Release Notes

CoreScanner Driver for Windows v3.7

October 2023

Contents

Overview

The Zebra Scanner Software Developer Kit (CoreScanner SDK) for Windows providing a single programming interface across multiple programming languages (such as MS .NET, C++, Java) for all scanners communication variants (such as IBMHID, SNAPI, HIDKB, Nixdorf Mode B, etc.).

With this SDK, you can read bar codes, manage scanner configurations, capture images/videos and selectively choose a list of scanners on which to work. While one application is in one programming language using a scanner or a set of scanners, another application in a different language can be used differently within the same system environment.

The SDK can build an application with complete control of its scanner's capabilities.

- Barcode data
    - Simulated HID Keyboard output.

- OPOS/JPOS output
  - SNAPI output
- Command and Control
  - LED and Beeper Control
  - Aim Control
- Imaging
  - Capture / Transfer of Images
  - View Video
  - Simultaneous capture barcode data and an image with one trigger pull using Intelligent Image Capture (IDC)
- Remote Scanner Management
  - Asset Tracking
  - Device Configuration (Get, Set and Store Scanner attributes)
  - Firmware Update
  - Scanner Communication Protocol Switching
  - Service to Automate Configuration / Firmware Upgrade Process

For the latest CoreScanner Driver updates, please visit Zebra Scanner SDK

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

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-windows.html

Supported COM Protocols

SDK supported communication protocols include:

- 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
- 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

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

Version History

Version 3.07.0042 – 10/2023

1. Access to **CoreScanner Version Info** – Modified how-to-access CoreScanner Version info. Now read from registry key, Instead of the Corescanner binary file.
2. **Bug Fix** – "Grave" accent no longer, incorrectly converting into CR/LF when the scanner is operating in RS232 NIXMODB communication mode.
3. **Bug Fix** – Fixed "Simulated HID Keyboard" issue. Scancode now properly generated for a "Group Separator" character, when in simulated HID Keyboard.

Version 3.07.0038 – 07/2023

1. Added a new call (Opcode) to configure DDF (Driver Data Formatting) programmatically. Previously this was only supported manually from Config.xml file.
2. Simulated HID Keyboard - Added support to configure ScanCode, in addition to existing Virtual Key code support in simulated HID Keyboard through settings in the Config.XML file.

3. Driver Data Formatting - Added ATL key combination support in the Driver Data Formatting (DDF). This functionality enables an ALT key combination to be added to barcode data when using Simulated HID Keyboard.
    a. Configuring this capability is located in the CoreScanner configuration xml file.
    b. An example of this capability is appending "ALT [+ Data + Enter" to the barcode data. Another example is "ALT [+ Data + TAB".
    c. Solution supports sending ALT + one ASCII key sequence like “ALT [“.
    d. Solution supports appending a Prefix only. Appending a Suffix is not supported.
4. Bug fix - Fixed intermittent MP7000 Reset during GetScanners call.
5. Bug fix – Fixed intermittent CoreScanner reset when a cascaded device like the DS8178 rebooted/disconnected, causing the MP7000 to reset.
6. Bug fix – Fixed intermittent CoreScanner error when reading Scale Weight from MP7000 when a cascaded scanner like DS8178 gets disconnected/reconnected or rebooted.

Version 3.07.0032 – 03/2023

1. Added support to output scan codes along with virtual keycodes for barcode data when using simulated HID keyboard.

Version 3.07.0031 – 11/2022

1. Added device re-enumeration logic to make the CoreScanner more robust against USB failures occurring at device discovery and device initialization.
2. Bug fix – Improved methodology to detect if device is already available in the discovered scanners list. Now uses device path instead of device serial number.

Version 3.07.0026 – 07/2022

1. Windows 11 support added.
2. Bug Fix – Fixed issue on CoreScanner information log file returning incorrect OS version for Windows 11.
3. Integrated Devcon USB device restart logic to reboot scanners when error code 117 (operation failed in device) is received for CoreScanner commands.

Version 3.07.0019 – 02/2022

1. Bug Fix – Fixed intermittent issue on incorrect barcode data returned in NIXMODB
2. Rebranded “HID Keyboard Pump” to “Simulated HID Keyboard”.
3. Added Italian Keyboard support to Simulated HID Keyboard.

Version 3.07.0011 – 10/2021

1. Bug Fix – Fixed rare CoreScanner crash on retrieving FIPS status attribute (#736) once enabled.

Version 3.07.0005 – 04/2021

1. Support added for RFD4030/31 devices attach and detach events over SSI CDC.

2. Fixed issue in CoreScanner not receiving the first decode data when scanner set to auto reconnect in enhanced HID.

Version 3.07.0004 – 01/2021

1. Added support to preserve system information log file on CoreScanner logs when maximum file count is reached for circular logging.
2. Added support to filter scanners connected over Bluetooth by Organizationally Unique Identifier (OUI)s.

Version 3.07.0002 – 08/2020

1. Updated the version of Visual C++ redistributable package from 2017 to 2019. Note redistributable package for 2017 is no longer included with the CoreScanner Driver for Windows.
2. Added support to enable/disable Scan Avoidance.

Version 3.06.0001 – 03/2020

1. Fixed issue STC does not recognized GS when host uses German keyboard.

Version 3.05.0001 – 01/2020

1. Add missing barcode types in IBMHID and IBMTT (OCRA, OCRB).

Version 3.04.0007 – 07/2019

1. AES 256 support added for SSI and BTSSI.
2. Fixed issue CoreScanner hangs once pull-trigger command execute in SSI host mode.

Version 3.04.0004 – 04/2019

1. Logging enhanced with the integration of “spdlog” logging library.
2. HID KB Pump updated to so that it will handle more languages including German. Now the default language selection is set to “Default” which will handle all the languages and “ENGLISH” “FRENCH” is still there for backward compatibility.

Version 3.03.0014 – 01/2019

1. Fixed issue on Windows 10 build 1809 HID KB devices do not enumerate due to device path change.
2. Microsoft© certified SNAPI driver bundled with CoreScanner driver.

Version 3.03.0010 – 08/2018

1. SSI+ ADF support added.
2. Fixed issue crashing CoreScanner when scanning a large barcode scanned with a Direct BT scanner.
3. Fixed issue HID KB scanners are unmanageable after a Windows Session change.
4. System user account installation support added for deployment.

Version 3.03.0001 – 02/2018

1. Security vulnerability fix (Unsafe service path of WMI provider services).

Version 3.02.0002 – 09/2017

1. Added new opcode “GET_EX_ASSET_INFO” to retrieve extended asset information from supported scanners.

Version 3.01.0008 – 09/2016

1. Bug fixes.

Version 3.00.0003 – 01/2016

1. Added cordless device PNP support (Bluetooth support).
2. WHQL Certified 64bit SNAPI Imaging Driver added.

Version 2.07.0001 – 10/2015

1. RFD8500 scanner support added.

Version 2.05.0001 – 12/2014

1. Security enhancements to address potential security vulnerabilities.

Version 2.04.0008 – 10/2014

1. Updated the version of C++ redistributable package to 2012 Update 4.
2. GS1 DataMatrix and GS1 QR Code symbology support added.

Version 2.03.0002 – 05/2014

1. Host side Advanced Data Formatting (ADF) support added.

Version 2.02.0007 – 03/2014

1. Windows 8 and 8.1 support added for 32bit and 64bit versions.

Version 2.01.0000 – 09/2013

1. Introduced new error/status code ERROR_DEVICE_BUSY (120) when device is busy with a tunnel.
2. Inter key delay support added in HID Keyboard emulation.

Version 2.00.0012 – 06/2013

1. RS-232 SSI and IBM Table Top host interface support added.
2. Unsolicited scanner events (topology changes and decode data) support added.
3. DWORD attribute support added.

Version 1.02.0011 – 08/2012

1. Codeless scanner plug-n-play events support added (require firmware update, check scanner PRGs for firmware support availability).

2. Simple Data Formatting feature added for emulated keyboard data.
3. SNAPI scanner support added to Scanner WMI Provider
4. Host variant switching support added for scanners with NULL synapse buffer.

Version 1.01.0001 – 03/2012

1. Initial release of CoreScanner Driver for Windows 64bit.

Version 1.00.0019 – 07/2011

1. Initial release of CoreScanner Driver for Windows 32bit.

Components

If the default install location is not changed, the components are installed in the following folders:

Component	Location
Driver Components	%ProgramFiles%\Zebra Technologies\Barcode Scanners\Common
TWAIN Driver	%WinDir%\twain_32\Zebra – On 32/64bit version %WinDir%\twain_64\Zebra – On 64bit version

Installation

Installation of a new release replaces previous versions of CoreScanner Driver for Windows components.

Supported operating systems:

- Windows 10 32bit and 64bit
- Windows 11 64bit

Microsoft Visual C++ 2019 Redistributable Package will be installed with this installation package.

External Dependencies

1. Microsoft Visual C++ 2019 Redistributable Package.