

Common Library Android SDK Version 3.9.0.0

Release Notes

NIPPON PRIMEX INC.

March 5th, 2024

1. Summary

Common Library Android SDK version 3.9.0.0 has been released.

By using this SDK, printing can be executed by the printers manufactured by NIPPON PRIMEX INC. from Android terminals through USB, Bluetooth or TCP/UDP (WLAN) communication.

2. Files to be provided and summary regarding them

The following contents are available by the SDK released this time.

[Sample application installer]

- NPISample_20240305.apk

Please execute it after transmitting the file to the Android terminal.

(It is required to be set to accept installing the file from unidentified provider.)

[Main SDK]

- 3 files of "NPrinterLib.jar", "core.jar" and "javase.jar".

These are "jar" files to be set in when applications are made by the user side.

[Manual (document file) folder]

- Documents

Manuals and Android application sample source are included.

Please be sure to read them for using SDK properly by utilizing its functions before using it.

• Please unzip the zipped file for the sample source.

3. Special notes regarding others

At the timing of version upgrade from 2.0.0.0 to 3.0.0.0., the file name "NPrinterInf" was changed into "NPrinterInf.inf". In case Version 2.0. or older has already been used, please change the file name "NPrinterInf" into "NPrinterInf.inf" before upgrading it into Version 3.0.0.0 or later.

*Starting from 3.9.0.0, you can specify the location paths for various configuration files used in the SDK.

If not specified, the application-specific folder will be used, but Android 13 or later will not allow file managers and other applications to edit the configuration files. However, Android 13 or later will not allow configuration files to be edited by apps such as file managers. In this case, please use the SDK to edit the configuration files since there are edit functions for various configuration files from 3.9.0.0.

【Revision history】

■ Version

1.0.0.0

■ Release date

2013/05/31

■ Revised points

- Being developed newly. (only for USB interface)

Sample application : 1.0.0.0

Common library : 1.0.0.0

■ Revised by

NIPPON PRINTER ENGINEERING INC.

■ Version

1.1.0.0

■ Release date

2014/02/18

■ Revised points

- Supporting Bluetooth interface connection
- Correcting the malfunction which brings about garbled double-byte characters when using “NPrint”.
- Changing the sample application screens

Sample application : 1.0.0.0

Common library : 1.0.0.0

■ Revised by

NIPPON PRINTER ENGINEERING INC.

■ Version

1.1.0.0 (* Version number is not changed because other than sample source and documents is not changed.)

■ Release date

2014/04/28

■ Revised points

- Since the sample source (“AndroidSDKSample” in the document folder) has become obsolete partially, it is updated.
- Adding some descriptions to SDK Guide regarding SDK version information obtaining and the “mStrCharSet” parameter for reading character codes.
- * Main SDK (NPrinterLib.jar) and application installer (apk file) has not been changed from those released last time.

■ Revised by

NIPPON PRINTER ENGINEERING INC.

■ Version

1.2.0.0

■ Release date

2014/06/24

■ Revised points

- Adding the function “NGetPrinterFromID” and the function “”NDeletePrinter.
- Correcting the malfunction which obtained the returned code of “Offline” when status obtaining is tried after obtaining extended information.
- Setting the USB / Bluetooth reconnection interval to 5 minutes.
- Correcting the malfunction which occurs when reconnecting with Bluetooth interface.
- Changing the way to connect the printer with Bluetooth interface from “only Secure connection!” into “Insecure connection (prioritized) and Secure connection”.
- Modifying the way for deleting the transmitted data.

■ Revised by

NIPPON PRINTER ENGINEERING INC.

■ Version

1.3.0.0

■ Release date

2015/05/19

■ Revised points

- Changing the operation of “NStartDoc” and “NEndDoc” between multiple threads (thread safe).
- Correcting the operation so that “NClosePrinter” call disconnect the connection immediately even when the data to be transmitted remains.
- Setting in the exclusive processing control at connection and disconnection.
- Correcting the operation so that the error code will be returned when there are already opened printers at “NDeletePrinter” execution.
- Correcting the operation so that the error code will be returned when there is no printer to be disconnected found by “NDeletePrinter”.
- Correcting the operation so that the data will not be transmitted until it receives status from the printer (until connection is completely established) in case of Bluetooth connection.
- Correcting the bug by which the function “NPrint” cannot be executed when there are data before outputting the file contents (binary data).
- Correcting the operation so that the printing at reconnecting will return the error code.
(Except for the document staring process)
- Correcting the bug by which USB connection printer names cannot be obtained by the function “NGetPrinterFromID”.
- Adding the new function which enables users to set whether transmitting retry will be done or not for the function “NOpenPrinter” by the overload.

■ Revised by

NIPPON PRINTER ENGINEERING INC.

■ Version

2.0.0.0

■ Release date

2017/07/15

■ Revised point

- Adding the TCP/UDP (WLAN) communication functions.

■ Revised by

NIPPON PRINTER ENGINEERING INC.

■ Version

3.0.0.0

■ Release date

2017/08/18

■ Revised points

- Adding the extension “.inf” to the setting files.
- Changing the operation so that the log output path can be specified.
- Changing the structure of the callback interface.
- Adding the events for notifying callbacks.
- Adding the log type 6 (CHK) and the log type 7 (PST).
- Adding the new function “NInitializeNetwork”.
- Modifying the function so that Bluetooth and WLAN interface can be supported by the function “NFirmwareDL”.
- Correcting the minor bugs regarding log output contents, etc.

■ Revised by

NIPPON PRINTER ENGINEERING INC.

■ Version

3.1.0.0

■ Release date

2017/09/08

■ Revised point

- Adding the new function “NBtPairing”.

■ Revised by

NIPPON PRINTER ENGINEERING INC.

■ Version

3.1.0.0

■ Release date

2017/09/29

■ Revised points

- (* Version number is not changed because the main SDK and the application installer (ak file) is not changed from those released on 2017/09/08. Only SDK Guide has been modified.)
- Adding Android 7.0 for the supported versions. (Operation tests have been done.)
 - The function “NBtPairing” was deleted from SDK Guide. (It became unrecommended.)

■ Revised by

NIPPON PRINTER ENGINEERING INC.

■ Version

3.2.0.0

■ Release date

2019/02/26

■ Revised points

- Changing the spec so that “null” can be accepted for the 2nd argument of the function “NStartDoc”.
- Adding the Kotlin sample application.

■ Revised by

NIPPON PRINTER ENGINEERING INC.

■ Version

3.3.0.0

■ Release date

2019/11/27

■ Revised points

- Adding Android 9 for the supported versions. (Operation tests have been done.)
- Changing the space for saving the application setting file from the internal storage (Environment.getExternalStorageDirectory()) into the application unique folder (Context.getExternalFilesDir(null).getAbsolutePath()).

■ Revised by

NIPPON PRINTER ENGINEERING INC.

■ Version

3.4.0.0

■ Release date

2021/04/21

■ Revised points

- Adding Android 10 for the supported versions. (Operation tests have been done.)
- Changing the names of the error codes from “ERP_~” into “N_ERR_~”.
- Correcting the “Error code table” in the SDK Guide. (Adding a few codes which have been omitted and changing the names into “N_ERR_~”.)
- Adding the “Extended Information” table after the page describing the function “NGetInformation”.
- Correcting the bug in the firmware which insert “0x00 0xFF” to the end of the model name of “NP-36~” and “NP-26~”.

■ Revised by

NIPPON PRINTER ENGINEERING INC.

■Version

3.5.0.0

■Release date

2022/01/24

■Revised points

- ・ Adding Android 11 and 12 to the supported versions. (Operation tests have been done.)
- ・ Adding "AndroidManifest Bluetooth" authority (for Android 12).
- ・ Changing Android support library.
- ・ Correcting not-recommended functions for Bluetooth connection.
- ・ Correcting not-recommended class for asynchronous processing.
- ・ Adding descriptions regarding the necessary authority permission request for SDK (NPrinterLib).
- ・ Correcting the error with which WLAN communication IP address cannot be obtained.
- ・ Correcting the error at WLAN communication reconnecting.
- ・ Correcting the indent setting of the dialogue for Android 12 USB devices connecting permission.

■Revised by Revised by

NIPPON PRINTER ENGINEERING INC.

■Version

3.6.0.0

■Release date

2022/02/07

■Revised point

- ・ Correcting the processing logic so that the exemption will not occur when USB data transmission fails.

■Revised by

NIPPON PRINTER ENGINEERING INC.

■Version

3.7.0.0

■Release date

2022/02/15

■Revised point

- ・ Correcting the way how to do exclusive control during transmitting and receiving the data.

■Revised by

NIPPON PRINTER ENGINEERING INC.

■Version

3.8.0.0

■Release date

2022/08/25

■Revised point

- Adding the data transmission setting file named "NWriteCustom.inf".

It enables to specify transmitting data size and transmission interval during USB communication.

■Revised by

NIPPON PRINTER ENGINEERING INC.

■Version

3.9.0.0

■Release Date

March 05, 2024

■Revision point

- File read/write permissions (READ_EXTERNAL_STORAGE, WRITE_EXTERNAL_STORAGE) are now required only for Android 12 (SDKVersion 32) or lower.

- Define multiple constructors for NPrinterLib.

In addition to the one with only one argument (~Version 3.8.0.0), added 1st argument context, 2nd argument authorization request flag, and 3rd argument configuration file/reference path.

- NPrinterLib constructor is prohibited from specifying null as the first argument.
- Fixed a bug that NPrint etc. can be executed when the USB authority confirmation dialog is canceled when NOpenPrinter is used.

→After canceling the dialog, it is treated as offline, and the confirmation dialog is displayed by executing NOpenPrinter again.

- Modification of NCommon class

Constant name change: N_RR_ARGUMENT_07 → N_ERR_ARGUMENT_07

Add constants : Add key value constants for barcode (NBarcodeInf.inf)

- Addition of the following functions:

1. NLogGetLines

Function to get SDK logs.

2. NLogDelete

Delete SDK log function

3. NLogSetProperty

Edit SDK log setting file (NLogInf.inf)

4. NSetCharSetInf

Edit string conversion setting file (NCharSetInf.inf).

5. NSetWriteCustom

Edit data sending related setting file (NWriteCustom.inf).

6. NBarcode1DSetting

 Edit barcode information management file (NBarcodeInf.inf)

7. edit NBarcode1DGetData

 Obtain information of barcode information management file (NBarcodeInf.inf)

8. getSettingPath

8. getSettingPath

 Obtaining the setting file reference path used by the SDK

 (Added with the change of the setting file path from fixed to specified)

■Changed by

 Nippon Printer Engineering Inc.
