



北京中安未来科技有限公司  
SINOSECU TECHNOLOGY CO., LTD.

# Passport Reader SDK User Manual

---

Document Number: SS-PRPM-PR-05

Revised Version: V1.1.0

Date: 2019.11.28

## Contents

|           |  |    |
|-----------|--|----|
| Chapter 1 | SDK Introduction.....  | 4  |
| 1.1       | SDK copyright.....   | 4  |
| 1.2       | SDK Operating Environment.....   | 4  |
| 1.3       | SDK File List.....   | 4  |
| Chapter 2 | Instructions.....  | 5  |
| 2.1       | Device Introduction.....   | 5  |
| 2.2       | SDK Development Procedures.....  | 6  |
| 2.2.1     | Recognition Processes.....   | 6  |
| 2.2.2     | Sample program.....  | 6  |
| Chapter 3 | Program Interface.....   | 8  |
| 3.1       | Common Interface.....  | 8  |
| 3.1.1     | Initialize and release recognition engine.....   | 8  |
| 3.1.2     | Detect whether the ID document is placed, document<br>recognition and acquire recognition results..... | 9  |
| 3.1.3     | Barcode reading related API.....   | 13 |
| 3.1.4     | Normal set up recognition option.....  | 15 |
| 3.1.5     | Acquire device related information.....  | 18 |
| 3.1.6     | Other Interfaces.....  | 19 |
| 3.2       | Special APIs.....  | 22 |
| 3.2.1     | Initialize and release core engine.....  | 22 |
| 3.2.2     | Setting recognition options.....   | 24 |
| 3.2.3     | Security feature related interface.....  | 26 |
| 3.2.4     | Parse the MRZ in the chip.....   | 28 |
| 3.2.5     | Other interface.....   | 29 |
| Chapter 4 | Appendix.....  | 31 |
| 4.1       | Appendix A.....  | 31 |
|           | Electronic chip data grouping.....   | 31 |
| 4.2       | Appendix B Document type and field explanation.....  | 32 |

|  |    |
|--|----|
| 4.2.1 Document main type.....                | 32 |
| 4.2.2 Chip field index.....                  | 35 |
| 4.2.3 Field definition of each document..... | 36 |

## Chapter 1 SDK Introduction

### 1.1 SDK copyright

The SDK copyright is owned by SinoSecu Technology Corporation. Without our authorization, it is not allowed to use the SDK.

### 1.2 SDK Operating Environment

Operation System that this SDK can support should be windows 7 and its upgraded version, including 32 bit and 64 bit. The computer configuration cannot lower than: Core i5(CPU), 2G(memory).

### 1.3 SDK File List

- API-LIBS files: the system files that this SDK relies on.
- Demo files: Demonstration programs.
- Lib files: recognition engine related files
- Passport Reader\DllDevelop files: including IDCard API files and multiple programming languages invoke the sample.
- Passport Reader\Websocket files(x32): including Websocket service program, service control program, Websocket configuration files, testing pages and logs.

#### **Note:**

If this SDK is acquired by digital copy( not execute installation process), one of the three following operations needs to be executed so as to load the recognition engine correctly. If it is developed by VB, the third method is the only option.

- If the operation system is 64 bit, all the files from the folder “API-LIBS” need to be copied into the directory “C:\Windows\SysWOW64”; if the operation system is 32 bit, all the files from the folder “API-LIBS” need to be copied into the directory “C:\Windows\System32”.
- Add the full path of “lib” folder in the environment variables “Path”.
- Copy the executable programs into the “lib” directory and operate at the meantime.

## Chapter 2 Instructions

### 2.1 Device Introduction

The APIs described in this document can apply to devices such as PR series, AR series, and KR series. All the above series support automatic classification, that is, a random piece of device under such series can scan multiple and various ID documents, including passports, visa, driving license, IDs, diversified passes and so on. The physical picture is shown at figure 2.1.



PR series



AR series



KR series

Figure 2.1 Device Model

Main functions of this hardware including support the chip reading of second generation ID card, e-passport and the UV illumination.

| Model No. | Chip reading of Chinese ID | Epassport chip reading | Visible and IR illumination | UV illumination | Resolution (Pixel)     |
|-----------|----------------------------|------------------------|-----------------------------|-----------------|------------------------|
| TH-PRXXX  | optional                   | optional               | √                           | optional        | 2048×1536              |
| EPRXXX    | optional                   | optional               | √                           | optional        | 2048×1536              |
| PSPRXXX   | optional                   | optional               | √                           | optional        | 2048×1536              |
| TH-ARXXX  | optional                   | optional               | √                           | optional        | 2048×1536<br>2592×1944 |
| QR5000    | optional                   | optional               | √                           | optional        | 2048×1536<br>2592×1944 |
| KRXXX     | optional                   | optional               | √                           | optional        | 2048×1536<br>2592×1944 |

Figure 2.1 Main functions of passport reader

## 2.2 SDK Development Procedures

### 2.2.1 Recognition Processes

As shown by figure 2.2.1, it is the standard procedures to call the APIs.

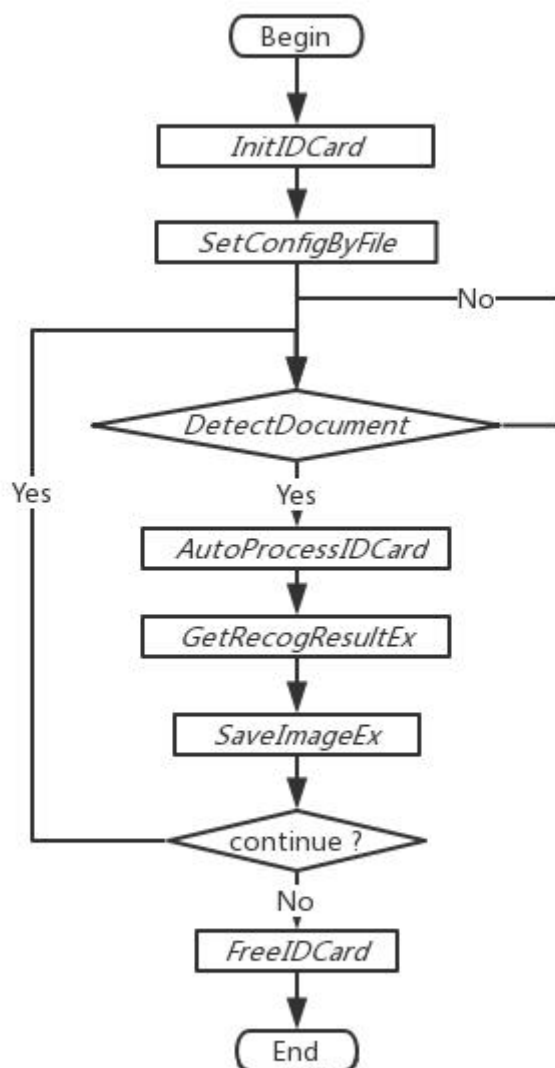


Figure 2.2.1 Procedures to scan the ID documents

### 2.2.2 Sample program

In order to help users to understand invoke API method, user manual and sample program are provided for reference. API documents and sample program are stored under the disk directory “Passport Reader\DllDevelop”. Please turn to “SinoSecu ID

document scanning SDK Sample” for more sample program instructions.

## Chapter 3 Program Interface

This chapter explains the export interface of the document recognition SDK. In terms of how to invoke the API, please turn to invoke sample(installation package is attached, different language, such as C++, Delphi, C# and VB demo codes has been provided). SDK export interface dynamic library is IDCard.dll, code system has adapt Unicode.

### 3.1 Common Interface

#### 3.1.1 Initialize and release recognition engine

##### 3.1.1.1 Initialize the recognition engine

|              |  |  |
|--------------|--|--|
| Description  | Initialize the recognition engine                                |  |
| Prototype    | int InitIDCard(LPCWSTR lpUserID,int nType, LPCWSTR lpDirectory); |  |
| Parameter    | lpUserID   | User ID provided by SinoSecu to verify authorization.  |
|              | nType  | Each bit symbolizes a type of recognition engine. If the bit is "1", recognition engine is loaded correspondingly; if it's "0", it means not loading.<br><br>Bit0 means the recognition engine for the business card.<br><br>Other bits remain unused. |
|              | lpDirectory  | Path for recognition engine files  |
| Return value | 0  | Initialization succeed   |
|              | 1  | Authorization ID is incorrect  |
|              | 2  | Device initialization is failed  |
|              | 3  | Recognition engine initialization is failed  |
|              | 4  | Authorization files are not found  |
|              | 5  | Recognition engine is failed to load templates   |
|              | 6  | Chip reader initialization is failed   |



### 3.1.1.2 Release recognition engine

|              |                            |
|--------------|----------------------------|
| Description  | Release recognition engine |
| Prototype    | void FreeIDCard();         |
| Parameter    | None                       |
| Return value | None                       |

### 3.1.2 Detect whether the ID document is placed, document recognition and acquire recognition results

#### 3.1.2.1 Detect if the ID document has been placed or not

|              |                       |  |
|--------------|-----------------------|--|
| Prototype    | int DetectDocument(); |  |
| Parameter    | None                  |  |
| Return Value | -1                    | The core engine has not been initialized   |
|              | 0                     | Cannot detect if the ID document is placed or not                                  |
|              | 1                     | Detect the ID document is placed in  |
|              | 2                     | Detect the ID document was taken out   |
|              | 3                     | Detected the barcode of mobile phone (only AR and KR series devices are supported) |

#### 3.1.2.2 Scan ID documents

|             |   |  |
|-------------|---|--|
| Description | When the placed ID document has been detected, this interface can be called to start recognition. |  |
| Prototype   | int AutoProcessIDCard(int& nCardType);  |  |
|             | nCardType   | [Output]<br>“1” means the ID documents has chips.<br>“2” means the ID documents do not have chips.<br>“4” means the ID documents has barcode.<br>“5” means the ID documents has chips and barcode. |

|              |     |   |
|--------------|-----|---|
|              |     | "6" means the ID documents do not have chips, but detected barcode.                       |
| Return Value | > 0 | Successfully return the main types of the document  |
|              | -1  | Did not set up the valid document types that participate in the automatic classification. |
|              | -2  | Image capturing is failed.  |
|              | -3  | Image cutting is failed.  |
|              | -4  | Classification is failed, and did not find the matched template.                          |
|              | -5  | Classification is failed, and did not set up the valid document types.                    |
|              | -6  | Classification is failed and recognition rejected.  |
|              | -7  | Recognition is failed.  |
|              | -8  | To read the chip information is failed, but page recognition is successful.               |
|              | -9  | To read the chip information is successful, but page recognition is failed.               |
|              | -10 | The page recognition and chip reading are both failed                                     |

### 3.1.2.3 Acquire recognition field name

|              |  |   |
|--------------|--|---|
| Prototype    | int GetFieldNameEx<br>(int nAttribute,int nIndex,LPWSTR lpBuffer,int& nBufferLen); |   |
| Parameter    | nAttribute   | 0: To acquire the chip information<br>To acquire OCR field result from the page |
|              | nIndex   | For field index, please refer to appendix B.                                    |
|              | lpBuffer   | Buffer areas to store the results   |
|              | nBufferLen   | [Input] buffer size<br>[Output] length for recognition results                  |
| Return Value | 0  | Succeed   |

|  |    |  |
|--|----|--|
|  | -1 | Recognition engine is failed to be initialized.                                    |
|  | -2 | Such property does not exist.  |
|  | 1  | Buffer areas is too small and “nBufferLen” can be used to adjust the storage room. |
|  | 2  | Recognition is failed  |
|  | 3  | The field symbolized by “nIndex” does not exist.                                   |

### 3.1.2.4 Acquire recognition field result

|              |  |  |
|--------------|--|--|
| Prototype    | int GetRecogResultEx<br>(int nAttribute,int nIndex,LPWSTR lpBuffer,int& nBufferLen); |  |
| Parameter    | nAttribute   | 0: To acquire the chip information<br>1: To acquire OCR result from the page |
|              | nIndex   | For field index, please refer to appendix B.                                 |
|              | lpBuffer   | Buffer areas to store the results  |
|              | nBufferLen   | [Input] buffer size<br>[Output] length for recognition results               |
| Return Value | 0  | Succeed  |
|              | -1   | Recognition engine is failed to be initialized.                              |
|              | -2   | Such property does not exist.  |
|              | 1  | Buffer areas is too small and “nBufferLen” reverse back the storage room.    |
|              | 2  | Recognition is failed  |
|              | 3  | The field represent by “nIndex” does not exist.                              |

### 3.1.2.5 Acquire the origin of results

|           |   |  |
|-----------|---|--|
| Prototype | int GetResultTypeEx(int nAttribute,int nIndex); |  |
| Parameter | nAttribute                                      | 0: to acquire the chip field value<br>1: To acquire OCR fields from page |

|              |        |   |
|--------------|--------|---|
|              | nIndex | For field index, please refer to appendix B       |
| Return Value | 0      | The Origin is from the chip                       |
|              | 1      | The origin is from the OCR field of page VIZ area |
|              | 2      | The result origins are export from VIZ area       |
|              | 3      | The origin is from the OCR field of page MRZ area |
|              | 4      | The result origins are from other MRZ fields      |

### 3.3.2.6 Acquire the recognition result confident

|              |  |   |
|--------------|--|---|
| Prototype    | int GetFieldConfEx(int nAttribute,int nIndex); |   |
| Parameter    | nAttribute                                     | 0: the origin is from chip data<br>1: the origin is from OCR result of the page |
|              | nIndex   | Please refer to Appendix B for field index                                      |
| Return Value | 0 ~ 100  | If confidence is lower than 30, and this field is reliable                      |

### 3.1.2.7 Acquire the ID documents name

|              |  |   |
|--------------|--|---|
| Prototype    | int GetIDCardName(LPCTSTR lpBuffer, int&nBufferLen);   |   |
| Parameter    | lpBuffer   | The Buffer is used to save document name  |
|              | nBufferLen   | [Input] "lpBuffer" is used to adjust buffer size<br>[Output] Length of ID document name |
| Return Value | 0  | Succeed   |
|              | Others   | Failed  |
| Note         | If the current language is set as Chinese, the document type is returned in Chinese; if the current language is set as English, the English name is returned |   |

### 3.1.2.8 Acquire the sub-type of the ID document

|           |                 |
|-----------|-----------------|
| Prototype | int GetSubID(); |
|-----------|-----------------|

|              |   |   |
|--------------|---|---|
| Parameter    | None  |   |
| Return Value | > 0   | Sub-types of ID documents                     |
|              | -1  | Did not acquire the sub-types of ID documents |
| Note         | After successfully calling the API "AutoProcessIDCard", and then call this API to acquire the sub-types of ID documents |   |

### 3.1.2.9 Save specified images to specified paths

|              |  |  |
|--------------|--|--|
| Prototype    | int SaveImageEx (LPCWSTR lpFileName,int nType);  |  |
| Parameter    | lpFileName   | When Saving images to local files, its filename must be "jpg" "bmp" "tif" and other formats cannot be supported  |
|              | nType  | For the types of image saving, "bit0~bit4" symbolize white image, IR image, UV image, page portrait and chip portrait; If the bit is "1", it means saving images, "0" means not saving                   |
| Return Value | 0  | Succeed  |
|              | Others   | If the API calling is failed, "bit0~bit4" symbolizes if the corresponding images are saved successfully. If the bit is "1", it means image saving is failed, if "0", it means image saving is successful |
| Note         | If the chip reading is failed, the chip portrait cannot be saved. When there is only one type of image needs to be saved, the filename for image saving must be consistent with parameter "lpFileName". When more than one type of images need to be saved, the filename should add "IR" "UV" "Head" "HeadEc" and the suffix remains unchanged |  |

### 3.1.3 Barcode reading related API

#### 3.1.3.1 Set barcode recognition

|           |   |   |
|-----------|---|---|
| Prototype | void SetBarCodeMode(bool bBarCodeMode,<br>bool bCellPhoneBarCodeCheck); |   |
| Parameter | bBarCodeMode  | "True" means barcode recognition is successful. |
|           |   | "false" means barcode recognition is            |

|              |   |   |
|--------------|---|---|
|              |   | failed.   |
|              | bCellPhoneBarCodeCheck  | <p>“True” means it can detect the phone barcode.</p> <p>“false” means it cannot detect the phone barcode.</p> |
| Return Value | None  |   |
| Note         | This API must be called first before calling “AutoProcessIDCard” if a barcode needs to be recognized. |   |

### 3.1.3.2 Set the barcode recognition types

|              |   |  |
|--------------|---|--|
| Prototype    | <pre>void SetRecogCodeTypes(     int nMode,     unsigned int nTypes );</pre>                        |  |
| Parameter    | nMode   | <p>1: Barcode mode for mobile phone</p> <p>2: Barcode mode for paper</p> |
|              | nTypes  | <p>bit0: 1D barcode</p> <p>bit1: QRCode</p> <p>bit2: PDF417</p>          |
| Return Value | None  |  |
| Note         | Set the type of barcode to be recognized. Setting multiple types will reduce the recognition speed. |  |

### 3.1.3.3 Barcode identification of mobile phone

|              |                              |                                 |
|--------------|------------------------------|---------------------------------|
| Prototype    | int RecogCellPhoneBarCode(); |                                 |
| Parameter    | None                         |                                 |
| Return Value | >0                           | The numbers of scanned barcodes |
|              | <= 0                         | Failed                          |

|      |   |
|------|---|
| Note | This function is only called after DetectDocument returns 3. Bar code results can be obtained after return success. |
|------|---|

### 3.1.3.4 Acquire the numbers of recognized barcodes

|              |                        |                                 |
|--------------|------------------------|---------------------------------|
| Prototype    | int GetBarcodeCount(); |                                 |
| Parameter    | None                   |                                 |
| Return Value | >= 0                   | The numbers of scanned barcodes |
|              | < 0                    | Failed                          |

### 3.1.3.5 Acquire barcode recognition results

|              |   |  |
|--------------|---|--|
| Prototype    | int GetBarcodeRecogResult(int nIndex,LPWSTR lpBuffer,int& nBufferLen,LPWSTR lpResultType, int& nResultTypeLen); |  |
| Parameter    | nIndex  | Barcode index starts from "0".                             |
|              | lpBuffer  | Barcode recognition results                                |
|              | nBufferLen  | Length for Barcode recognition results                     |
|              | lpResultType  | Barcode types  |
|              | nResultTypeLen  | Length for barcode types                                   |
| Return Value | 0   | Succeed  |
|              | -1  | Buffer area for "lpResult" or "lpResultType" is too small. |
|              | -2  | Recognition is failed                                      |
|              | -3  | "nIndex" index does not exist.                             |
| Note         | Be able to recognize one dimensional codes and QR codes.  |  |

### 3.1.4 Normal set up recognition option

There are two ways to set up the recognition options. One is to import the configuration file through the API "SetConfigByFile", and the other is to set up respective scanning options by calling the API.

If using the first method, after modifying the configuration files, simply call the API “SetConfigByFile” to import all the scanning options at once. For the contents and format of the configuration files, please refer to the configuration files that come with the installation package. Its location is in the “lib” folder under the installation directory, and the filename is “IDCardConfig.ini”.

If using the second way, the API needs to be called once for each scanning option.

#### 3.1.4.1 Import configuration

|              |  |   |
|--------------|--|---|
| Description  | To load ID document recognition options from configuration files |   |
| Prototype    | int SetConfigByFile(LPCWSTR lpConfigFile);                       |   |
| Parameter    | lpConfigFile   | The full path for configuration files                           |
| Return Value | 0  | Successfully load the configurations                            |
|              | -1   | The configuration files or configuration formats are incorrect. |

#### 3.1.4.2 Set languages

|              |  |  |
|--------------|--|--|
| Description  | To set up the languages that the core engine adopts. |  |
| Prototype    | int SetLanguage(int nLangType);                      |  |
| Parameter    | nLangType  | For language types, “0” means “Chinese” and “1” means “English”. |
| Return value | 0  | Succeed  |
|              | 1  | Failed   |

#### 3.1.4.3 Set image types

|           |  |  |
|-----------|--|--|
| Prototype | void SetSaveImageType(int nImageType); |  |
| Parameter | nImageType                             | For the types of image saving, “bit0~bit4” symbolize white image, IR image, UV image, page portrait and chip portrait; If the bit is “1”, it means capturing images, if “0”, |



|              |      |                         |
|--------------|------|-------------------------|
|              |      | it means not capturing. |
| Return Value | None |                         |

#### 3.1.4.4 Set if the page recognition is performed

|              |                                   |  |
|--------------|-----------------------------------|--|
| Prototype    | void SetRecogVIZ(bool bRecogVIZ); |  |
| Parameter    | bRecogVIZ                         | <p>“True” means page recognition is performed.</p> <p>“False” means page recognition is not performed.</p> |
| Return Value | None                              |  |

#### 3.1.4.5 Set if the chip data can be recognized

|              |                           |   |
|--------------|---------------------------|---|
| Prototype    | void SetRecogDG(int nDG); |   |
| Parameter    | nDG                       | <p>From bit1 to bit 16, each bit represents a data group. If the bit is set to “1”, it means the corresponding data group is recognized.”0” means not recognizing any data.</p> <p>“Bit1” means “DG1”.</p> <p>“Bit2” means “DG2”</p> <p>... ..</p> <p>“Bit16” means “DG 16”</p> |
| Return Value | None                      |   |

#### 3.1.4.6 Set whether to parse MRZ in the chip

|              |                                     |  |
|--------------|-------------------------------------|--|
| Prototype    | void SetAnalyseMRZ(bool bAnalysis); |  |
| Parameter    | bAnalysis                           | <p>“True” means parse MRZ.</p> <p>“False” means not parse MRZ.</p> |
| Return Value | None                                |  |

### 3.1.4.7 Empty document types that participates in automatic classification

|              |  |
|--------------|--|
| Description  | Empty document types that participates in automatic classification |
| Prototype    | void ResetIDCardID();  |
| Parameter    | None   |
| Return Value | None   |

### 3.1.4.8 Set ID document types that participates in the automatic classification

|              |   |  |
|--------------|---|--|
| Description  | Set up or increase the number of ID document types that participates in the automatic classification. You can only set one type of document when calling the API once. When you want to recognize multiple documents, you can call API by multiple times in succession to accumulate. |  |
| Prototype    | int AddIDCardID(int nMainID,int nSubID[],int nSubIDCount);  |  |
| Parameter    | nMainID   | Document types that participates in automatic classification   |
|              | nSubID  | A list of ID document sub-types that participate in automatic classification. If the “nSubIDCount” value is “1” and the first element value in the “nSubID” is “0”, then all sub-types can participate in automatic classification |
|              | nSubIDCount   | The number of ID document sub-types that participates in the automatic classification  |
| Return Value | 0   | Succeed  |
|              | Others  | Failed   |

### 3.1.5 Acquire device related information

#### 3.1.5.1 Acquire the device serial No.

|           |   |   |
|-----------|---|---|
| Prototype | int GetDeviceSN<br>(LPCWSTR lpBuffer,int nBufferLen); |   |
| Parameter | lpBuffer  | The Buffer is used to save the serial No.   |
|           | nBufferLen  | “lpBuffer” buffer size, the maximum cannot exceed 16, and “16” is the recommended size. |

|              |   |  |
|--------------|---|--|
| Return Value | 0 | Succeed                                      |
|              | 1 | The device has not been successfully loaded. |
|              | 2 | This device cannot support this operation.   |

### 3.1.5.2 Acquire device model

|              |   |  |
|--------------|---|--|
| Prototype    | BOOL GetCurrentDevice<br>(LPCWSTR lpBuffer,int nBufferLen); |  |
| Parameter    | lpBuffer  | The Buffer is used to save the serial NO.  |
|              | nBufferLen  | "lpBuffer" buffer capacity, calculated by "wchar_t", suggest set not less than 64. |
| Return Value | true  | Succeed  |
|              | false   | Failed   |

### 3.1.6 Other Interfaces

#### 3.1.6.1 Acquire the SDK version No.

|              |   |   |
|--------------|---|---|
| Prototype    | BOOL GetVersionInfo (LPCWSTR lpBuffer, int nBufferLen); |   |
| Parameter    | lpBuffer  | Buffer area to save core engine version NO. |
|              | nBufferLen  | "lpBuffer" means the size of buffer area.   |
| Return Value | TRUE  | Succeed                                     |
|              | FALSE   | Failed                                      |

#### 3.1.6.2 Check if the device has been connected to computer host

|              |                             |  |
|--------------|-----------------------------|--|
| Prototype    | int CheckDeviceOnlineEx (); |  |
| Parameter    | None                        |  |
| Return Value | 1                           | The device has been connected to computer host and also been successfully initialized. |
|              | 2                           | The device has been lost connection( no connection to the                              |

|  |   |  |
|--|---|--|
|  |   | computer host)   |
|  | 3 | If the device has been lost connection to computer host, the core engine needs to be re-initialized(InitIDCard). |

### 3.1.6.3 Set signal lights

|              |  |  |
|--------------|--|--|
| Prototype    | int SetIOStatus<br>(int nIOType,bool bOpen); |  |
| Parameter    | nIOType                                      | Signal light NO.:<br>"5" means ready light<br>"6" means error light<br>"7" means warning light |
|              | bOpen  | "true"means turning on signal light.<br>"false" means turning off the signal light.            |
| Return Value | 0  | Succeed  |
|              | 1  | The device has not been initialized.   |
|              | 2  | This device cannot support this operation.   |
|              | 3  | The parameter is illegal.  |
|              | 4  | Failed.  |

### 3.1.6.4 Buzzer Warning

|              |                                  |  |
|--------------|----------------------------------|--|
| Prototype    | int BuzzerAlarm(int nDuration,); |  |
| Parameter    | nDuration                        | Buzzer sound duration is calculated by milliseconds. |
| Return Value | 0                                | Succeed  |
|              | -1                               | The device has not been initialized.                 |
|              | -2                               | This device cannot support this operation.           |

### 3.1.6.5 Capture image to internal storage

| Prototype | int AcquireImage(int nImageSizeType); |   |
|-----------|---------------------------------------|---|
| Parameter | nImageSizeType                        | <p>ID Document size:</p> <p>“0” represents a full-page image, in which no image rotation operation is performed;</p> <p>“1” represents an image of the first generation ID card, that is, the physical size and placement of the document are the same as the first generation ID card. This type includes the first generation ID card, driving license, and vehicle license. In this mode, the document image is automatically rotated;</p> <p>“2” represents the image of the second generation ID card, that is, the physical size and placement of the document are the same as the second generation ID card. This type includes the back side of the second-generation ID card, the front side of second generation ID card , the front side of home-entry permit, the back side of the home-entry permit, and the Hong Kong permanent identity card. In this mode, the document image is automatically rotated;</p> <p>“3” represents the image of the passport type, that is, the physical size and placement of the document are the same as the passport. This type includes passports, visas, Mainland Travel Permit for Taiwan Residents, Exit-Entry Permit (EEP) to HK / Macau, and China Mainland Residents Travel Permit to Taiwan. In this mode, the document image is automatically rotated;</p> <p>“4” The image representing the type of China PLA Officer Card, ie the physical size and placement of the document is the same as China PLA Officer Card. This type currently only contains China PLA Officer Card. In this mode, the document image is automatically rotated;</p> <p>“5” represents the image of Chinese Household Register , that is, the physical size and placement of the document are the same as Chinese Household Register. This type currently only contains Chinese Household Register. In this mode, the document</p> |

|              |   |   |
|--------------|---|---|
|              |   | <p>image is automatically rotated;</p> <p>“6” represents the image of boarding pass. This type only includes boarding passes. In this mode, the document image is automatically rotated;</p> <p>“7” represents Inhabitants ID of a border area portrait page;</p> <p>“8” represents Inhabitants ID of a border area information page;</p> <p>“20” represents the image of the custom type size. If you use this method, you need to set up the size of the captured image first, see 3.5.2. By default, the size of the custom type image is the full page. It is important to note that the image will not be automatically rotated.</p> <p>“21” represents an image of the original size, in which the black edge, tilt correction and cropping processing are automatically performed on the captured image. When the automatic sorting function is used, this method can help acquire the image size.</p> |
| Return Value | 0   | Succeed   |
|              | 1   | Failed  |
|              | 2   | The device is not online  |
|              | 3   | The parameter is illegal  |
|              | 4   | Failed  |
| Note         | After the image is successfully captured into the internal storage, the file can be saved to disk by calling the API “SaveImageEx interface”. |   |

## 3.2 Special APIs

### 3.2.1 Initialize and release core engine

#### 3.2.1.1 Initialize core engine for specified device model.

|           |  |  |
|-----------|--|--|
| Prototype | int InitIDCardEx(LPCWSTR lpUserID,int nType,LPCWSTR lpDirectory,LPCWSTR lpDeviceName); |  |
| Parameter | lpUserID   | User ID provided by SinoSecu to certify authorization. |

|              |              |  |
|--------------|--------------|--|
|              | nType        | Each bit symbolizes a type of recognition engine. If the bit is "1", recognition engine is loaded correspondingly; if "0", it means not loading.<br><br>Bit0 means the recognition engine for the business card.<br><br>Other bits remain unused |
|              | lpDirectory  | Path for saving this Dynamic library files   |
|              | lpDeviceName | Device model   |
| Return Value | 0            | The initialization is succeed  |
|              | 1            | ID authorization is not correct  |
|              | 2            | The device initialization is failed  |
|              | 3            | Core engine initialization is failed   |
|              | 4            | The license file has not been found  |
|              | 5            | The core engine load the templates is failed   |
|              | 6            | Card reader initialization is failed   |

### 3.2.1.2 Specify the initialize core of the device serial number

|              |  |   |
|--------------|--|---|
| Prototype    | int InitIDCardSN(LPCWSTR lpUserID,int nType,LPCWSTR lpDirectory,LPCWSTR lpDeviceSN); |   |
| Parameter    | lpUserID   | User ID, provided by SinoSecu Corporation, to check the authority document.   |
|              | nType  | Each bit denote as a kind of recognition engine, 1 bit denote upload response recognition engine, 0 means not.<br><br>Bit0 means business card recognition core.<br><br>Other bit was not used currently. |
|              | lpDirectory  | The store path of the dynamic library.  |
|              | lpDeviceSN   | Device serial number  |
| Return Value | 0  | Successful initialization   |
|              | 1  | Incorrect authorization ID  |

|  |   |  |
|--|---|--|
|  | 2 | Device initialize is failed                |
|  | 3 | Initialize core is failed                  |
|  | 4 | Authorization document not found           |
|  | 5 | Recognition Core upload template is failed |
|  | 6 | Initialize card reader is failed           |

### 3.2.2 Setting recognition options

#### 3.2.2.1 Setting recognition rejection sign

|              |  |                  |
|--------------|--|------------------|
| Description  | Setting recognition rejection sign refer to a certain document |                  |
| Prototype    | int SetIDCardRejectType<br>(int nMainID, bool bSet);           |                  |
| Parameter    | nMainID  | Document type    |
|              | bSet   | Rejection or not |
| Return Value | 0  | Succeed          |
|              | Other  | Failed           |

#### 3.2.2.2 Set whether to read document chip

|              |  |                           |
|--------------|--|---------------------------|
| Prototype    | int SetRecogChipCardAttribute(int nReadCard);  |                           |
| Parameter    | nReadCard  | 0 means not read the chip |
|              |  | 1 means read the chip     |
| Return Value | 0  | Succeed                   |
|              | Other  | Failed                    |
| Note         | This interface only refer to device with chip reading function. Only after initialize the device can this interface be called. |                           |

#### 3.2.2.3 Set whether to re-scan by white image

|           |                                  |  |
|-----------|----------------------------------|--|
| Prototype | void ReRecogMRZbyVI(bool bFlag); |  |
| Parameter | bFlag                            | True means setting this function; false means not. |



|              |   |
|--------------|---|
| Return Value | None  |
| Note         | Re-scan the white light MRZ part, only set once (Used under infrared image MRZ part not clear enough lead to classification failed situation) |

#### 3.2.2.4 Setting whether to remove the background

|              |   |   |
|--------------|---|---|
| Prototype    | void SetBGSubtraction<br>(int nBGSub);  |   |
| Parameter    | nBGSub  | bit0: Whether remove the white light background or not<br>bit1: Whether remove the infrared light background or not<br>bit2: Whether remove the ultraviolet light background or not<br>Each bit value take 1 means remove the background, 0 means not remove the background |
| Return Value | None  |   |
| Note         | Suitable for AR, KR, QR model without cover situation. Call this interface can improve captured image effect. |   |

#### 3.2.2.5 Setting captured image resolution

|              |  |                                     |
|--------------|--|-------------------------------------|
| Prototype    | BOOL SetAcquireImageResolution(int nResolutionX,int nResolutionY);   |                                     |
| Parameter    | nResolutionX   | Capture image horizontal resolution |
|              | nResolutionY   | Capture image vertical resolution   |
| Return Value | TRUE   | Succeed                             |
|              | FALSE  | Failed                              |
| Note         | <p>If customer need to scan the captured image, please don't change the default image resolution, otherwise it will cause recognition rate decline or can't recognized. Only if customer don't need to recognize the captured image, this interface can be called.</p> <p>TH-PRXXX serial device provide 300 megapixel (2048×1536) image, TH-PRXXX serial device and KR serial device provide 300 megapixel (2048×1536) and 500 megapixel (2592×1944) image.</p> |                                     |

### 3.2.2.6 Setting captured image exposure value

|              |   |  |
|--------------|---|--|
| Prototype    | void SetAcquireImageExposureTime (int nLightType,int nModel);   |  |
| Parameter    | nLightType  | Must take value 4, refer to ultraviolet light                |
|              | nModel  | 0: factory settings<br>1: Dark<br>2: Convention<br>3: Bright |
| Return Value | 0   | Setting succeed  |
|              | -1  | Device not support this function                             |
|              | -2  | Incorrect parameter  |
| Note         | 1. This interface only support settings for ultraviolet light, parameter nLightType must take value 4;<br>2. Only suitable for TH-AR, QR, and KR device, don't use it unless special situation. |  |

### 3.2.3 Security feature related interface

#### 3.2.3.1 Detect whether the document has ultraviolet stagnancy feature

|              |   |  |
|--------------|---|--|
| Prototype    | void CheckUVDull(bool bForceAcquire, int nReserve); |  |
| Parameter    | bForceAcquire                                       | 1:enforce capture ultraviolet image<br>0: System will judge whether to capture the ultraviolet image |
|              | nReserve  | Reserve, just transmit 0   |
| Return Value | 0   | Detect ultraviolet stagnancy feature   |
|              | -1  | System not initialized   |
|              | -2  | Device not support this function   |
|              | -3  | Image capture failed   |

|  |    |               |
|--|----|---------------|
|  | -4 | Fake document |
|--|----|---------------|

### 3.2.3.2 Setting whether the document has ultraviolet fiber feature

|              |   |   |
|--------------|---|---|
| Prototype    | int FibreDetect(bool bAcquireImage);                |   |
| Parameter    | bAcquireImage                                       | true Restart capture image<br>false If there is any image in the internal storage, then don't restart capture |
| Return Value | < 0   | Detection failed  |
|              | >= 0  | Ultraviolet fiber number detection  |
| Note         | This function only suitable for passport currently. |   |

### 3.2.3.3 Obtain ultraviolet fiber location information

|              |  |                               |
|--------------|--|-------------------------------|
| Prototype    | int GetFibrePos(int nIndex,int& nLeft,int& nTop,int& nRight,int& nBottom);   |                               |
| Parameter    | nIndex   | Ultraviolet fiber index       |
|              | nLeft  | Ultraviolet fiber left pixel  |
|              | nTop   | Ultraviolet fiber upper pixel |
|              | nRight   | Ultraviolet fiber right pixel |
|              | nBottom  | Ultraviolet fiber lower pixel |
| Return Value | 0  | Succeed                       |
|              | Other  | Failed                        |
| Note         | This function only suitable for passport currently. Once detected the document has ultraviolet fiber feature on FibreDetect interface, can this interface be called. |                               |

### 3.2.3.4 Detect whether the document is copy or not

|              |  |   |
|--------------|--|---|
| Prototype    | int GetImageSourceType(int nMainID,int nScale,bool bAcquireImage); |   |
| Parameter    | nMainID  | Document main ID  |
|              | nScale   | The front 3 bit refer to different document category, bit take value 1 means differentiate, 0 means not differentiate<br><br>bit0: Copy document differentiate<br><br>bit1: Color copy document differentiate<br><br>bit2: Screenshot image differentiate |
| Return Value | 0  | Original document   |
|              | > 0  | bit0: Copy document<br><br>bit1: Color copy document<br><br>bit2: Screenshot image  |
|              | < 0  | Detection failed  |
| Note         | Only support second-generation ID card currently.                  |   |

### 3.2.4 Parse the MRZ in the chip

To obtain the MRZ parsed result, you need to set the option of the chip first.  
See 3.1.4.6 for the setting interface.

#### 3.2.4.1 Get the parsed MRZ field name

|              |  |  |
|--------------|--|--|
| Prototype    | int GetAnalyseMRZFieldName (int nIndex, LPTSTR lpBuffer, int& nBufferLen); |  |
| Parameter    | nIndex   | For field index, please refer to appendix B.                       |
|              | lpBuffer   | Buffer areas to store the results                                  |
|              | nBufferLen   | [Input] buffer size<br><br>[Output] length for recognition results |
| Return Value | 0  | succeed  |

|  |    |  |
|--|----|--|
|  | -1 | Recognition engine is failed to be initialized.                                    |
|  | 1  | Buffer areas is too small and "nBufferLen" can be used to adjust the storage room. |
|  | 3  | The field symbolized by "nIndex" does not exist.                                   |

### 3.2.4.2 Get the parsed MRZ field result

|              |   |  |
|--------------|---|--|
| Prototype    | int GetAnalyseMRZResult (int nIndex, LPTSTR lpBuffer, int& nBufferLen); |  |
| Parameter    | nIndex  | For field index, please refer to appendix B.                                       |
|              | lpBuffer  | Buffer areas to store the results  |
|              | nBufferLen  | [Input] buffer size<br>[Output] length for recognition results                     |
| Return Value | 0   | succeed  |
|              | -1  | Recognition engine is failed to be initialized.                                    |
|              | 1   | Buffer areas is too small and "nBufferLen" can be used to adjust the storage room. |
|              | 3   | The field symbolized by "nIndex" does not exist.                                   |

### 3.2.5 Other interface

#### 3.2.5.1 Specify document type recognition interface

|              |   |   |
|--------------|---|---|
| Description  | Recognize the image according to parameter specified document type. |   |
| Prototype    | int RecognizeCardEX (int nMainID, int nSubID);                      |   |
| Parameter    | nMainID   | Document main ID  |
|              | nSubID  | Document subsidiary ID                                  |
| Return Value | > 0   | Recognition succeed, return value is document main type |
|              | -1  | Classify failed   |
|              | -2  | Location failed   |

|  |    |  |
|--|----|--|
|  | -3 | Recognition failed                                 |
|  | -4 | No right load image                                |
|  | -5 | Corresponding template not found                   |
|  | -6 | Reject recognition(Unreliable recognition content) |
|  | -7 | Cropping failed                                    |

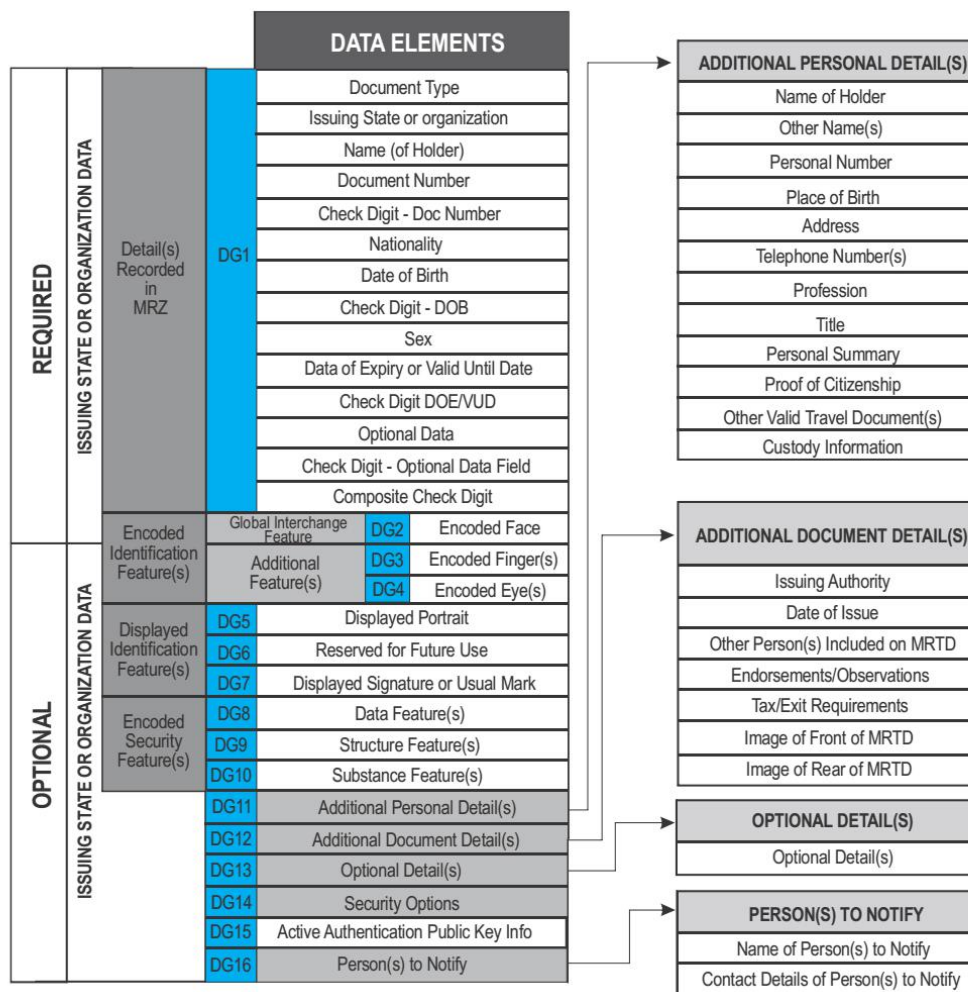
### 3.2.5.2 DataGroup Obtain specified DataGroup information from e-passport chip

|              |  |   |
|--------------|--|---|
| Prototype    | int GetDataGroupContent(int nDGIndex, bool bRawData, unsigned char* lpBuffer, int& nLength); |   |
| Parameter    | nDGIndex   | Data grouping index, 1~16 refer to DG1~DG16 respectively. Check the Six Chapter appendix for data grouping information.       |
|              | bRawData   | Whether to return the original data from the chip, true means output original information, false output analyzed information. |
|              | lpBuffer   | Used to store data grouping information.  |
|              | nLength  | [Input] means the size of the lpBuffer.<br>[Output] means the length of the data grouping information.                        |
| Return Value | 0  | Succeed   |
|              | Other  | Failed  |

## Chapter 4 Appendix

### 4.1. Appendix A

#### Electronic chip data grouping



Attention:

1. Currently the document chip stored information only include DG1, DG2, DG11, DG12
2. Each country or district may store different information, if the DG's content is empty, it's normal phenomenon.

## 4.2 Appendix B Document type and field explanation

### 4.2.1 Document main type

For each type of document, there is a MAINID, which remains unchanged. Even if new document type was added, the original document MAINID will keep the same.

This version SDK supports the following documents:

| Document type                                       |               |   | Document MAINID<br>(Decimal notation) |
|---|---------------|---|---------------------------------------|
| Resident identification card-photo page             |               |   | 2                                     |
| Resident identification card-issuing authority page |               |   | 3                                     |
| Temporary identification card                       |               |   | 4                                     |
| Vehicle drivers license                             |               |   | 5                                     |
| Vehicle registration certificate                    |               |   | 6                                     |
| Military identification 1998 version                |               |   | 7                                     |
| Soldier identification 1998 version                 |               |   | 8                                     |
| Machine readable document                           | Passport size | Exit-Entry Permit for Travelling to and from Hong Kong and Macao (EEP) 2005version        | 9                                     |
|   |               | Travel passes for Taiwan residents to enter or leave the mainland 1992 version-photo page | 10                                    |
|   |               | Mainland residents travel to and from Taiwan 1992 version-photo page                      | 11                                    |
|   |               | visa  | 12                                    |
|   |               | passport  | 13                                    |
|   | Card size     | Travel permit for Hong Kong and Macao residents to and from the mainland-photo page       | 14                                    |



|  |  |      |
|--|--|------|
|  | Travel permit for Hong Kong and Macao residents to and from the mainland -MRZ page | 15   |
| Registration card for permanent residence  |  | 16   |
| Seaman's Certificate 2009 version-photo page   |  | 17   |
| Military identification 1998 version-photo page (support passport reader)                      |  | 18   |
| Military identification 1998 version-information page (support passport reader)                |  | 19   |
| Officers card 2006 version-photo page  |  | 20   |
| Officers card 2006 version-information page  |  | 21   |
| Exit-Entry Permit for Travelling to and from Hong Kong and Macao (EEP) 2014 version-photo page |  | 22   |
| Border area entry-exit permit 2014 version-photo page  |  | 23   |
| The Chinese People's Liberation Army Driving license 2010 version                              |  | 24   |
| Travel passes for Taiwan residents to enter or leave the mainland 2015 version-photo page      |  | 25   |
| Travel passes for Taiwan residents to enter or leave the mainland 2015 version -MRZ page       |  | 26   |
| The Chinese People's Liberation Army Driving license 2012 version                              |  | 27   |
| Mainland residents travel to and from Taiwan 2017 version-photo page                           |  | 29   |
| Vehicle registration certificate vice page   |  | 30   |
| Residence permit for Hong Kong, Macao and Taiwan residents-photo page                          |  | 31   |
| Residence permit for Hong Kong, Macao and Taiwan residents-issuing authority page              |  | 32   |
| Permanent residence card for foreigners 2017 version-photo page                                |  | 33   |
| Taiwan (Jin Ma Peng) Entry and exit permit 2015 version-photo page                             |  | 34   |
| Taiwan residence permit-photo page   |  | 35   |
| Vietnam entry and exit permits   |  | 36   |
| Residence permit(Guangdong, Guangxi, Dongguan)-photo page                                      |  | 1000 |

|  |      |
|--|------|
| Hong Kong identity card-photo page   | 1001 |
| Boarding pass(Camera device don't support boarding pass recognition currently) | 1002 |
| Border area entry-exit permit 2005 version-photo page                          | 1003 |
| Border area entry-exit permit 2005 version-information page                    | 1004 |
| Macao identity card-photo page   | 1005 |
| Claim certificate (scanner supported)  | 1006 |
| Lawyer license-issuing authority page  | 1007 |
| Lawyer license-photo page  | 1008 |
| Road transportation IC card of People's Republic of China                      | 1009 |
| Business card  | 1010 |
| Organization Code Certificate  | 1011 |
| Shenzhen special economic zone residence permit 2015 version-photo page        | 1013 |
| Inner Mongolia Autonomous Region People's court work permit                    | 1018 |
| Inner Mongolia Autonomous Region Work permit for procuratorial organs          | 1019 |
| Social security card(Beijing, Chongqing)-photo page                            | 1021 |
| Marine crew health certificate-photo page                                      | 1022 |
| Marine crew health certificate-issuing authority page                          | 1023 |
| Maritime crew training certificate-photo page                                  | 1024 |
| Maritime crew training certificate-issuing authority page                      | 1025 |
| Marine crew competency certificate-photo page                                  | 1026 |
| Marine crew competency certificate-issuing authority page                      | 1027 |
| Zhejiang province temporary residence permit-photo page                        | 1029 |
| National health insurance card   | 1030 |
| Taiwan identity card-photo page  | 1031 |
| Taiwan identity card -MRZ page   | 1032 |
| English Name   | 1035 |
| Shenmei group work permit  | 1037 |

|   |       |
|---|-------|
| Xiamen social security card-photo page              | 1039  |
| Taiwan driving license                              | 1040  |
| Malaysia identity card-photo page                   | 2001  |
| USA California driving license                      | 2002  |
| New Zealand driving license                         | 2003  |
| Singapore identity card                             | 2004  |
| TD-2 type machine readable travel document          | 2006  |
| TD-1 type machine readable travel document          | 2009  |
| Indonesia identity card                             | 2010  |
| Thailand identity card                              | 2011  |
| Thailand driving license                            | 2012  |
| Mexico electoral certificate-photo page             | 2013  |
| Mexico electoral certificate -MRZ page              | 2014  |
| Sweden driving license                              | 2020  |
| Malaysia driving license                            | 2021  |
| Singapore work permit 2017 version-photo page       | 2023  |
| Singapore work permit 2017 version-fingerprint page | 2025  |
| Singapore driving license                           | 2031  |
| Indonesia driving license                           | 2041  |
| Japan driving license                               | 2051  |
| Barcode   | 10000 |

#### 4.2.2 Chip field index

For ICAO Doc 9303 standard passport or electronic travel document. Index 1-12 is the information read directly from the chip. Index 13-24 is the information parsed from RFID MRZ. The contents of index 13-24 need to turn on the parsing chip MRZ function to obtain (see 3.1.4.6 for details).reading the chip field index is listed in the following table.

| Index | Field name (Chinese) | Field name (English) |
|-------|----------------------|----------------------|
| 0     | 保留                   | Reserve              |
| 1     | MRZ1                 | MRZ1                 |

|    |               |                           |
|----|---------------|---------------------------|
| 2  | MRZ2          | MRZ2                      |
| 3  | MRZ3          | MRZ3                      |
| 4  | 本国姓名          | NationalName              |
| 5  | 其它姓名          | OtherName                 |
| 6  | 出生日期          | BirthDay                  |
| 7  | 出生地点          | BirthPlace                |
| 8  | 签发日期          | IssueDay                  |
| 9  | 签发机关          | Authority                 |
| 10 | 个人号码          | Personal NO.              |
| 11 | 地址            | Address                   |
| 12 | RFID MRZ      | RFID MRZ                  |
| 13 | (MRZ)证件类型     | (MRZ)Identification type  |
| 14 | (MRZ)证件号码     | (MRZ)ID Number            |
| 15 | (MRZ)英文姓名     | (MRZ)English name         |
| 16 | (MRZ)出生日期     | (MRZ)Date of Birth        |
| 17 | (MRZ)有效期至     | (MRZ)Date of Expiry       |
| 18 | (MRZ)性别       | (MRZ)Sex                  |
| 19 | (MRZ)签发国籍代码   | (MRZ)Issuing country code |
| 20 | (MRZ)持证人国籍代码  | (MRZ)Nationality code     |
| 21 | (MRZ)中文姓名     | (MRZ)Chinese name         |
| 22 | (MRZ)身份证件号码   | (MRZ)ID card number       |
| 23 | (MRZ)身份号码(扩展) | (MRZ)ID Number(Expanded)  |
| 24 | (MRZ)换证次数     | (MRZ)Renewal times        |

#### 4.2.3 Field definition of each document

For each document, there are many projects needs to be recognized. The following table explained each document recognition project's index.

| Document name                      | Document ID | Index | Field   |
|------------------------------------|-------------|-------|---------|
| Resident identification card-photo | 2           | 0     | Reserve |

|   |   |    |   |
|---|---|----|---|
| page  |   | 1  | Name  |
|   |   | 2  | Gender  |
|   |   | 3  | Nationality   |
|   |   | 4  | Birthday  |
|   |   | 5  | Address   |
|   |   | 6  | Citizen identification number                         |
| Resident identification card-issuing authority page   | 3 | 0  | Reserve   |
|   |   | 1  | Issuing authority                                     |
|   |   | 2  | Expiry Date (Including issuing date and valid period) |
|   |   | 3  | Issuing date  |
|   |   | 4  | Valid until   |
| Temporary identification card   | 4 | 0  | Reserve   |
|   |   | 1  | Name  |
|   |   | 2  | Gender  |
|   |   | 3  | Nationality   |
|   |   | 4  | Birthday  |
|   |   | 5  | Address   |
|   |   | 6  | Citizen identification number                         |
|   |   | 7  | Issuing authority                                     |
|   |   | 8  | Expiry Date   |
|   |   | 9  | Issuing date  |
|   |   | 10 | Valid until   |
| Vehicle drivers license<br><br>Explanation: driver license (1) expired, didn't add template | 5 | 0  | Reserve   |
|   |   | 1  | Identification number                                 |
|   |   | 2  | Name  |
|   |   | 3  | Gender  |

|                                      |   |    |                               |
|--------------------------------------|---|----|-------------------------------|
|                                      |   | 4  | Address                       |
|                                      |   | 5  | Birthday                      |
|                                      |   | 6  | Issue Date                    |
|                                      |   | 7  | Class                         |
|                                      |   | 8  | Valid From                    |
|                                      |   | 9  | Valid for                     |
|                                      |   | 10 | Expiry Date                   |
| Vehicle registration certificate     | 6 | 0  | Reserve                       |
|                                      |   | 1  | License plate number          |
|                                      |   | 2  | Vehicle type                  |
|                                      |   | 3  | Holder                        |
|                                      |   | 4  | Address                       |
|                                      |   | 5  | Brand model                   |
|                                      |   | 6  | Vehicle identification number |
|                                      |   | 7  | Engine number                 |
|                                      |   | 8  | Registration date             |
|                                      |   | 9  | Issue Date                    |
|                                      |   | 10 | Application                   |
| Military identification 1998 version | 7 | 0  | Reserve                       |
|                                      |   | 1  | Number                        |
|                                      |   | 2  | Name                          |
|                                      |   | 3  | Birthday                      |
|                                      |   | 4  | Gender                        |
|                                      |   | 5  | Birthplace                    |
|                                      |   | 6  | Nationality                   |
|                                      |   | 7  | Department                    |
|                                      |   | 8  | Job                           |

|   |   |    |  |
|---|---|----|--|
|   |   | 9  | Title                                      |
|   |   | 10 | Licence-issuing authority                  |
|   |   | 11 | Issue Date                                 |
|   |   | 12 | Valid for                                  |
| Soldier identification 1998 version   | 8 | 0  | Reserve                                    |
|   |   | 1  | Name                                       |
|   |   | 2  | Gender                                     |
|   |   | 3  | Nationality                                |
|   |   | 4  | Birthplace                                 |
|   |   | 5  | Recruitment date                           |
|   |   | 6  | Age  |
|   |   | 7  | Department                                 |
|   |   | 8  | Number                                     |
|   |   | 9  | Licence-issuing authority                  |
|   |   | 10 | Issue Date                                 |
| Exit-Entry Permit for Travelling to and from Hong Kong and Macao (EEP) 2005 version | 9 | 0  | "W"Type mark, show up in the MRZ, type "W" |
|   |   | 1  | Identification number<br>MRZ (MRZ output)  |
|   |   | 2  | Chinese Name                               |
|   |   | 3  | English Name                               |
|   |   | 4  | Gender                                     |
|   |   | 5  | Birthday                                   |
|   |   | 6  | Expiry Date                                |
|   |   | 7  | Issuing country code                       |
|   |   | 8  | English surname                            |
|   |   | 9  | English first name                         |

|   |    |    |  |
|---|----|----|--|
|   |    | 10 | MRZ1   |
|   |    | 11 | MRZ2   |
|   |    | 12 | Holder nationality code                        |
|   |    | 13 | Identification number<br>(Direct recognition)  |
|   |    | 14 | Birthplace                                     |
|   |    | 15 | Issuing place                                  |
|   |    | 16 | Issuing date                                   |
| Travel passes for Taiwan residents<br>to enter or leave the mainland 1992<br>version-photo page | 10 | 0  | Document type, show up<br>in the MRZ, type "T" |
|   |    | 1  | Identification number<br>MRZ (MRZ output)      |
|   |    | 2  | Chinese Name                                   |
|   |    | 3  | English Name                                   |
|   |    | 4  | Gender   |
|   |    | 5  | Birthday                                       |
|   |    | 6  | Expiry Date                                    |
|   |    | 7  | Issuing country code                           |
|   |    | 8  | English surname                                |
|   |    | 9  | English first name                             |
|   |    | 10 | MRZ1   |
|   |    | 11 | MRZ2   |
|   |    | 12 | Holder nationality code                        |
|   |    | 13 | The document number<br>from VIZ                |
|   |    | 14 | ID number                                      |
|   |    | 15 | Date of Issue                                  |
|   |    | 16 | Issue times(MRZ)                               |
|   |    | 17 | Address  |



|  |    |    |   |
|--|----|----|---|
|  |    | 18 | Occupation/title                                |
|  |    | 19 | Issue times(VIZ)                                |
|  |    | 20 | The code of place of issue                      |
| Mainland residents travel to and from Taiwan 1992 version-photo page | 11 | 0  | Type mark, show up in the MRZ, type "T"         |
|  |    | 1  | Identification number MRZ (MRZ output)          |
|  |    | 2  | Chinese Name                                    |
|  |    | 3  | English Name                                    |
|  |    | 4  | Gender  |
|  |    | 5  | Birthday  |
|  |    | 6  | Expiry date                                     |
|  |    | 7  | Issuing country code                            |
|  |    | 8  | English surname                                 |
|  |    | 9  | English first name                              |
|  |    | 10 | MRZ1  |
|  |    | 11 | MRZ2  |
|  |    | 12 | Holder nationality code                         |
|  |    | 13 | Document number                                 |
|  |    | 14 | Identification number                           |
|  |    | 15 | Issuing date                                    |
|  |    | 16 | Issuing frequency                               |
|  |    | 17 | Address   |
|  |    | 18 | Job   |
| Visa   | 12 | 0  | Visa type, the type show up in the MRZ          |
|  |    | 1  | Machine readable zone output number(MRZ output) |

|          |    |    |   |
|----------|----|----|---|
|          |    | 2  | Domestic name                                   |
|          |    | 3  | English name                                    |
|          |    | 4  | Gender  |
|          |    | 5  | Birthday  |
|          |    | 6  | Expiry date                                     |
|          |    | 7  | Issuing country code                            |
|          |    | 8  | English surname                                 |
|          |    | 9  | English first name                              |
|          |    | 10 | MRZ1  |
|          |    | 11 | MRZ2  |
|          |    | 12 | Holder nationality code                         |
|          |    | 13 | Document number                                 |
|          |    | 14 | Passport number/Pass number(direct recognition) |
|          |    | 15 | Issuing place                                   |
|          |    | 16 | Issuing date                                    |
|          |    | 17 | Note  |
|          |    | 18 | Travel time                                     |
|          |    | 19 | Residence purpose                               |
|          |    | 20 | Visit date                                      |
|          |    | 21 | Departure date                                  |
|          |    | 22 | Stay day  |
|          |    | 23 | Visa type                                       |
| Passport | 13 | 0  | Passport type (the type show up in the MRZ)     |
|          |    | 1  | Passport number MRZ (MRZ output)                |
|          |    | 2  | Domestic name (Page                             |

|    |  |
|----|--|
|    | recognition)                                 |
| 3  | English name                                 |
| 4  | Gender                                       |
| 5  | Birthday                                     |
| 6  | Expiry date                                  |
| 7  | Issuing country code                         |
| 8  | English surname                              |
| 9  | English first name                           |
| 10 | MRZ1   |
| 11 | MRZ2   |
| 12 | Holder nationality code                      |
| 13 | passport number (direct identification)      |
| 14 | birth place(Chinese passport only)           |
| 15 | Issue place(Chinese passport only)           |
| 16 | Issue date(Chinese passport only)            |
| 17 | RFID MRZ                                     |
| 18 | OCR MRZ                                      |
| 19 | Birth place pinyin(Chinese passport only)    |
| 20 | Issue place pinyin(Chinese passport only)    |
| 21 | ID number (Taiwan and Korean passports only) |
| 22 | National name pinyin OCR                     |

|   |      |   |                                 |
|---|------|---|---------------------------------|
|   |      | 23  | Gender OCR                      |
|   |      | 24  | Licensee Nationality code OCR   |
|   |      | 25  | ID card number OCR              |
|   |      | 26  | Birth date OCR                  |
|   |      | 27  | Valid until OCR                 |
|   |      | 28  | Issuing authority OCR           |
|   |      | 29  | Domestic surname                |
|   |      | 30  | Domestic first name             |
|   | Note | Passport number is recommended to obtain from index 1, which is passport number MRZ(MRZ export) |                                 |
| Travel permit for residents of Hong Kong and Macao to mainland – photo page | 14   | 0   | Reserve                         |
|   |      | 1   | ID number                       |
|   |      | 2   | Chinese name                    |
|   |      | 3   | English name                    |
|   |      | 4   | Gender                          |
|   |      | 5   | Birth date                      |
|   |      | 6   | This certificate is valid until |
|   |      | 7   | English surname                 |
|   |      | 8   | English firstname               |
|   |      | 9   | Hong kong and Macau ID number   |
|   |      | 10  | Issue date                      |
|   |      | 11  | Validity period                 |
|   |      | 12  | Issue authority                 |
|   |      | 13  | Renewal number                  |
|   |      | 14  | Other name                      |

|   |    |    |   |
|---|----|----|---|
| Travel permit for residents of Hong Kong and Macao to mainland – MRZ page | 15 | 0  | document type, the type that appear in machine readable code is C |
|   |    | 1  | ID number   |
|   |    | 2  | Chinese name  |
|   |    | 3  | English name  |
|   |    | 4  | Gender  |
|   |    | 5  | Birth date  |
|   |    | 6  | Valid until   |
|   |    | 7  | English surname   |
|   |    | 8  | English first name  |
|   |    | 9  | MRZ1  |
|   |    | 10 | MRZ2  |
|   |    | 11 | MRZ3  |
|   |    | 12 | Issue country code  |
|   |    | 13 | ID card number  |
|   |    | 14 | Renewals Times  |
| Resident population registration cards                                    | 16 | 0  | Reserve   |
|   |    | 1  | Name  |
|   |    | 2  | Gender  |
|   |    | 3  | Nationality   |
|   |    | 4  | Birth Date  |
|   |    | 5  | ID card   |
| Seafarer certificate 2009 edition-photo page                              | 17 | 0  | certificate type  |
|   |    | 1  | Passport number from MRZ  |
|   |    | 2  | Country name  |
|   |    | 3  | English Name  |
|   |    | 4  | Gender  |

|  |    |    |                                    |
|--|----|----|------------------------------------|
|  |    | 5  | Birth date                         |
|  |    | 6  | Valid until                        |
|  |    | 7  | Issue country code                 |
|  |    | 8  | English surname                    |
|  |    | 9  | English first name                 |
|  |    | 10 | MRZ1                               |
|  |    | 11 | MRZ2                               |
|  |    | 12 | Certificat holder nationality code |
|  |    | 13 | Passport number                    |
|  |    | 14 | Birth place                        |
|  |    | 15 | Issue Authority                    |
|  |    | 16 | Issue date                         |
| Military officer license 1998 edition – photo page       | 18 | 0  | Reserve                            |
|  |    | 1  | Number                             |
|  |    | 2  | Issue Authority                    |
|  |    | 3  | Issue Date                         |
|  |    | 4  | Valid Until                        |
| Military officer license 1998 edition – information page | 19 | 0  | Reserve                            |
|  |    | 1  | Name                               |
|  |    | 2  | Birth Date                         |
|  |    | 3  | Gender                             |
|  |    | 4  | Birth Place                        |
|  |    | 5  | Nationality                        |
|  |    | 6  | Department                         |
|  |    | 7  | Duty                               |
|  |    | 8  | Title                              |
| Police officer card 2006 edition-photo                   | 20 | 0  | Reserve                            |

|  |    |    |                        |
|--|----|----|------------------------|
| page   |    | 1  | Name                   |
|  |    | 2  | Public Security Bureau |
|  |    | 3  | Police Officer Number  |
| Police officer card 2006<br>edition-information page               | 21 | 0  | Reserve                |
|  |    | 1  | Name                   |
|  |    | 2  | Gender                 |
|  |    | 3  | Blood Group            |
|  |    | 4  | Birth Date             |
|  |    | 5  | Duty                   |
|  |    | 6  | Title                  |
|  |    | 7  | Valid until            |
| Exit-Entry Permit for travelling to and<br>from Hongkong and Macau | 22 | 0  | Reserve                |
|  |    | 1  | Certificate number     |
|  |    | 2  | Chinese Name           |
|  |    | 3  | English Name           |
|  |    | 4  | Birth Date             |
|  |    | 5  | Gender                 |
|  |    | 6  | Valid until            |
|  |    | 7  | Issue Date             |
|  |    | 8  | MRZ1                   |
|  |    | 9  | MRZ2                   |
|  |    | 10 | MRZ3                   |
|  |    | 11 | Issue Date             |
|  |    | 12 | Valid until            |
| Border area entry and exit pass 2014<br>edition-photo page         | 23 | 0  | Reserve                |
|  |    | 1  | Country Name           |
|  |    | 2  | English Name           |

|  |    |    |                         |
|--|----|----|-------------------------|
|  |    | 3  | Gender                  |
|  |    | 4  | Birth Date              |
|  |    | 5  | ID number               |
|  |    | 6  | Career                  |
|  |    | 7  | Issue Date              |
|  |    | 8  | Valid until             |
|  |    | 9  | Address                 |
|  |    | 10 | MRZ1                    |
|  |    | 11 | MRZ2                    |
|  |    | 12 | certificate Type        |
|  |    | 13 | MRZ Issue country coder |
|  |    | 14 | MRZ English Name        |
|  |    | 15 | MRZ Certificate Number  |
|  |    | 16 | MRZ Nationality Code    |
|  |    | 17 | MRZ Birth Date          |
|  |    | 18 | MRZ Gender              |
|  |    | 19 | MRZ validity until      |
| Chinese People's Liberation Army<br>vehicle driver license | 24 | 0  | Reserve                 |
|  |    | 1  | Name                    |
|  |    | 2  | Gender                  |
|  |    | 3  | Certificate Number      |
|  |    | 4  | Blood Type              |
|  |    | 5  | Birth Date              |
|  |    | 6  | Department              |
|  |    | 7  | Driving permit model    |
|  |    | 8  | Initial Issue Date      |
|  |    | 9  | Issue Date              |
|  |    | 10 | Valid until             |



|   |    |    |                      |
|---|----|----|----------------------|
| Mainland travel permit for Taiwan residents 2015 edition-photo page | 25 | 0  | Reserve              |
|   |    | 1  | Chinese Name         |
|   |    | 2  | English Name         |
|   |    | 3  | Birth Date           |
|   |    | 4  | Gender               |
|   |    | 5  | Valid until          |
|   |    | 6  | Issue Place          |
|   |    | 7  | Certificate Number   |
|   |    | 8  | Issue Times          |
|   |    | 9  | Issue Authority      |
| Mainland travel permit for Taiwan residents 2015 edition-MRZ page   | 26 | 0  | Certificate Type     |
|   |    | 1  | Certificate Number   |
|   |    | 2  | Chinese Name         |
|   |    | 3  | English Name         |
|   |    | 4  | Gender               |
|   |    | 5  | Birth Date           |
|   |    | 6  | Valid until          |
|   |    | 7  | English Surname      |
|   |    | 8  | English First Name   |
|   |    | 9  | MRZ1                 |
|   |    | 10 | MRZ2                 |
|   |    | 11 | MRZ3                 |
|   |    | 12 | ID Number            |
|   |    | 13 | Renewals Times       |
| Chinese People's Liberation Army driving license 2012 edition       | 27 | 0  | Reserve              |
|   |    | 1  | Organizaiton         |
|   |    | 2  | License Plate Number |
|   |    | 3  | Brand Model          |

|  |    |    |                                     |
|--|----|----|-------------------------------------|
|  |    | 4  | Vehicle Color                       |
|  |    | 5  | Engine Model                        |
|  |    | 6  | Frame Model                         |
|  |    | 7  | Manufacture Date                    |
| Travel Permit for Mainlanders to Enter and Exit Taiwan     | 29 | 0  | Reserve                             |
|  |    | 1  | Certificate Number                  |
|  |    | 2  | Chinese Name                        |
|  |    | 3  | English Name                        |
|  |    | 4  | Birth DNate                         |
|  |    | 5  | Gender                              |
|  |    | 6  | Valid until                         |
|  |    | 7  | Issue Place                         |
|  |    | 8  | MRZ1                                |
|  |    | 9  | MRZ2                                |
|  |    | 10 | MRZ3                                |
|  |    | 11 | Issue Authority                     |
| Motor vehicle driving license secondary page               | 30 | 0  | Reserve                             |
|  |    | 1  | Plate Number                        |
|  |    | 2  | File Number                         |
|  |    | 3  | Driving license identification code |
| Hongkong,Macao and Taiwan Residence Permit-photo page      | 31 | 0  | Reserve                             |
|  |    | 1  | Name                                |
|  |    | 2  | Gender                              |
|  |    | 3  | Birth                               |
|  |    | 4  | Address                             |
|  |    | 5  | ID unumber                          |
| Hongkong,Macao and Taiwan Residence Permit-Issue authority | 32 | 0  | Reserve                             |
|  |    | 1  | Issue Authority                     |

|   |      |    |                         |
|---|------|----|-------------------------|
| page  |      | 2  | Validity Period         |
|   |      | 3  | Issue Date              |
|   |      | 4  | Valid until             |
|   |      | 5  | Pass Number             |
| Foreigner Permanent Resident Identity card 2017 edition-photo page      | 33   | 0  | Reserve                 |
|   |      | 1  | English Name            |
|   |      | 2  | Chinese Name            |
|   |      | 3  | Gender                  |
|   |      | 4  | Birth                   |
|   |      | 5  | Nationality             |
|   |      | 6  | Issue Authority         |
|   |      | 7  | English Issue authority |
|   |      | 8  | Citizen ID number       |
|   |      | 9  | Valid until             |
|   |      | 10 | English Surname         |
|   |      | 11 | English First Name      |
| Taiwan Area (Jin mapeng) Entry and Exit License 2015 edition-photo page | 34   | 0  | Reserve                 |
|   |      | 1  | ID Number               |
|   |      | 2  | Name                    |
|   |      | 3  | Birth                   |
|   |      | 4  | Validity Date           |
|   |      | 5  | Taiwan Address          |
|   |      | 6  | Permit Number           |
|   |      | 7  | Issue Date              |
|   |      | 8  | Gender                  |
|   |      | 9  | Birth Date              |
| Resident Permit(Guangdong, Guangxi and Dongguan)-photo                  | 1000 | 0  | Reserve                 |
|   |      | 1  | Name                    |

|   |      |    |                      |
|---|------|----|----------------------|
| page  |      | 2  | Gendr                |
|   |      | 3  | Nationality          |
|   |      | 4  | Birth                |
|   |      | 5  | Address              |
|   |      | 6  | Citizen ID number    |
|   |      | 7  | Issue Date           |
|   |      | 8  | Validity Period      |
|   |      | 9  | certificate Number   |
|   |      | 10 | Serve Place          |
|   |      | 11 | Country or place     |
|   |      | 12 | Birth Place          |
| Hong Kong citizen identity card –<br>photo page                                     | 1001 | 0  | Reserve              |
|   |      | 1  | Chinese Name         |
|   |      | 2  | Pinyin Name          |
|   |      | 3  | Gender               |
|   |      | 4  | Birth Date           |
|   |      | 5  | Issue Date           |
|   |      | 6  | ID Number            |
|   |      | 7  | Symbol Mark          |
|   |      | 8  | Chinese Code         |
|   |      | 9  | Code Translation     |
|   |      | 10 | Code correction name |
| Boarding Pass(photograph<br>equipment not support boarding pass<br>certificate now) | 1002 | 0  | Reserve              |
|   |      | 1  | Name                 |
|   |      | 2  | Flight               |
|   |      | 3  | Arrival station      |
|   |      | 4  | Date                 |
|   |      | 5  | Seat Number          |

|   |      |    |                    |
|---|------|----|--------------------|
| Border area entry and exit pass 2015 edition-photo page       | 1003 | 0  | Reserve            |
|   |      | 1  | Certificate Number |
|   |      | 2  | Name               |
|   |      | 3  | Gender             |
|   |      | 4  | Birth Date         |
|   |      | 5  | ID Number          |
|   |      | 6  | MRZ1               |
|   |      | 7  | MRZ2               |
| Border area entry and exit pass 2015 edition-information page | 1004 | 0  | Reserve            |
|   |      | 1  | Name               |
|   |      | 2  | Gender             |
|   |      | 3  | Birth date         |
|   |      | 4  | ID Number          |
|   |      | 5  | Address            |
| Macao Resident Identify Card-photo page                       | 1005 | 0  | Reserve            |
|   |      | 1  | Chinese Name       |
|   |      | 2  | Pinyin Name        |
|   |      | 3  | Gender             |
|   |      | 4  | Birth Date         |
|   |      | 5  | Issue Date         |
|   |      | 6  | Valid until        |
|   |      | 7  | ID Number          |
|   |      | 8  | First Issue        |
|   |      | 9  | Chinese Code       |
|   |      | 10 | Code Translation   |
| Receiving certificate   | 1006 | 0  | Reserve            |
|   |      | 1  | Acceptance Number  |
|   |      | 2  | Name               |

|   |      |   |                                   |
|---|------|---|-----------------------------------|
|   |      | 3 | Citizen ID Number                 |
| Lawyer License-Issue authority page               | 1007 | 0 | Reserve                           |
|   |      | 1 | Practice Institution              |
|   |      | 2 | Practice Certificate Type         |
|   |      | 3 | Practice Certificate Number       |
| Lawyer License-photo page                         | 1008 | 0 | Reserve                           |
|   |      | 1 | Licensee                          |
|   |      | 2 | Gender                            |
|   |      | 3 | ID Number                         |
| People's Republic of China Road Transport IC card | 1009 | 0 | Reserve                           |
|   |      | 1 | User Name                         |
|   |      | 2 | Vehicle Number Plate              |
|   |      | 3 | Vehicle Type                      |
|   |      | 4 | Brand Type                        |
|   |      | 5 | Issue Authority                   |
|   |      | 6 | Road Transport Certificate Number |
|   |      | 7 | Issue Date                        |
| Business card                                     | 1010 | 0 | Name                              |
|   |      | 1 | Title                             |
|   |      | 2 | Mobile                            |
|   |      | 3 | Company                           |
|   |      | 4 | Address                           |
|   |      | 5 | Phone                             |
|   |      | 6 | Fax                               |
|   |      | 7 | Phone                             |
|   |      | 8 | Website                           |
|   |      | 9 | E-mail                            |

|   |      |   |                     |
|---|------|---|---------------------|
| Organization code certificate                                     | 1011 | 0 | Reserve             |
|   |      | 1 | Code                |
|   |      | 2 | Organization name   |
|   |      | 3 | Organization type   |
|   |      | 4 | Address             |
|   |      | 5 | Validity Period     |
|   |      | 6 | Issue Authority     |
|   |      | 7 | Registration Number |
| Shenzhen Special Economic Zone Resident Permit                    | 1013 | 0 | Reserve             |
|   |      | 1 | Name                |
|   |      | 2 | Gender              |
|   |      | 3 | Nationality         |
|   |      | 4 | Issue Date          |
|   |      | 5 | Address             |
|   |      | 6 | Citizen ID number   |
| Inner Mongolia Autonomous Region People's Court Work Permit       | 1018 | 0 | Reserve             |
|   |      | 1 | Name                |
|   |      | 2 | Title               |
|   |      | 3 | Number              |
|   |      | 4 | Issue Date          |
|   |      | 5 | Validity Period     |
| Inner Mongolia Autonomous Region Procuratorial Office Work Permit | 1019 | 0 | Reserve             |
|   |      | 1 | Name                |
|   |      | 2 | Nationality         |
|   |      | 3 | Birth date          |
|   |      | 4 | Duty                |
|   |      | 5 | Department          |
|   |      | 6 | Title               |

|  |      |    |                          |
|--|------|----|--------------------------|
|  |      | 7  | Valid until              |
| Social Security Card                                     | 1021 | 0  | Reserve                  |
|  |      | 1  | Name                     |
|  |      | 2  | Gender                   |
|  |      | 3  | Nationality              |
|  |      | 4  | Birth date               |
|  |      | 5  | Social Security Number   |
|  |      | 6  | Card Number              |
|  |      | 7  | Issue Date               |
|  |      | 8  | Valid until              |
|  |      | 9  | Bank Card Number         |
| Sea boat crew health<br>certificate-photo page           | 1022 | 0  | Reserve                  |
|  |      | 1  | Holder Name              |
|  |      | 2  | Holder Pinyin Name       |
|  |      | 3  | Nationality              |
|  |      | 4  | Birth Date               |
|  |      | 5  | Gender                   |
|  |      | 6  | Department               |
|  |      | 7  | Certificate Number       |
|  |      | 8  | Valid until              |
|  |      | 9  | Issue Date               |
|  |      | 10 | Print Number             |
| Sea boat crew health<br>certificate-Issue authority page | 1023 | 0  | Reserve                  |
|  |      | 1  | Issue Authority          |
|  |      | 2  | Chief Examiner Signature |
|  |      | 3  | Issue Authority          |
| Sea boat crew training<br>certificate-photo page         | 1024 | 0  | Reserve                  |
|  |      | 1  | Holder Name              |



|  |      |    |   |
|--|------|----|---|
|  |      | 2  | Holder Pinyin Name                        |
|  |      | 3  | Nationality                               |
|  |      | 4  | Birth Date                                |
|  |      | 5  | Gender                                    |
|  |      | 6  | Certificate Number                        |
|  |      | 7  | Issue Date                                |
|  |      | 8  | Certificate Name Column                   |
|  |      | 9  | Issue Date                                |
|  |      | 10 | Valid until                               |
|  |      | 11 | Print Number                              |
| Sea boat crew training<br>certificate-Issue authority page | 1025 | 0  | Reserve                                   |
|  |      | 1  | Name of officially<br>authorized official |
|  |      | 2  | Authorized organ                          |
|  |      | 3  | Certificate name                          |
|  |      | 4  | Issue date                                |
|  |      | 5  | Valid until                               |
| Sea boat crew training<br>certificate-photo page           | 1026 | 0  | Reserve                                   |
|  |      | 1  | Holder's Name                             |
|  |      | 2  | Holder's pinyin Name                      |
|  |      | 3  | Nationality                               |
|  |      | 4  | Birth Date                                |
|  |      | 5  | Gender                                    |
|  |      | 6  | Certificate Number                        |
|  |      | 7  | Valid until                               |
|  |      | 8  | Issue Date                                |
|  |      | 9  | Duty                                      |
|  |      | 10 | Level                                     |

|  |      |    |   |
|--|------|----|---|
|  |      | 11 | Trial Limit                               |
|  |      | 12 | Printing Number                           |
| Sea boat crew training<br>certificate-Issue authority page | 1027 | 0  | Reserve                                   |
|  |      | 1  | Name of officially<br>authorized official |
|  |      | 2  | Authorized organ                          |
|  |      | 3  | Title                                     |
|  |      | 4  | Trial limit                               |
| Zhejiang Temporary Residence<br>Permit-photo page          | 1029 | 0  | Reserve                                   |
|  |      | 1  | Name                                      |
|  |      | 2  | Gender                                    |
|  |      | 3  | Nationality                               |
|  |      | 4  | Citizen ID card                           |
|  |      | 5  | Current Living Address                    |
| Taiwan National Health Insurance<br>card                   | 1030 | 0  | Reserve                                   |
|  |      | 1  | Name                                      |
|  |      | 2  | ID Card Number                            |
|  |      | 3  | Birth Date                                |
|  |      | 4  | Card Number                               |
| Taiwan ID card-photo page                                  | 1031 | 0  | Reserve                                   |
|  |      | 1  | Name                                      |
|  |      | 2  | Gender                                    |
|  |      | 3  | Birth Date                                |
|  |      | 4  | Issue Date                                |
|  |      | 5  | Unified Numbers                           |
| Taiwan ID card-barcode page                                | 1032 | 0  | Reserve                                   |
|  |      | 1  | Father                                    |
|  |      | 2  | Mother                                    |

|   |      |   |                       |
|---|------|---|-----------------------|
|   |      | 3 | Spouse                |
|   |      | 4 | Servicing             |
|   |      | 5 | Birth place           |
|   |      | 6 | Address               |
|   |      | 7 | Number                |
| English Name (Import Identification only) | 1035 | 0 | Reserve               |
|   |      | 1 | English Name          |
| Shenmei Group Work Permit                 | 1037 | 0 | Reserve               |
|   |      | 1 | Name                  |
|   |      | 2 | Department            |
|   |      | 3 | Number                |
| Xiamen Social Security Card-photo page    | 1039 | 0 | Reserve               |
|   |      | 1 | Name                  |
|   |      | 2 | Gender                |
|   |      | 3 | Card number           |
|   |      | 4 | Insurance Number      |
|   |      | 5 | ID card               |
| Taiwan Area Driving License               | 1040 | 0 | Reserve               |
|   |      | 1 | Name                  |
|   |      | 2 | Gender                |
|   |      | 3 | Birth Date            |
|   |      | 4 | Issue Date            |
|   |      | 5 | Driver License Number |
|   |      | 6 | Address               |
|   |      | 7 | Validity Period       |
|   |      | 8 | Jurisdiction Number   |
|   |      | 9 | Driver liense Type    |

|                                       |      |   |                        |
|---------------------------------------|------|---|------------------------|
| Malaysian ID card-photo page          | 2001 | 0 | Reserve                |
|                                       |      | 1 | Citizen ID Card Number |
|                                       |      | 2 | Name                   |
|                                       |      | 3 | Gender                 |
|                                       |      | 4 | Birth Date             |
|                                       |      | 5 | Nationality            |
|                                       |      | 6 | Address                |
| American California Driver's License  | 2002 | 0 | Reserve                |
|                                       |      | 1 | Driver License Number  |
|                                       |      | 2 | Last Name              |
|                                       |      | 3 | First Name             |
|                                       |      | 4 | Gender                 |
| New Zealand driver's license          | 2003 | 0 | Reserve                |
|                                       |      | 1 | Last Name              |
|                                       |      | 2 | First Name             |
|                                       |      | 3 | Birth Date             |
|                                       |      | 4 | Issue Date             |
|                                       |      | 5 | ID Driver License ID   |
|                                       |      | 6 | Expiry Date            |
| Singapore ID card                     | 2004 | 0 | Reserve                |
|                                       |      | 1 | Name                   |
|                                       |      | 2 | Gender                 |
|                                       |      | 3 | Nationality            |
|                                       |      | 4 | Birth Date             |
|                                       |      | 5 | Birth Country          |
|                                       |      | 6 | ID Card Number         |
| TD-2 machine readable travel document | 2006 | 0 | Reserve                |
|                                       |      | 1 | MRZ1                   |

|                                       |      |    |                           |
|---------------------------------------|------|----|---------------------------|
|                                       |      | 2  | MRZ2                      |
| TD-1 Machine Readable Travel Document | 2009 | 0  | Certificate Type          |
|                                       |      | 1  | ID card Number            |
|                                       |      | 2  | Issue Country Code        |
|                                       |      | 3  | English Name              |
|                                       |      | 4  | Gender                    |
|                                       |      | 5  | Birth Date                |
|                                       |      | 6  | Valid until               |
|                                       |      | 7  | English Surname           |
|                                       |      | 8  | English First Name        |
|                                       |      | 9  | MRZ1                      |
|                                       |      | 10 | MRZ2                      |
|                                       |      | 11 | MRZ3                      |
|                                       |      | 12 | Counrty Code(Native)      |
|                                       |      | 13 | ID card Number(Extension) |
| Indonesian ID card                    | 2010 | 0  | Reserve                   |
|                                       |      | 1  | ID card Number            |
|                                       |      | 2  | Name                      |
|                                       |      | 3  | Birth Date                |
|                                       |      | 4  | Birth Place               |
|                                       |      | 5  | Gender                    |
|                                       |      | 6  | Area                      |
|                                       |      | 7  | country of citizenship    |
|                                       |      | 8  | Nationality               |
|                                       |      | 9  | Blood Type                |
|                                       |      | 10 | Address                   |
| Thailand National ID Card             | 2011 | 0  | Reserve                   |

|                               |      |    |                            |
|-------------------------------|------|----|----------------------------|
|                               |      | 1  | First Name                 |
|                               |      | 2  | Last Name                  |
|                               |      | 3  | Birth date                 |
|                               |      | 4  | Issue Date                 |
|                               |      | 5  | Valid until                |
|                               |      | 6  | ID card Number             |
| Thailand driver's license     | 2012 | 0  | Reserve                    |
|                               |      | 1  | Name                       |
|                               |      | 2  | Driver's License Number    |
|                               |      | 3  | Date of Birth              |
|                               |      | 4  | Issue Date                 |
|                               |      | 5  | Valid until                |
| Mexican Voter Card-photo page | 2013 | 6  | ID card Number             |
|                               |      | 0  | Reserve                    |
|                               |      | 1  | Father's Surmane           |
|                               |      | 2  | Mother's Surname           |
|                               |      | 3  | Name                       |
|                               |      | 4  | Street and Number          |
|                               |      | 5  | Colony and Zip Code        |
|                               |      | 6  | City and State             |
|                               |      | 7  | Voter Code                 |
|                               |      | 8  | Identity Unique Identifier |
|                               |      | 9  | Gender                     |
|                               |      | 10 | Age                        |
| Mexican Voter card back ABC   | 2014 | 11 | Birth Date                 |
|                               |      | 0  | Reserve                    |
|                               |      | 1  | Identity Unique Identifier |
|                               |      | 0  | Reserve                    |
| Swedish driver's license      | 2020 | 0  | Reserve                    |

|                             |      |   |                             |
|-----------------------------|------|---|-----------------------------|
|                             |      | 1 | First Name                  |
|                             |      | 2 | Last Name                   |
|                             |      | 3 | Birth Date                  |
|                             |      | 4 | Issue Date                  |
|                             |      | 5 | Valid until                 |
|                             |      | 6 | Certificate Number          |
|                             |      | 7 | Social Security Card Number |
| Malaysia driver's license   | 2021 | 0 | Reserve                     |
|                             |      | 1 | Name                        |
|                             |      | 2 | Nationality                 |
|                             |      | 3 | Citizen ID Card Number      |
|                             |      | 4 | Certificate Type            |
|                             |      | 5 | Valid until                 |
|                             |      | 6 | Address                     |
| Singapore driver's license  | 2031 | 0 | Reserve                     |
|                             |      | 1 | Driver's License Number     |
|                             |      | 2 | Name                        |
|                             |      | 3 | Birth Date                  |
|                             |      | 4 | Issue Date                  |
|                             |      | 5 | Valid until                 |
| Indonesian driver's license | 2041 | 0 | Reserve                     |
|                             |      | 1 | Name                        |
|                             |      | 2 | Gender                      |
|                             |      | 3 | Address                     |
|                             |      | 4 | City                        |
|                             |      | 5 | Birth Date                  |
|                             |      | 6 | Height                      |
|                             |      | 7 | Job                         |

|                           |      |   |                          |
|---------------------------|------|---|--------------------------|
|                           |      | 8 | ID card Number           |
|                           |      | 9 | Valid until              |
| Japanese driver's license | 2051 | 0 | Reserve                  |
|                           |      | 1 | Name                     |
|                           |      | 2 | Birth Date               |
|                           |      | 3 | Residence                |
|                           |      | 4 | Delivery                 |
|                           |      | 5 | Valid until              |
|                           |      | 6 | Exemption conditons,etc. |