WT6000 OPERATING SYSTEM BSP 20503 RELEASE NOTES

INTRODUCTION

Wearable computers give workers the hands-free mobility they need to boost productivity to a new level. But your workers find today's wearables uncomfortable — until now. Introducing the WT6000, the new Android wearable computer that sets a new standard for enterprise-class wearability. It's smaller and lighter than other wearables on the market.

With the incredible new mounting system, the WT6000 fits comfortably on every worker, on any size arm. The larger touchscreen provides more real estate to display intuitive graphical Android applications. Integrated NFC allows workers to instantly tap-to-pair with Zebra's Bluetooth ring scanner, Bluetooth headset and Bluetooth printers at the start every shift, making it easy to deploy a complete hands-free speech-directed solution. And the industrial rugged design delivers maximum uptime in your most demanding environments.

The result? Maximum comfort. Maximum durability. Maximum workforce productivity. The WT6000 — putting the wearable in industrial wearable computing.

- Android Lollipop 5.1 operating system with powerful 1.0 GHz quadcore processor, providing more than enough performance for the most advanced supply chain applications
- Prelicensed and loaded Alltouch Terminal Emulation (TE) and enterprise web browser for realtime, remote connection to business critical supply chain applications
- 3.2 inch capacitive touch screen provides ample room for both your application and intuitive virtual keyboards and enables input even when user is wearing gloves Three function buttons beneath the display for navigation in legacy TE apps
- 3350mAh lithium ion PowerPrecision+ battery pack provides full shift life and proactive health statistics
- NFC reader enables seamless taptopair functionality for supported Bluetooth accessories, such as RS6000 Bluetooth ring scanner, HS3100 Bluetooth headset and Bluetooth mobile printers.

COMPONENT CONTENTS

Component / Description	Version
Product Build Number	02-05-03-L-00-MV
Android Version	5.1.1
Android security patch level	2016-12-01

Linux Kernel	3.14.52
u-boot	2015.04(2017-Jan-19)
Android SDK Level	22
Platform	Freescale imx6
Bluetooth Stack	Android 5.1.1
Flash Size	4GB
RAM Size	1GB
MSP Agent	7.08.86 (Included for Airwatch support only)
Scanning	16.0.21.5
Datawedge	6.0.21
Mx / OSX	MXMF: 6.1.8/ OSX: FSL.51.5.2.10
WiFi	FUSION_BA_1_01_0.0.003
PTT Express	3.1.28
EMDK Service	6.0.6.306
RxLogger	4.58.5.0
Touch FW	25
Zebra Volume Control	1.1.23
Battery Manager	1.5
B2M	1.0.0.297
Bluetooth Pairing Utility	3.5

DataAnalytics	1.0.2.1813
File Browser	1.13
Stage Now	2.5.1.1037
App Gallery	2.3.8
WLAN FW	7.35.205.8 FWID 01-298a66f9
NFC	NFC_NCIHAL_AR3.2.0_L
Sensors (Accel, Gyro)	3060105
Sensors (Light)	1
MobiControl	12.2.0. Build 23469
Wavelink Velocity	1.2.0.2741
Print Station	1.3
Tap and Pair	2.0
Zebra Utilities (Printer)	2.0.5152
Enterprise Keyboard	1.2.0.2 2

FEATURES ADDED/SUPPORT

·   Updated Mobility DNA components (EMDK, Scanner Framework, Battery Manager, DataWedge, Fusion)

·   PTT Express

·   Zebra Utilities (Printer)

·   Enterprise Keyboard

·   DHCP Options (12, 15, 42, 61, 66, 67, 77, 119, 150, 186, 188, 230)

·   Support for updated main logic board: Bluetooth/WLAN radio are being built at new facility

RELEASE NOTES FOR UPDATED COMPONENTS

EMDK 6.0.6 New Features and Fixed Issues
· Added support for MX v6.1 in Profile Manager:

- Threat Manager – Added new feature to configure the detection of rooting and to apply a countermeasure when the device is detected as being rooted.
- UI Manager – Added new feature to allow or disallow network monitored messages/notifications.
- Bluetooth Manager – Added new feature to enable or disable the mobile device discoverability.
- Wi-Fi – Added new feature to enable or disable the password protected encryption.
- Device Administrator – Added new feature to select the type of screen lock such as no password, password, pattern and swipe.
- KeyMapping Manager – Added key mapping support for Rear Button and Grip Trigger 2.

· Enhanced Barcode Manager APIs with the following features:
- Added new decoder parameter in Code128, Code39, I2of5 and UpcEan decoders in ScannerConfig.DecoderParams:
    - reducedQuietZone - Flag to enable or disable the decoding of margin less barcodes.
- Added new parameter to ScannerConfig.DecoderParams.Gs1DatabarLim:
    - securityLevel - Sets the four levels of decode security for GS1 Databar Lim barcodes.
- Added new reader parameters in ScannerConfig.ReaderParams.ReaderSpecific.ImagerSpecific:
    - oneDQuietZoneLevel - This parameter sets the effort at which the decoder will attempt to decode margin-less barcodes.
    - poorQualityDecodeEffortLevel - This parameter permits selection of enhancement modes for decoding barcodes of poor or degraded quality.
    - Added new reader parameters in ScannerConfig.ReaderParams.ReaderSpecific. CameraSpecific:
    - viewfinderSize - Sets the View Finder window size in camera scanner as a percentage of full width and full height.
    - viewfinderOffsetX - Sets the X axis position of the top left corner of the view finder.
    - viewfinderOffsetY - Sets the Y axis position of the top left corner of the view finder.
    - oneDQuietZoneLevel - This parameter sets the effort at which the decoder will attempt to decode margin-less barcodes.
    - poorQualityDecodeEffortLevel - This parameter permits selection of enhancement modes for decoding barcodes of poor or degraded quality.
- Added new reader parameters in ScannerConfig.ReaderParams.ReaderSpecific.LaserSpecific:
    - adaptiveScanning - This parameter enables or disables the adaptive scanning.
    - beamWidth - Controls the beam width of the laser scanner. Laser beam width can be shortened or widened using this parameter.

- oneDQuietZoneLevel - This parameter sets the effort at which the decoder will attempt to decode margin-less barcodes.
- poorQualityDecodeEffortLevel - This parameter permits selection of enhancement modes for decoding barcodes of poor or degraded quality.
- Added new enums in ScannerConfig:
  - OneDQuietZoneLevel - Describes the effort at which the decoder will attempt to decode margin-less barcodes.
  - PoorQualityDecodeEffortLevel - Describes the selection of enhancement modes for decoding barcodes of poor or degraded quality.
  - AdaptiveScanning - Enable or Disable Adaptive scanning.
  - BeamWidth - Controls the beam width of the laser scanner.
  - GS1LimitedSecurityLevel - Security level addition of GS1 DataBar lim decoder.
- Enhanced DataCapture feature in the Profile Manager:

  - Added new reader parameters:
    - Aim Timer - Sets the duration (in ms) for timed aim modes.
    - Viewfinder Size - Sets the View Finder window size in camera scanner as a percentage of full width and full height.
    - Viewfinder X Offset - Sets the X axis position of the top left corner of the view finder.
    - Viewfinder Y Offset - Sets the Y axis position of the top left corner of the view finder.
    - Character Set Selection - Allows the user to convert the barcode data if different from default encoding type.
    - Added new values for Aim Type:
    - Timed Hold - Once trigger is pressed, an aiming session is started for a time specified by Aim Timer. When this time expires, a decode session is started and scan beam will be visible. The decode session will remain active until the Beam Timer expires, the trigger is released or a barcode is decoded.
    - Timed Release - Once the trigger is pressed, an aiming session is started and will continue until the trigger is released. If the Aim Timer is expired when the trigger is released, a decode session will be started with scan beam visible for a remaining time equal to Beam Timer or a barcode is decoded.
    - Press And Release - The scan beam starts when the trigger is pressed and released. The decode session will remain active until the Beam Timer expires or a barcode is decoded.
    - Added new values for Character Set Selection:
    - ISO-8859-1 - Allows the user to convert the barcode data using ISO-8859-1 character encoding type.
    - Shift_JIS - Allows the user to convert the barcode data using Shift_JIS character encoding type.
    - UTF-8 - Allows the user to convert the barcode data using UTF-8 character encoding type.
  - Enhanced the performance of using decodeAudioFeedbackUri in ScannerConfig.ScannerParams in Barcode Manager API.
  - The ProfileConfig class which can be used to access the profile data has been deprecated. It is recommended to use the name-value pair function of Profile Manager feature. The Profile XML can also be directly modified. Refer to the Clock Sample for information on modifying Profile XML data.
  - Fixed: Toggling Hard trigger and soft trigger sometimes results into cancel read exception.

- Fixed: In earlier versions, selecting EMDK APIs as target Compile Sdk Version in the Android Studio project would result in the compilation error. This issue is now fixed.

Scanner Framework 16.0.21.5 New Features and Fixed Issues
· Tap to Pair enhancement with RS6000. User does not have unpair with RS6000 before connecting to a different RS6000

Battery Manager 1.5 New Features and Fixed Issues
· Updated to display RS6000 battery information

DataWedge 6.0.21 New Features and Fixed Issues
· Fixed: Intermittent crash in DataWedge after import configuration.

· Fixed: If scanned quickly with delay on control characters a data loss is seen.

· Feature to wait after dispatching control characters as keystrokes to avoid any data capture errors.

· DataWedge to handle scanner exception when calling scanner APIs before scanner framework get initialized

· Escape character support in Datawedge ADF.

· Fixed: Send via startService option not working with Intent output.

· Fixed: Scan trigger stops working in DWDemo during continuous read.

· Fixed: DW service restart on switching keyboards.

· Performance improvements for data dispatching.

· Fixed: DWDemo doesn't show correct scanner icon.

· Fixed: Profile is getting activated after "suspend-resuming" the device in a "disabled app".

· Display of packages in ascending order in package selection list.

· Fixed the issue where DataWedge opens an already opened scanner when switching.

· Added disabled application list feature.

FUSION_BA_1_01_0.0.003 New Features and Fixed Issues

- Decreased connection time

- Improvements for re-connecting to LEAP and FAST profiles with ACS 5.x

- Improvements for Fast Mschapv2 connection

- Suppress some disconnects to improve telnet client reliability

- Improved stability after multiple on/off cycles

- Device will always acquire country when enabling 11d

- While roaming, devices data transfer(FTP/ping) is now successful

- Auto-time configuration persists Real Time Clock across warm boot.

- Lossless roaming improvements

- Support for WiFi radio built at new facility

SPRS FIXED

- 30857 – Prevent a change to battery EEPROM data that would cause the battery to not charge

Known Issues

- Zebra Volume Control is disabled by default. It can be enabled in settings by navigating to Apps->Disabled->ZebraVolumeControl. Press the "Enable" button. It can also be enabled via MX.

- Zebra Utilities requires a menu key. Any of the programmable keys can be configured for this function.

Exclusions
Not Supported

- Simulscan

- USB Mass Storage

- MSP

·   Google Multiuser Support

DEVICE COMPATIBILITY

This software release has been approved for use with:

Device	Operating System
WT6000 All current SKUs	Android 5.5.1

INSTALLATION REQUIREMENTS

This Software can be used with compatible devices listed above.

There are no restrictions upgrading from previous releases.

INSTALLATION INSTRUCTIONS

1.   Attach the USB cable to the WT6000 via cradle or charging cable, then attach the cable to the PC.

2.   To update the WT6000 software, download the Full Package Update from Zebra.com to your PC.
The file name is WT6K0L300PUWW20503.zip
3.   Copy the .zip file above from your PC to your WT6000's Internal storage.

4.   Put the WT6000 into Recovery Mode using the following steps:

·   Hold the "Power Key" until "Reboot" option appears and then release.

·   Tap "Reboot" button and then press "OK" and then immediately hold the "P1" Key until recovery mode is initiated. (Just hold it down the entire time (including the vibration)… do not let go until you get to Android system recovery screen).

5.   Once on the Recovery Screen, scroll down using "P2" Key to "Apply update from emulated storage".

6.   Press "P3" Key to select.

7.   Once the install completes, you will be back at the Recovery Mode screen.

8.   If you wish to reset the WT6000 to factory settings, repeat the above process with the Factory or Enterprise reset package:

·   WT6K0L3F0RFWW20503.zip (Factory Reset Package),

·   WT6K0L3E0REWW20503.zip (Enterprise Reset Package).

9. Now, select "Reboot system now" with the "P3" Key, you will see it reboot, then you will see "Zebra Android Screen" and then you will hear it vibrate, then you will see the "WT6000 Wearable Terminal" screen with 5 white dots moving… it will stay at this screen for a little over 4 minutes and then you are at the Home Screen.

DOWNLOADABLE SOFTWARE INCLUDED IN THIS RELEASE

Filename	Description
WT6K0L300PUWW20503.zip	SFW: FullPkgUpd,AND,Lpop,v20503,RELEASE
WT6K0L3E0REWW20503.zip	SFW: EntResetPkgUpd,AND,Lpop, RELEASE
WT6K0L3F0RFWW20503.zip	SFW: FacResetPkgUpd,AND,Lpop, RELEASE

Last Revised: <01-19-2017>