

ISO 19794-4 Support .NET

Programmer's Manual

Ver 1.x

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Table of contents

CHAPTER 1 INTRODUCTION.....	1
CHAPTER 2 COMPONENTS.....	2
CHAPTER 3 NBIOBSPISO4 CLASS	3
■ NBioBSPISO4.COMPRESS_MOD.....	3
■ NBioBSPISO4.NIMPORTRAW	3
■ NBioBSPISO4.NIMPORTRAWSET	3
■ Method	4
NExportRawToISOV1	4
ExportRawToISOV2.....	5
ImportISOToRaw.....	6



Chapter 1 Introduction

NITGEN.SDK.NBioBSPISO4 Module is intended to help you develop using ISO 19794-4 data format under .Net environment.

This Module is compatible with NITGEN.SDK.NBioBSP Module and it operates with NITGEN.SDK.NBioBSP.dll

Chapter 2 Components

ISO 19794-4 folder created from the installation is as follows:

■ Linux folder

- bin : contains libNExportRawToISO.so to support x86 or x64.
- Inc : contains header files to help you develop.
- Samples : contains sample files.

■ Windows folder

- bin : contains NExportRawToISO.dll and test program to support x86 or x64
- DotNet : contains NITGEN.SDK.NBioBSPISO4.dll and test program for .NET-compatible.
- inc : contains header files to help you develop.
- Lib : contains NExportRawToISO.lib to support x86 or x64.
- Sample C++ : contains files for C++ compatible sample.
- Sample DotNet : .contains files for .NET-compatible sample.

■ Java Wrapper

Library for Java is contained in "eNBioBSP SDK for java". (v1.4.4.0 or higher)

Chapter 3 NBioBSPISO4 Class

■ NBioBSPISO4.COMPRESS_MOD

Defined value assigned by Nitgen to compress a raw image

Literal	Value	Mean
NONE	0	No compression
WSQ	1	WSQ

■ NBioBSPISO4.NIMPORTRAW

Contains a raw image.

Type	Name	Description
NBioAPI_UINT8	nFingerID	Finger index Refer to NBioAPI_FINGER_ID in "eNBioBSP SDK"
NBioAPI_UINT16	nImgWidth	Width of image
NBioAPI_UINT16	nImgHeight	Height of image
NBioAPI_UINT8[]	RawData	Image data

■ NBioBSPISO4.NIMPORTRAWSET

Contains a raw image set.

Type	Name	Description
NBioAPI_UINT8	nDataCount	The number of data
NIMPORTRAW[]	ImportRawData	Array of NIMPORTRAW data

■ Method

```
NBioAPI_RETURN ExportRawToISOV1(NBioAPI.Export.EXPORT_AUDIT_DATA ExportAuditData,
                                bool bIsRollDevice,
                                NBioAPI_UINT8 nCompressMod,
                                NBioAPI_UINT8[] ISOBuf)
```

Description

Converts from fingerprint raw data to ISO 19794-4 data using fingerprint image captured by "NITGEN.SDK.NBioBSP" Module and returns error code.

Parameters

NBioAPIExport.EXPORT_AUDIT_DATA ExportAuditData

[in] fingerprint image structure captured by "NITGEN.SDK.NBioBSP" Module

bool bIsRollDevice

[in] image type

Value	Description
True	Roll image
false	Flat image

NBioAPI_UINT8 nCompressMod

[in] Compression type (refer to [NBioBSPISO4_COMPRESS_MOD](#))

NBioAPI_UINT8[] ISOBuf

[out] Array of ISO 19794-4 format data

Return Value

NBioAPI_RETURN

Error Code of eNBioBSP SDK

```
NBioAPI_RETURN ExportRawToISOV2(NBioAPI_UINT8          nFingerID,
                                NBioAPI_UINT16        nImgWidth,
                                NBioAPI_UINT16        nImgHeight,
                                NBioAPI_UINT8[]       RawBuf,
                                bool                 bIsRollDevice,
                                NBioAPI_UINT8         nCompressMod,
                                out NBioAPI_UINT8[]  ISOBuf)
```

Description

Converts from fingerprint raw image to ISO 19794-4 data from fingerprint image captured by "NITGEN.SDK.NBioBSP"

Module and returns error code.

Parameters

NBioAPI_UINT8 nFingerID
[in] Finger index (refer to NBioAPI_FINGER_ID of "eNBioBSP SDK")
NBioAPI_UINT16 nImgWidth
[in] Width of raw image
NBioAPI_UINT16 nImgHeight
[in] Height of raw image
NBioAPI_UINT8[] RawBuf
[in] Array of raw image
bool bIsRollDevice
[in] Image type

Value	Description
True	Roll image
false	Flat image

NBioAPI_UINT8 nCompressMod
[in] Compression type (refer to [NBioBSPISO4.COMPRESS_MOD](#))
NBioAPI_UINT8[] ISOBuf
[out] Array of ISO 19794-4 format data

Return Value

NBioAPI_RETURN
Error Code of eNBioBSP SDK

```
NBioAPI_RETURN ImportISOToRaw(NBioAPI_UINT8[]    ISOBuf,
                               out NIMPORTRAWSET ImportRawSet)
```

Description

Converts from ISO 19794-4 data to fingerprint raw image and returns error code.

Parameters

NBioAPI_UINT8[] ISOBuf
[in] array of ISO 19794-4 data
NIMPORTRAWSET ImportRawSet
[out] returns raw image in ISOBuf.

Return Value

NBioAPI_RETURN
Error Code of eNBioBSP SDK
