Release Notes

Scanner SDK for Android v2.6

July 2023

Contents

Overview

The Zebra Scanner SDK for Android enables cordless scanners to be connected and controlled by a tablet / smart phone without using a cradle, after pairing over Bluetooth. Scanning a pairing barcode appeared in tablet/smart phone display will make the device paired and connoted with the application. Furthermore, it supports controlling USB scanner connected to tablet / smart phone.

Functionality,

1. Display bar code data within a tablet / phone application.
2. Apps using the SDK can command and control the scanner.
   a. LED and Beeper Control.
   b. Aim Control.
   c. Enable/disable Symbologies.
   d. Scanning control
      i. Remote scanner trigger (i.e. Host app-initiated triggering).
      ii. Enable/disable scanning.
   e. Event notification.

      i.   Scanner available / unavailable.

     ii.   Scanner connected / disconnected from host.

   iii.   Bar code data transmission (i.e. host gets event stating bar code has been scanned).

   f.   Automatic reconnection to last connected scanner (i.e. scanner goes out range and then returns).

   g.   Enable/Disable the pager vibrating motor.

3.   Device Configuration (Get, Set and Store Scanner attributes).

4.   Asset Tracking.

   a.   Model number

   b.   Serial number

   c.   Date of manufacture

   d.   Firmware

5.   Simplified pairing using Scan-To-Connect technology

6.   Displays battery statistics for select cordless scanners

7.   Enables image and video capture

8.   Update scanner firmware

The SDK also includes source code for the "Scanner Control" app available from the Google Play store (https://play.google.com/store/apps/details?id=com.zebra.scannercontrol.app).

For the latest SDK updates, please visit Zebra Scanner SDK

For support, please visit http://www.zebra.com/support.

NOTE: Due to a Google security patch, Google CVE-2020-12856, the Android device must notify users of pairing events with a popup message (prevents silent pairing).

Device Compatibility

For the compatible devices list, please visit following page.

https://www.zebra.com/us/en/support-downloads/software/developer-tools/scanner-sdk-for-android.html

NOTE: OEM Imagers Engines and Decoders Boards usually come without integrated LED and beeper. This functionality can only be tested with connected external beeper/LED.

Supported COM Protocols

SDK supported communication protocols include:

- USB - Symbol Native API (SNAPI) with Imaging Interface
- Simple Serial Interface (SSI) over Bluetooth Classic
- Simple Serial Interface (SSI) over Bluetooth Low-Energy (BLE)

	Query Assets Information	Host Switching	Imaging and Video	Faster Firmware Update	Management and Firmware Update	Barcode
1 – Imaging only. 2 – Firmware support required.						
IBM Table-Top USB						
IBM Hand-Held USB						
IBM OPOS - IBM Hand-held USB with Full Scan Disable						
HID Keyboard Emulation						
USB CDC Host						
Symbol Native API (SNAPI) with Imaging Interface	X		X	X	X	X
Symbol Native API (SNAPI) without Imaging Interface						
Wincor-Nixdorf RS-232 Mode B						
Simple Serial Interface (SSI) over RS232						
Simple Serial Interface (SSI) over Bluetooth Classic	X		X^1	X^2	X	X
Simple Serial Interface (SSI) over Bluetooth Low-Energy (BLE)	X				X	X
Simple Serial Interface (SSI) over MFI						

Version History

Version 2.6.19 – 07/2023

1. Added remote management support to the Scanner SDK for Android. Remote management supports both Firmware and Config File update through the consumption of an SMS package. Details: Place SMS Package in "Download/ZebraSMS" folder (programmable location). Folder automatically created when installing SDK. For additional details see Scanner SDK for Android TechDocs page.
2. Added SMS package (Firmware and Config File) consumption support to the Android Scanner Control Application (SCA). Details: Place SMS Package in "Download/ZebraSMS" folder (programmable location). Folder automatically created when installing SCA. For additional details see Scanner SDK for Android TechDocs page.

Version 2.6.16 – 04/2023

1. Bug fix – Fixed crash when application (SDK created app) moved to background. Issue resolved a null pointer exception.

2. Added reconnect option to enable reconnection even when go out of range and come back outside programmed time-out period. Now to reconnect (outside the timeout period) double click the trigger button. This only works in "SSI over Bluetooth Classic" mode.

Version 2.6.13 – 12/2022

1. Added device filter capability using an API. The API removes all non-Zebra barcode scanners by filtering on friendly name.
2. Added auto-reconnect to last paired scanner upon application launch. This is achieved through an API which enables/disables auto reconnecting.
3. Added support for Android SDK API level 33.

Version 2.6.10 – 07/2022

1. Added Android 12 and 13 support. Note Android 10 and older versions no longer supported by Zebra's SDK.

Version 2.6.8 – 01/2022

1. Firmware update support added via FCDAT firmware file (contains both firmware and device parameter configuration).
2. Support added to only see Zebra Bluetooth devices on the available device list. Implementation filters using the OS' available devices list and only shows devices with Zebra's vendor ID.

Version 2.6.6 – 08/2021

1. Enhanced "Virtual Tether" features in Scanner Control App (SCA).
    a. Now host side feedback (vibration, beeping, LED) is automatically turn on when click the scanner "simulate button".
    b.   App automatically stop the host alarm (vibration, beeping, LED) when the scanner comes back into discoverable range.
2. Bug fix – Fixed a virtual tether issue retrieving scanner asset information when reconnecting to scanner (scanner comes back into range).
3. Bug fix – Fixed a virtual tether alarm issue. Now upon reconnection of the scanner to the host over Bluetooth LE, the virtual tether alarm stops automatically.

Version 2.6.0 – 04/2021

1. Enhanced "Virtual Tether" support to include host feedback in the Android SDK and Scanner Control App.
2. Added support for SSI over CDC.
3. Bug fix now able to successfully change the scanner beeper volume from low to high.
4. Added support enabling 2 com ports simultaneously for ZETI and SSI in "commonio" library.

Version 2.5.17 – 02/2021

1. Restructured "commonio" library classes.

Version 2.5.16 – 01/2021

1. Changed how the STC barcode is generated. It no longer uses the Bluetooth MAC address to generate the STC barcode. Instead, the STC barcode is generated with a unique Zebra pairing ID. New additional implemented supported in the SDK, STC utility and Scanner Control App (SCA).
2. Added Virtual tethering support. New capability supported in the SDK and Scanner Control App (SCA).
3. Added BTLE support to STC supported com protocols.

Version 2.5.13 – 10/2020

1. Added Android 11 support. Note Android 8 and older versions no longer supported by Zebra's SDK.
2. Bug fix – Fixed scanner Bluetooth pairing issue with Android 10 on Samsung Galaxy 10 and Samsung Note 10.

Version 2.5.8 – 07/2020

1. Simplified corded (USB) scanner connection in the Scanner Control App (SCA) – Users no longer must enter the Bluetooth address if using a corded scanner
2. Simplified entry of Bluetooth address at initial launch of the Scanner Control App (SCA). Now app only accepts valid range of characters when entering Bluetooth (MAC) address of phone into app.
3. Updated SDK to Google lib and removed redundant older library called gson.
4. Added support for CS6080 Bluetooth scanner (Classic Bluetooth and BTLE).

Version 2.5.3 – 04/2020

1. Faster wireless firmware update for select scanners over the Bluetooth Classic communication protocol. See 123Scan's release notes per scanner for product support details.

Version 2.5.1 – 01/2020

1. Scanner Control App (SCA) – Added image and video capture functionality to the Advanced tab.

Version 2.4.10 – 10/2019

1. Added Android 10 support. Note Android 7 and older versions no longer supported by Zebra's SDK.
2. Added AndroidX library structure support.
3. Improved device discovery, which improved thread management.

Version 2.4.7 – 08/2019

1. Bug fix – Fixed an issue in SDK, a crash with unclosed threads.

Version 2.4.6 – 06/2019

1. Bug fix – Fixed an issue with writing a RFID tag (send the correct RMD packet, and correct data type for RFID tag reads).

Version 2.4.5 – 04/2019

1. Scanner Control App (SCA) - Added scale support on DataView tab for MP class scanners.
2. Added MP scale support to the Android SDK.

Version 2.4.2 – 10/2018

1. More stable and fast Video capture over SNAPI communication protocol.
2. Android 9 "Pie" support.

Version 2.4.1 – 08/2018

1. Added support for Image capture, Video capture and Intelligent Document Capture (IDC) over USB cable using SNAPI communication protocol.
2. Bug fix – Bluetooth (LE) Low Energy communication now more reliable and faster (i.e. firmware update is faster).

Version 2.3.2 – 05/2018

1. Fixed critical security vulnerability reported by Android bug.

Version 2.3.1 – 04/2018

1. Optimized text of enter Bluetooth MAC address screen.
2. Optimized pair barcode presentation when shown on tablet in landscape mode.

Version 2.2.0 – 01/2018

1. Image Capture support.
2. Scan Speed Analytics in Scanner Control application.

Version 2.1.0 – 07/2017

1. Bluetooth LE support.
2. Cascaded device support.

Version 2.0.8 – 01/2017

1. Android 7.x support.
2. DS8178 and DS2278 support.

Version 2.0.4 – 09/2016

1. Firmware update support.
2. New Scanner Control application.

Version 1.1.0 – 06/2016

1. ScanToConnect paring barcode support.
2. USB SNAPI scanner support.

Version 1.0.0 – 10/2015

1. Initial SDK release.

Components

The SDK ZIP file contains the following components:

- Android Studio project includes Scanner Control App code.
- Scanner Control App (APK file).
- AAR SDK library.
- SDK JavaDoc HTML.

Installation

Supported operating systems:

- Android 11.x, 12.x and 13.x