Update.
- Added support for enabling custom features with CustomFeatureCSP
- Added support to clear the list of Bluetooth paired devices.
- Added support for Illumination Brightness parameter for SE4710 & SE4750 Scan Engines.
- Added support for Feature based Zebra software Licensing support for Enterprise Browser.
- Added Support "Wake up and Scan" on Trigger Press

## LifeGuard Update 15:

- This LG patch is applicable for 01-30-04.00-ON-U00-STD BSP version. The LG Patch includes the following updated components.

- DataWedge 8.2.48
- StageNow 5.0.0.1
- EMDK 8.2.4.2804
- MXMF: 10.2.0.25/ OSX: QCT.81.8.25.20

## Fixes

- SPR39478: Resolved an issue wherein user was unable to change the touch mode functionality such as "Stylus, Glove and Finger" using stagenow.
- SPR 40289: Resolved an issue wherein TC52 was intermittently losing audio connectivity with HS3100.
- SPR40078: Resolved an issue wherein EC30 was performing BLE packet advertisement on incorrect power level when the MAX set level.
- SPR39982: Fixed an issue wherein isVerifyAppsEnabled api was returning false though it was enabled from settings.
- SPR40301: - Resolved an issue where Webview does not load intermittently after Enterprise Reset with GMS-Restricted persistent profile.
- SPR39795: Resolved an issue wherein timestamp was missing in dotcode scanned data.
- SPR40025: Removed the ImagerMode options from Datawedge as it is not supported.
- SPR40770: Standardized the Thermal mitigation response for TC57
- SPR40602: Resolved an issue wherein WFW Manager CSP was returning coverage view config error.

## New Features

- Added support for Edge-detect Document Capture
- Add support for Signature presence checking with anchor barcode image capture.
- Add UI support for Enterprise NFC.
- Added support for 802.11k Link and Beacon Measurement
- 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 Trusted Device Pairing and Single Pairing feature over Bluetooth
- Integration of Custom Feature CSP to add ability to suppress USB permissions pop-up notification
- Added support for AR1337 camera on TC52, TC57, TC72, TC77, MC93, TC83 devices(Refer Point 3 in NOTE section for [more info](#))
- Added software audio codec support for TC83 Rev B SKU with HW ID 651,653,654,655,656,658,659,660,661,662,664,666,667,668,669 (Refer Point 4 in NOTE section for [more info](#))
- Added support for KYPD-MC93DLA-01 and KYPD-MC93DLA-10 custom keypads on MC93.
- Added feature in OemInfo to verify the signature and grant read data access to applications signed with Zebra OEM keys or MX Plugin CSP keys.
- Added feature in ZDS to receive southbound messages from FCM in Oreo devices.

## LifeGuard Update 13:

- This LG patch is applicable for 01-30-04.00-ON-U00-STD BSP version. The LG Patch includes the following updated components.
  - MX: - 10.1.0.47
  - DataWedge: - 8.1.48
  - EMDK: - 8.1.9.2709
  - OSX: 81.8.25.19

## Fixes

- SPR40239 – Resolved an issue wherein the QR code provisioning failed to work on non-camera SKUs using built-in scanner
- SPR40567 – Resolved an issue wherein DataWedge used to crash upon sending enable/disable DW intent from an Application
- SPR40544 – Resolved an issue wherein Connected notification was not being sent by Datawedge to the Applications when “AutoSwitch to default on event” was enabled.
- SPR40408, SPR40771, SPR40400 – Fixed an issue wherein WAN was getting turned off at very high temperatures and would turn back on after the temperature reduced by a great extent.
- SPR40500 – Resolved an issue wherein the configured custom private Verizon APNs used to get reverted to defaults on updating the BSP.
- IrDA Raw mode throughput issue has been solved in this release.

## LifeGuard Update 12:

- This LG patch is applicable for 01-30-04.00-ON-U00-STD BSP version.

## Fixes

- Fixed multiple vulnerability in the QCOM SoC

## LifeGuard Update 11 (Only for TC72/TC77):

- This LG patch is applicable for 01-30-04.00-ON-U00-STD BSP version.

## New Features

- Added Display timing optimization for TC72/TC77 SKUs supporting the SE4770 scan engine Tianma display devices.

## LifeGuard Update 10:

- This LG patch is applicable for 01-30-04.00-ON-U00-STD BSP version.

## Resolved Issues

- SPR40250 – Resolved an issue wherein user was unable to power off the device by clicking on the Power menu item while automation suite was running on the device.
- SPR40109 – Resolved an issue wherein proxy service was getting killed after reboot.
- SPR39918 – Resolved an issue wherein Phone information was being displayed upon dialing UUID code.
- SPR39868 – Resolved an issue wherein Diamond key UI was showing (/) instead of (?) while in shifted state.
- SPR37883 – Resolved an issue wherein proxy resolution fails when Java script functions are invoked.

## LifeGuard Update 08:

- This LG patch is applicable for 01-30-04.00-ON-U00-STD BSP version.  
The LG Patch includes the following updated components.

- MX: - 10.1.0.33
- DataWedge: - 8.1.38
- EMDK: - 8.1.6.2706
- StageNow-Client: - 4.3.2.3
- MX Proxy Framework: - 10.1.0.5
- Scanning Framework: - 23.1.16.0
- PTT Express: - 3.1.46 (Added PTT Express A la Carte license)

## Resolved Issues

- SPR39482//SPR40126 – Resolved an issue wherein the check digit rule was not working as expected on MSI barcode symbology.
- SPR40076 – Resolved an issue wherein scanner framework crash was seen due to incorrectly invoking of EMDK API sequence.
- SPR39819 – Resolved an issue wherein an additional "Enter key" was being added in the barcode data when Datawedge ADF rule for Line feed Action Key Char was set to "Send Char" 10.

- SPR39560 – Resolved an issue wherein upon performing OS updates with below 30% battery level would lead to device prompting for the device password.
- SPR39522 – Resolved an issue wherein the CTRL key combination modifier functionality was not working when pressed with any other key in quick succession.
- SPR37538 – Resolved an issue wherein batteries were not getting charged when placed in toaster while it used to charge in the device.
- SPR38955 – Resolved an issue wherein button actions are incorrect in case user slides finger to touch screen or another on-screen button without lifting.
- SPR39924 – Resolved an issue where in DNS resolution was not working as expected in ethernet interface.
- SPR40170 - Resolved an issue where Bluetooth was crashing when more than 100 devices are paired.

### **New Features**

- Added support for Digimarc SDK 3.8.1
- Added support for XAPDU and SAM ATR, PPS on TC7x SAM product
- Permanently disabled Ambient Display for EC30
- Added support of Individual Wakeup source for EC30
- Added support for USB-C charging for ET51 Scanner Frame SKU

### **LifeGuard Update 06:**

- This LG patch is applicable for 01-30-04.00-ON-U00-STD BSP version. The LG Patch includes the following updated components.
  - MX: - 10.0.5.1
  - DataWedge: - 8.0.42
  - StageNow-Client: - 4.2.6.6
  - MX Proxy Framework: - 10.0.1.1
  - Enterprise Browser: - 2.7 (for PS20 devices only)

### **Fixes**

- SPR39784/SPR39879 - Resolved an issue wherein setting time zone would not set the time correctly via MX
- SPR39878 – Resolved an intermittent crash issue in Datawedge.
- SPR39592 – Resolved an issue wherein intermittently the BT Pairing pop up would appear on disconnecting a BT scanner.
- SPR39647 – Resolved an issue wherein CODE39 symbology was not being decoded
- SPR39327 – Resolved an issue wherein intermittently devices would get stuck in fastboot screen after a Factory reset.

### **New Features**

- Added eSIM provisioning
- Added support to change the device's domain selection like from voice to data and vice versa.
- Added auto selection of active SIM/USIM/eSIM subscriptions when device is in DSDS mode

### **LifeGuard Update 04:**

- This LG patch is applicable for 01-30-04.00-ON-U00-STD BSP version. The LG Patch includes the following updated components.

- MX: - 10.0.2.6
- DataWedge: - 8.0.37
- StageNow-Client: - 4.2.5.5
- Enterprise Keyboard: - 2.2.2.3
- EMDK: - 8.0.10.2621
- DDT: - 1.20.0.2
- Event injection Service: - 4.3.0.0
- Zebra Folder: -10.0
- Wi-Fi: - FUSION\_QA\_2\_1.11.0.008\_O
- OSX: QCT.81.8.25.18

### Fixes

- SPR39012 - Resolved an issue wherein the profile with SKIP\_SUW used to take more time to get applied
- SPR39545-Resolved an issue wherein external USB keyboard was not getting disabled via StageNow or MX
- SPR39405- Resolved an issue wherein cellular network connection failure were observed.
- SPR39514-Resolved an issue wherein while using chrome in GMS restricted profile, enable Google Play services notification popup used to appear.
- SPR39613 - Resolved an issue where Device was unable to fetch UUID details of remote device
- SPR39513- Resolved an issue wherein screen would not wake up from suspend when using scan-trigger as wakeup source
- SPR39006 – Added support to automatically agree to the location consent when the location modes are changed using WirelessMgr CSP
- SPR35665 – Resolved an issue wherein Google keyboard settings are not persisting through a reboot when configured directly after factory reset
- SPR38534 – Resolved an issue where disconnection is observed in Fast Transition mode when device is in suspend state.
- SPR39082 – Resolved an issue wherein Intermittent loss of Ethernet connection is observed.
- SPR38880 – Resolved an issue wherein device gets stuck on bootup screen.
- SPR38885 – Added support to allow package installation while App whitelist is enabled with App verification mode as long as the package and its corresponding signature is whitelisted.
- SPR39332 – Resolved an issue wherein scanning multiple barcodes would not work while in SKIP SETUP Wizard screen
- SPR38739 – Resolved an issue wherein streaming of certain MP3 files used to fail
- SPR38748 – Resolved an issue wherein multicast voice traffic reception is improved.
- SPR39578-Resolved an issue where Device was unable to retain Bluetooth connection after idle timeout period.
- Fixed an issue on SE4750 scanner devices where scanning would occasionally stop after extensive scanning.
- SPR39544 - Resolved an issue wherein the eMMC health data was being reported incorrectly for a specific flash part.
- SPR39644 – Included Rxlogger v5.4.16.0 that provides option to store the logs in the Internal sdcard, even when external SDcard is present on the device. User needs to select “Enable Internal sdcard only” to store the logs in the internal sdcard.

## New Features

- Added Workstation Dock Enhancements & PH10 Support.
- Added Ability to Provision network credentials as part of Android Setup Wizard.
- Added support for Google QR Code integration with device scanner.
- Added support for Raw and IrCOMM modes for existing IrDA SW package.
- Added secure DataWedge Intent APIs for device and data security.
- Added support of Dynamic Staging to mass create barcodes from a single profile.
- Added Ability to easily add support for new File Transfer protocols.
- Added support to Control Access to Sensitive MX Functions.
- Added MC93 Cold Storage SKUs Heater Control Logic Optimization.
- Added Scanner Frame support for ET51.
- Added support for Connectivity analysis retry in Worry Free Wifi
- Added support for Image Capture with anchor barcode.
- Added support for Sensitivity parameter for Presentation mode.
- Added support for Trigger modes (Timed Release & Timed Hold) support in DS36xx and L36xxx scanners.

## Cellular carrier supported

AT&T, Verizon Wireless, Sprint, Telstra, and ROW (Rest of World)

## Version Information

Below Table contains important information on versions

Description	Version
Product Build Number	X1-30-04.00-ON-U20-STD
Android Version	8.1.0
Security Patch level	February 01, 2021
Linux Kernel	4.4.78
Component Versions	Please see Component Version under Addendum section

## Important Links

- **Requirements and Instructions**
  - [Installation and setup instructions](#)
- [Zebra Techdocs](#)
- [Developer Tools](#)

## Upgrade Options

Below table provides detailed information on shortest path to upgrade based on current version of software.

Current Software Version on Device	Steps to get to this Release	Comments
01-12-01.00-ON-Uxx 01-13-20.00-ON-Uxx 01-18-02.00-ON-Uxx 01-21-18.00-ON-Uxx	Apply Full Package Update HE_FULL_UPDATE_01-30-04.00-ON-U00-STD.zip <b>Followed by</b> Apply Delta Update HE_DELTA_UPDATE_01-30-04.00-ON-U20-STD.zip	Full Package Update
01-23-19.00-ON-Uxx	<b>Option 1:</b> Apply Delta Package Update HE_DELTA_UPDATE_01-23-19.00-ON_TO_01-30-04.U00-ON.zip <b>Followed by</b> Apply Delta Update HE_DELTA_UPDATE_01-30-04.00-ON-U20-STD.zip <b>Option 2:</b> Apply Full Package Update HE_FULL_UPDATE_01-30-04.00-ON-U00-STD.zip <b>Followed by</b> Apply Delta Update HE_DELTA_UPDATE_01-30-04.00-ON-U20-STD.zip	<b>Option #1</b> is recommended as size of Delta package update is smaller compared to Full Package Update
01-30-04.00-ON-Uxx	Apply Delta Update HE_DELTA_UPDATE_01-30-04.00-ON-U20-STD.zip	

### NOTE:

1. The MC93 devices with below HW IDs are not allowed to downgrade to any of the older BSPs than 01.30.04.
  - a. HW IDs: 513, 514, 521, 544, 549, 588, 589
  - b. The HW ID from MC93 devices can be found under “Settings->System->About phone->SW Components ->HW ID”
2. The TC72/TC77 devices with Tianma display are not allowed to downgrade to any of the older BSPs. For TC72 the device is not allowed to upgrade to Android P BSP 2.11.01. To identify the display type on TC72/TC77 devices user can check the ro.config.device.display property using getprop command from adb.



- a. For TC72/TC77 Innolux device [ro.config.device.display] = 900
  - b. For TC72/TC77 Tianma device [ro.config.device.display] = 512
3. In devices with AR1337 camera on TC72, TC77,TC52,TC57,MC93,TC83 , the camera will not work with any of the older LG releases or BSPs below 01-30-04.00-OG-U15.They can be identified by reading the property “ro.config.device.camera0” using getprop command from adb.
    - a. [ro.config.device.camera0]: [128]
    - b. [ro.config.device.camera0\_sensor\_name]: [ON-Semi AR1337]
    - c. TC52, TC77, TC72, TC77 AR1337 new SKU list with AR1337 camera support is available in Device support section in the release notes
  4. TC83 Rev B SKU’s (HW ID’s 651,653,654,655,656,658,659,660,661,662,664,666,667,668,669) are not allowed to downgrade to any of the older LG releases or BSPs below 01-30-04.00-ON-U15 .
    - a. The HWID can be identified from Settings->System->About phone->SW Components->HW ID or by reading the property “ro.config.device.sku” using getprop command from adb .

## Known Constraints and Workarounds

- WiFi sleep policy set to “Always” (Android O limitation)
- Some devices operate at 320 dpi. This screen configuration results in the majority of the AOSP applications displaying content consistently in both portrait and landscape modes. In most cases if the application layout is not optimal in landscape it is optimal in portrait or vice versa. However, there are a few applications that do not render properly in either portrait or landscape. In this case the suggested alternative is to change the display size using the bundled Display Settings APK or use settings menu to change the display size and font size (settings □ Display □ Advanced settings □ Display Size / Font Size).
- Illumination brightness is set to maximum by default for SE4710 and SE4750 Scan Engines.
- Support for ZBK-ET5X-10SCN7-02 and ZBK-ET5X-8SCN7-02 (SE4770 scan engine devices) is not available with software released before 01-30-04.00-ON-U20-STD.

## Device Support

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

Device Family	Part Number		Device Specific Manuals and Guides
ET51	ET51CE-L21E-00CN ET51CT-L21E-00CN	ET51CE-L21E-SFCN	<a href="#">ET51 Home Page</a>

ET56	ET56DE-L21E-00CN		<a href="#">ET56 Home Page</a>
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## Addendum

### Component Versions

Component / Description	Version
AnalyticsMgr	2.4.0.1254
Battery Manager	Version: 1.4.2
Bluetooth Pairing Utility	Version 3.16
Device Central	2.1.0.15
DataWedge	8.2.211
EMDK	9.0.3.3003
Enterprise Keyboard	2.2.2.3
System Update	1.0.0.8
MXMF	10.3.0.18
OSX	QCT.81.8.25.21
StageNow-Client	5.1.0.1
Wi-Fi	FUSION_QA_2_1.11.0.010_O
License Manager	5.0.0
MSRN	2.01
NFC	NFC_NCIHALx_ARC0.8.4.0
PTT Express	3.1.46
Rxlogger and RxLoggerUtility	Version 5.4.16.0 and Version: 1.3.3.12
Scanning Framework	23.01.22.00
WorryFree Wifi Analyzer	3.2.13
Android Webview	85.0.4183.101

## Revision History

Rev	Description	Date
1.0	Initial Release	February 22, 2021