

**RFID READER**

# **Compact Flash Reader**

**SL801**

## **User Manual**

**Version 1.4**

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**StrongLink**

# CONTENS

<b>1. GENERAL INFORMATION</b> .....	<b>4</b>
<b>2. DEMO SOFTWARE</b> .....	<b>5</b>
<b>2.1 ONLINE</b> .....	<b>5</b>
<b>2.2 CARDS TESTING</b> .....	<b>6</b>
<b>2.3 ISO14443A (Mifare class)</b> .....	<b>6</b>
2.3.1 Mifare_Ultralight.....	6
2.3.2 Mifare_Std.....	7
2.3.3 Mifare_ProX.....	9
<b>2.4 ISO14443B</b> .....	<b>10</b>
2.4.1 ISO14443B.....	10
2.4.2 ISO14443B-4.....	11
<b>2.5 ISO15693</b> .....	<b>11</b>
<b>3. DLL INFORMATION</b> .....	<b>13</b>
<b>3.1 SYSTEM FUNCTION</b> .....	<b>13</b>
3.1.1 Get DLL Version.....	13
3.1.2 Connect.....	13
3.1.3 Disconnect.....	13
3.1.4 Get Device Type.....	13
3.1.5 Manage Protocol.....	13
3.1.6 Manage RF Transmittal.....	13
3.1.7 Manage LED.....	13
<b>3.2 DES FUNCTION</b> .....	<b>14</b>
3.2.1 DES_Encrypt.....	14
3.2.2 DES_Decrypt.....	14
<b>3.3 ISO14443A FUNCTION</b> .....	<b>15</b>
3.3.1 REQA.....	15
3.3.2 Select UltraLight.....	16
3.3.3 Mifare_Std Anticollision.....	16
3.3.4 Mifare_Std Selectting.....	16
3.3.5 Mifare_Std Authenticate.....	16
3.3.6 Mifare_Std (UltraLight) Read.....	16
3.3.7 Mifare_Std Write.....	17
3.3.8 UltraLight Write.....	17
3.3.9 Mifare_Std Initialize Value.....	17
3.3.10 Mifare_Std Read Value.....	17
3.3.11 Mifare_Std Increment.....	17
3.3.12 Mifare_Std Decrement.....	17

3.3.13	Mifare_Std Restore.....	17
3.3.14	Mifare_Std Transfer.....	18
3.3.15	Mifare_Std Halt.....	18
3.3.16	DESFire Reset.....	18
3.3.17	Mifare_ProX Reset.....	18
3.3.18	T=CL Protocol Transceive.....	19
3.3.19	T=CL Protocol Deselect.....	19
<b>3.4</b>	<b>ISO14443B FUNCTION.....</b>	<b>19</b>
3.4.1	ISO14443B Transceive.....	19
3.4.2	REQB.....	19
3.4.4	T=CL Protocol Deselect.....	20
3.4.5	AT88RF020 Authenticate.....	20
3.4.6	AT88RF020 Count.....	20
3.4.7	AT88RF020 Read.....	20
3.4.8	AT88RF020 Write.....	20
3.4.9	AT88RF020 Lock.....	21
3.4.10	AT88RF020 Deselect.....	21
3.4.11	ST Select.....	21
3.4.12	SR176 Read.....	21
3.4.13	SR176 Write.....	21
3.4.14	SR176 Lock.....	22
3.4.15	SR1X4K Get UID.....	22
3.4.16	SR1X4K Read.....	22
3.4.17	SR1X4K Write.....	22
3.4.18	SR1X4K Lock.....	22
3.4.19	ST Desactivated.....	23
3.4.20	THR1064 Read.....	23
3.4.21	THR1064 Write.....	23
3.4.22	THR1064 Authenticate.....	23
<b>3.5</b>	<b>ISO15693 FUNCTION.....</b>	<b>24</b>
3.5.1	ISO15693_Inventory.....	24
3.5.2	ISO15693_Inventorys.....	24
3.5.3	ISO15693_Get_System_Information.....	24
3.5.4	ISO15693_Select.....	24
3.5.5	ISO15693_Reset_To_Ready.....	25
3.5.6	ISO15693_Stay_Quiet.....	25
3.5.7	ISO15693_Get_Block_Security.....	25
3.5.8	ISO15693_Read.....	26
3.5.9	ISO15693_Write.....	26
3.5.10	ISO15693_Lock_Block.....	27
3.5.11	ISO15693_Write_AFI.....	27
3.5.12	ISO15693_Lock_AFI.....	27
3.5.13	ISO15693_Write_DSFID.....	28
3.5.14	ISO15693_Lock_DSFID.....	28

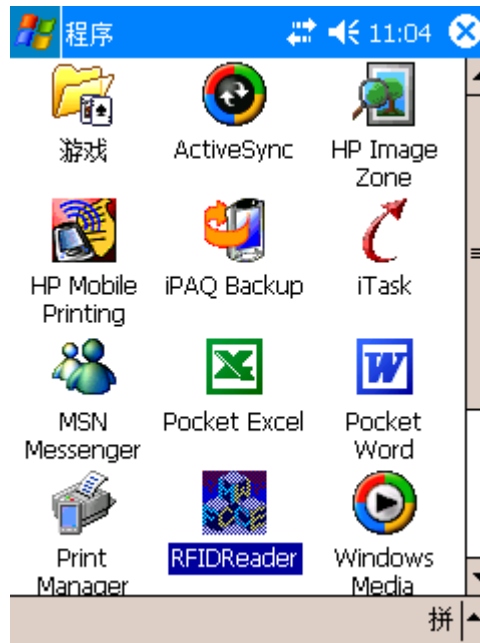
## 1. GENERAL INFORMATION



- Compact Flash Type II Interface
- DC3.0V - DC3.6V VDD Operating
- Pocket PC 2003/2005 Operating Systems Compatibility
- 13.56MHz RF Operating Frequency
- ISO14443A, ISO1443B & ISO15693 Protocols
- 120MA Working Current
- 5MA Idle Current
- Operating Temperature Range:  $-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$
- Storage Temperature Tange:  $-25^{\circ}\text{C} \sim +60^{\circ}\text{C}$
- Dimension:  $83 \times 44 \times 13 \text{ mm}$
- Weight: 20g

## 2. DEMO SOFTWARE

DEMO software is applicable for Pocket PC 2003/2005 operating system. SL801\_Setup.exe will install the DEMO software and DLL onto PDA, and then become a logo as follow



### 2.1 ONLINE

Click [Connect] button on the windows of “Device”, the software will search for the port and show corresponding module information after successful connecting.



## 2.2 CARDS TESTING

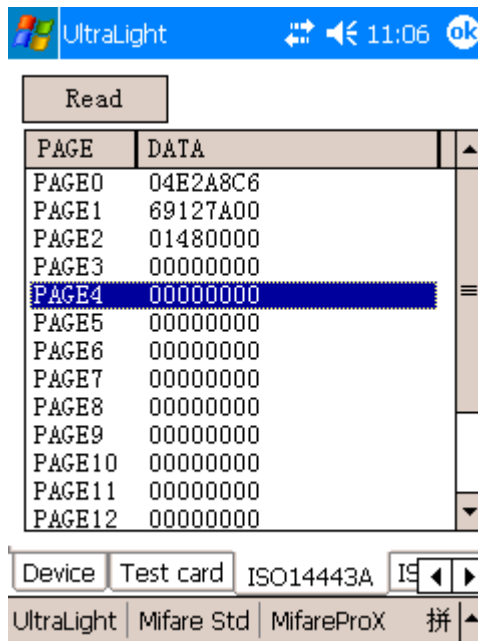
Click [Start] button on the windows of “Test Card”, you can test cards types. At this time, when all the standard card come to the antenna area, the indicator light on the SL801 will shine, and show corresponding types of the card.



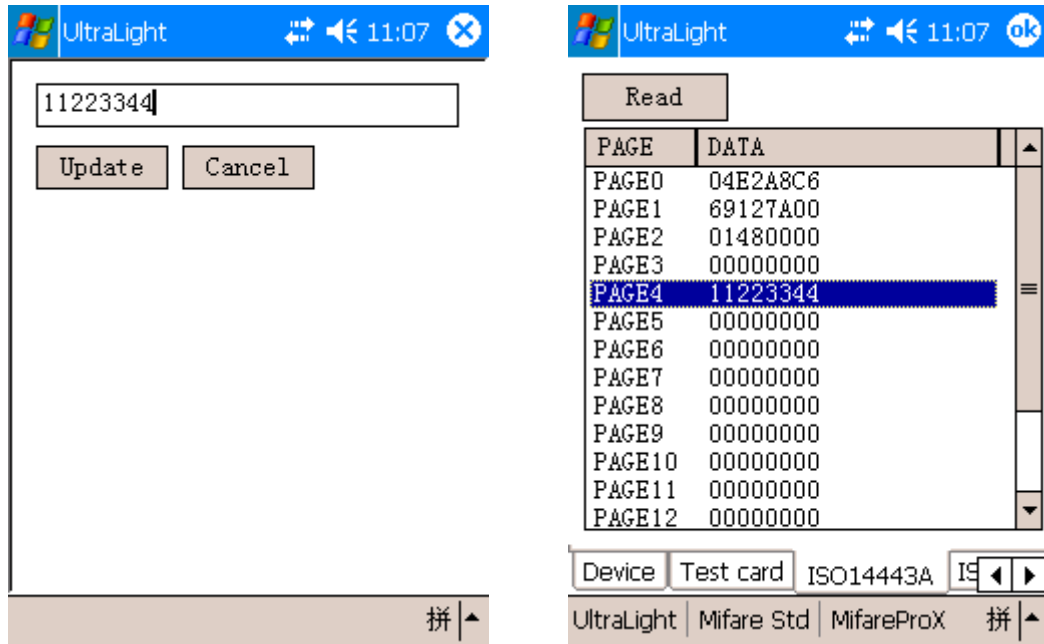
## 2.3 ISO14443A (Mifare class)

### 2.3.1 Mifare\_Ultralight

Click the [Read] button to read data from UltraLight and display.

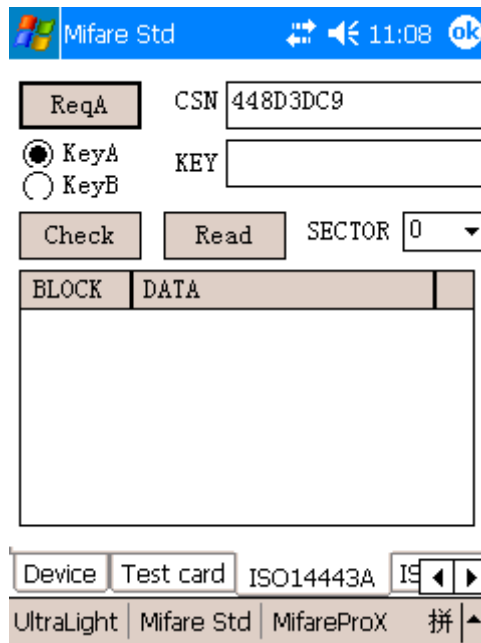


Double-clicking certain data module will pop-up a window. After input new data, click [Update] button to store the new data into corresponding address.

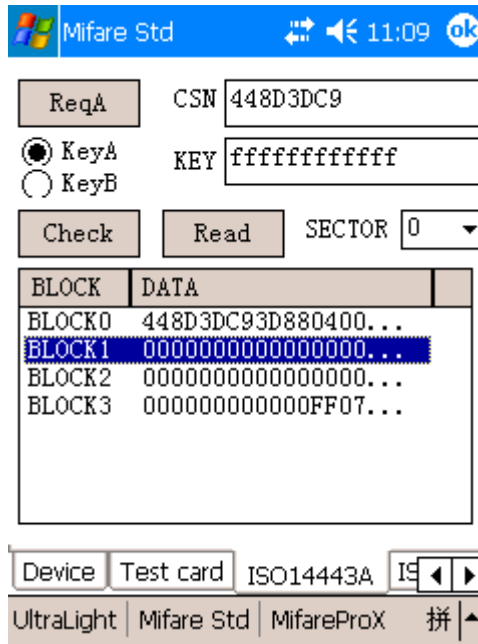


### 2.3.2 Mifare\_Std

Click [ReqA] button to obtain the Chip unique Serial Number.

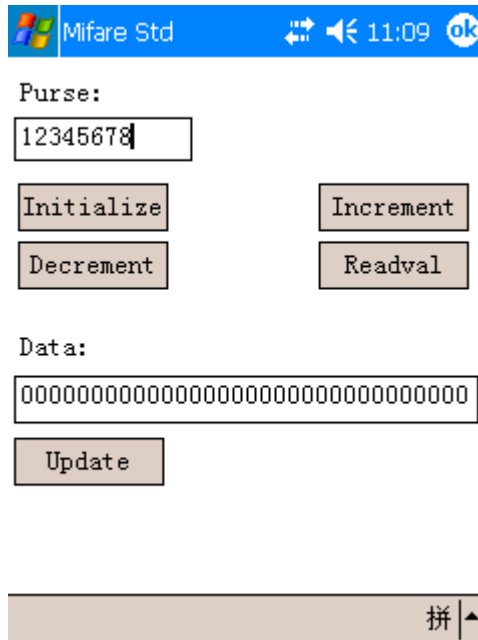


Input the correct 6 bytes password, click [Check] button to verify this password, then can read/write the tag.



Double-click certain data module will pop-up a window to rewrite data and operate the purse

Notice: purse show at BCD, other data shows at HEX

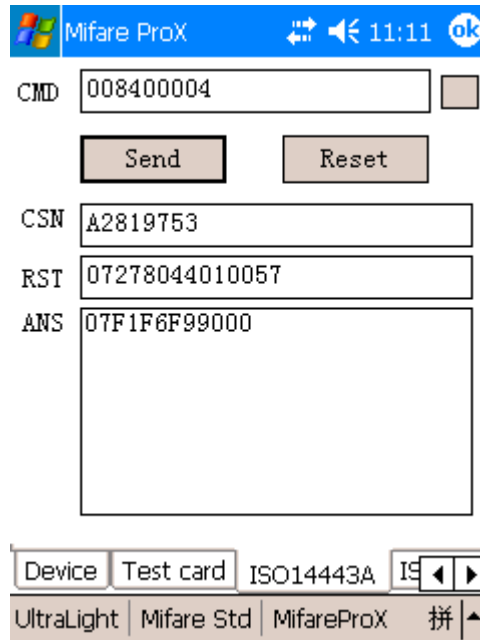




### 2.3.3 Mifare\_ProX

Click [Reset] button to obtain the serial number and the reposition information.

Input COS command to CMD, click [Send] button to obtain the response data from tag.

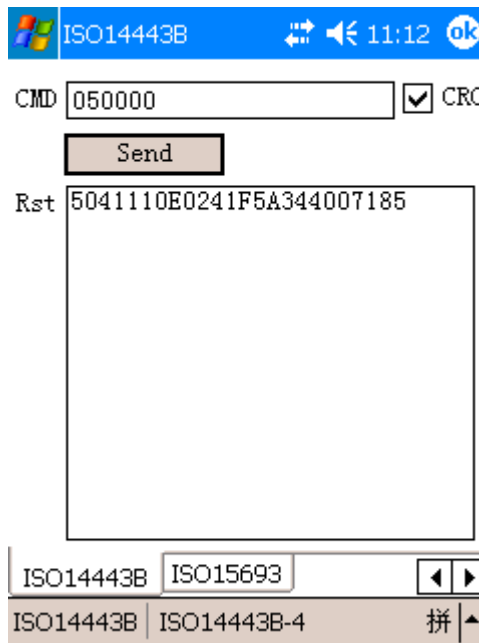


## 2.4 ISO14443B

There are two windows under the ISO14443B, which are ISO14443B and ISO14443B-4. The difference is on the window of ISO14443B, SL801 will transmit and receive all data, base function “int WINAPI rf\_transceive”, while on the window of ISO14443B-4, SL801 auto manage ISO14443-4 Protocol Control Byte, the transferring base function “int WINAPI rf\_cos\_command”.

### 2.4.1 ISO14443B

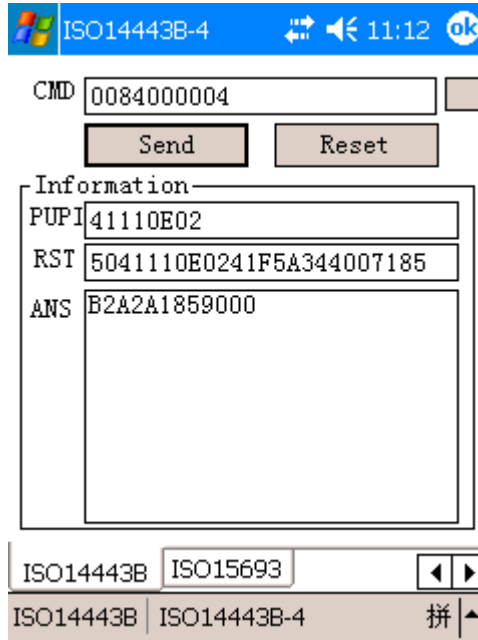
Example: Send REQB command to card on the window of the ISO14443B as follow



### 2.4.2 ISO14443B-4

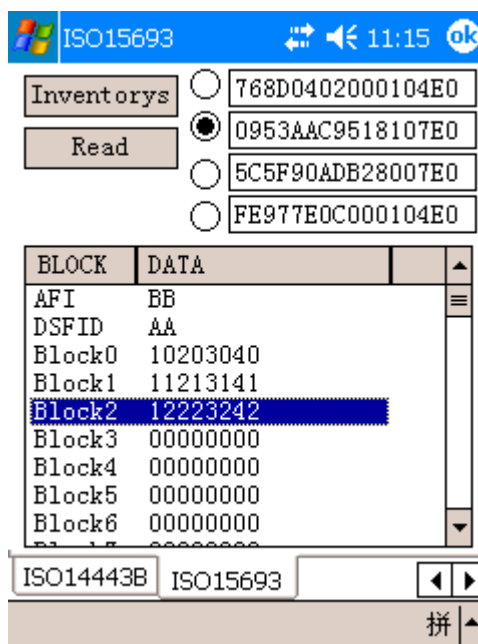
Click [Reset] button to obtain RATS information.

Input COS command to CMD, and click [Send] to obtain the response data from the card.

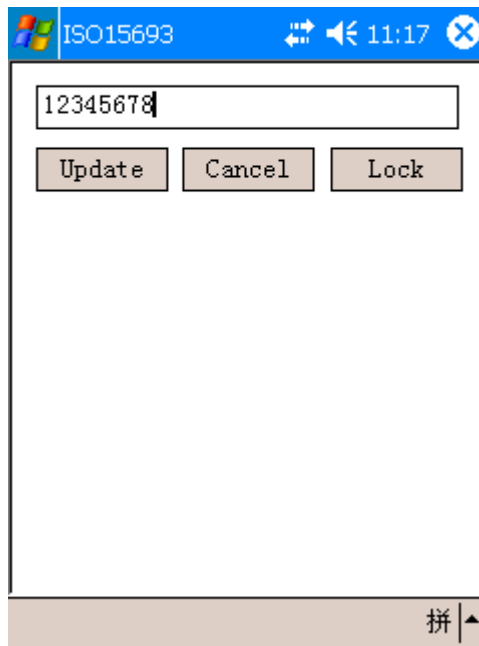


## 2.5 ISO15693

Click [Inventorys] button to obtain 4 sheets of UID of ISO15693 card at most, choose certain UID, click [Read] button can read the data from the card.



Double-click data module to rewrite and lock the data to corresponding block in the pop-up window.



### 3. DLL INFORMATION

#### 3.1 SYSTEM FUNCTION

##### 3.1.1 Get DLL Version

Prototype: int WINAPI lib\_ver(unsigned int \*pVer)

Parameter: pVer: [OUT] DLL version number

Return: return 0 on success

##### 3.1.2 Connect

Prototype: int WINAPI rf\_init\_com (int port)

Parameter: port: [IN] serial port number

Return: return 0 on success

##### 3.1.3 Disconnect

Prototype: int WINAPI rf\_ClosePort(void)

Return: return 0 on success

##### 3.1.4 Get Device Type

Prototype: int WINAPI rf\_get\_model (unsigned char \*pVersion,  
unsigned char \*pLen)

Parameter: pVersion: [OUT] response information

pLen: [OUT] the length of response information

Return: return 0 on success

##### 3.1.5 Manage Protocol

Prototype: int WINAPI rf\_init\_type(unsigned char type)

Parameter: type: [IN] woking mode of the reader

Return: return 0 on success

Explanation: type = 'A': set SL801 into ISO14443A mode

type = 'B': set SL801 into ISO14443B mode

type = '1': set SL801 into ISO15693 mode

##### 3.1.6 Manage RF Transmittal

Prototype: int WINAPI rf\_antenna\_sta(unsigned char model)

Parameter: model: [IN] RF transmittal state

Return: return 0 on success

Explanation: model = 0: turn off RF transmittal

model = 1: turn on RF transmittal

##### 3.1.7 Manage LED

Prototype: int WINAPI rf\_light(unsigned char color)

Parameter: color: [IN] 0 = turn off, others = light on

## 3.2 DES FUNCTION

### 3.2.1 DES\_Encrypt

Prototype: int WINAPI des\_encrypt(unsigned char \*pSzOut,  
                                  unsigned char \*pSzIn,  
                                  unsigned int inlen,  
                                  unsigned char \*pKey,  
                                  unsigned int keylen)

Parameter: pSzOut: [OUT] ciphertext, bytes length equal to plaintext  
          pSzIn: [IN] plaintext  
          inlen: [IN] length of plaintext, integer times of 8 bytes  
          pKey: [IN] encrypt key  
          keylen: [IN] length of key, 8 bytes for single DES,  
                  16 bytes for triple DES

Return: return 0 on success

### 3.2.2 DES\_Decrypt

Prototype: int WINAPI des\_decrypt( unsigned char \*pSzOut,  
                                  unsigned char \*pSzIn,  
                                  unsigned int inlen,  
                                  unsigned char \*pKey,  
                                  unsigned int keylen)

Parameter: pSzOut: [OUT] plaintext, bytes length equal to ciphertext  
          pSzIn: [IN] ciphertext  
          inlen: [IN] length of ciphertext, integer times of 8 bytes  
          pKey: [IN] encrypt key  
          keylen: [IN] length of key, 8 bytes for single DES,  
                  16 bytes for triple DES

Return: return 0 on success

### 3.3 ISO14443A FUNCTION

#### 3.3.1 REQA

Prototype: int WINAPI rf\_request(unsigned char model, unsigned short \*pTagType)

Parameter: model: [IN] Req mode  
pTagType: [OUT] response data from tag, chip type code

Return: return 0 on success

Explanation: mode = 0x26: REQ\_STD

mode = 0x52: REQ\_ALL

pTagType: 0x4400 = Ultra\_Light

0x0400 = Mifare\_1K

0x0200 = Mifare\_4K

0x4403 = Mifare\_DESFire

0x0800 = Mifare\_Pro

0x0403 = Mifare\_ProX

To read the ISO14443A card in influence district, you should transfer the base function hereunder in turn

Mifare\_Std:

1. int WINAPI rf\_request
2. int WINAPI rf\_anticoll
3. int WINAPI rf\_select

Card will be on actived state thereafter

UltraLight:

1. int WINAPI rf\_request
2. int WINAPI int rf\_ul\_select

This function aggregate anticollision and select command, Card will be on actived state thereafter

Mifare\_DESFire:

1. int WINAPI rf\_DESFire\_rst

This function aggregate ReqA, anticollision, select command, Card will be on actived state thereafter

MifareProX:

1. int WINAPI rf\_typea\_rst

This function aggregate searching for card, anticollision ,activation and reposition order, Card will be on actived state thereafter

### 3.3.2 Select UltraLight

Prototype: int WINAPI rf\_ul\_select (unsigned char \*pSnr, unsigned char \*pLen)

Parameter: pSnr: [OUT] response data from tag, unique serial number

pLen: [OUT] length of response data

Return: return 0 on success

### 3.3.3 Mifare\_Std Anticollision

Prototype: int WINAPI rf\_anticoll( unsigned char bcnt,  
unsigned char \*pSnr,  
unsigned char \*pLen)

Parameter: bcnt: [IN] must be 4

pSnr: [OUT] response data from tag, unique serial number

pLen: [OUT] length of response data

Return: return 0 on success

### 3.3.4 Mifare\_Std Selecting

Prototype: int WINAPI rf\_select(unsigned char \*pSnr,  
unsigned char snrLen,  
unsigned char \*pSize)

Parameter: pSnr: [IN] unique serial number of tag

snrLen: [IN] length of pSnr

pSize: [OUT] response data, capacity code

Return: return 0 on success

### 3.3.5 Mifare\_Std Authenticate

Prototype: int WINAPI rf\_M1\_authentication2( unsigned char model,  
unsigned char block,  
unsigned char \*pKey)

Parameter: model: [IN] key validate mode

block: [IN] block absolute address

pKey: [IN] 6 bytes password

Return: return 0 on success

Explanation: model = 0x60: via KeyA

model = 0x61: via KeyB

### 3.3.6 Mifare\_Std (UltraLight) Read

Prototype: int WINAPI rf\_M1\_read (unsigned char block,  
unsigned char \*pData,  
unsigned char \*pLen)

Parameter: block: [IN] block absolute address

pData: [OUT] response data from tag

pLen: [OUT] length of response data

Return: return 0 if successful



Explanation: this function is applicable for Ultra\_Light card. Every page of Ultra\_Light card has 4bytes. Transferring this function every time, return data of 4 consecutive pages..

### 3.3.7 Mifare\_Std Write

Prototype: int WINAPI rf\_M1\_write (unsigned char block, unsigned char \*pData)

Parameter: block: [IN] block absolute address  
pData: [IN] written data, 16 bytes

Return: return 0 on success

### 3.3.8 UltraLight Write

Prototype: int WINAPI int rf\_ul\_write (unsigned char page, unsigned char \*pData)

Parameter: page: [IN] page address (0 – F)  
pData: [IN] written data, 4 bytes

Return: return 0 on success

### 3.3.9 Mifare\_Std Initialize Value

Prototype: int WINAPI rf\_M1\_initval(unsigned char block, long value)

Parameter: block: [IN] block absolute address  
pValue: [IN] initialize purse at HEX format, low byte in former

Return: return 0 on success

### 3.3.10 Mifare\_Std Read Value

Prototype: int WINAPI rf\_M1\_readval(unsigned char block, long \*pValue)

Parameter: block: [IN] block absolute address  
pValue: [OUT] return value at HEX format low byte in former

Return: return 0 on success

### 3.3.11 Mifare\_Std Increment

Prototype: int WINAPI rf\_M1\_increment (unsigned char block, long value)

Parameter: block: [IN] block absolute address  
value: [IN] increase value at HEX format, low byte in former

Return: return 0 on success

### 3.3.12 Mifare\_Std Decrement

Prototype: int WINAPI rf\_M1\_decrement (unsigned char block, long value)

Parameter: block: [IN] block absolute address  
value: [IN] deduct value at HEX format, low byte in former

Return: return 0 on success

### 3.3.13 Mifare\_Std Restore

Prototype: int WINAPI rf\_M1\_restore (unsigned char block)

Parameter: block: [IN] block absolute address

Return: return 0 on success

### 3.3.14 Mifare\_Std Transfer

Prototype: int WINAPI rf\_M1\_transfer (unsigned char block)

Parameter: block: [IN] block absolute address

Return: return 0 on success

Explanation: this function only use after increment, decrement and restore order

### 3.3.15 Mifare\_Std Halt

Prototype: int WINAPI rf\_halt( )

Return: return 0 on success

### 3.3.16 DESFire Reset

Prototype: int WINAPI rf\_DESFire\_rst(unsigned char model,  
  unsigned char \*pData,  
  unsigned char \*pMsgLg)

Parameter: model: [IN] ReqA mode  
          pData: [OUT] response data from tag  
          pMsgLg:[OUT] length of response data

Return: return 0 on success

Explanation: mode = 0x26: REQ\_STD  
              mode = 0x52: REQ\_ALL  
              pData = 7 bytes Chip Serial Number  
                  + n bytes RATS according to ISO14443-4 protocol

### 3.3.17 Mifare\_ProX Reset

Prototype: int WINAPI rf\_typea\_rst(unsigned char model,  
  unsigned char \*pData,  
  unsigned char \*pMsgLg)

Parameter: model: [IN] ReqA mode  
          pData: [OUT] response data from tag  
          pMsgLg:[OUT] length of response data

Return: return 0 on success

Explanation: mode = 0x26: REQ\_STD  
              mode = 0x52: REQ\_ALL  
              pData = 7 bytes Chip Serial Number  
                  + n bytes ATS according to ISO14443-4 protocol

### 3.3.18 T=CL Protocol Transceive

Prototype: int WINAPI rf\_cos\_command(unsigned char \*pCommand,  
 unsigned char cmdLen,  
 unsigned char \*pData,  
 unsigned char \*pMsgLg)

Parameter: pCommand: [IN] cos command  
 cmdLen: [IN] length of command  
 pData: [OUT] response data from tag, including SW1 & SW2  
 pMsgLg: [OUT] length of response data

Return: return 0 on success

### 3.3.19 T=CL Protocol Deselect

Prototype: int WINAPI CL\_Deselect( )

Return: return 0 on success

## 3.4 ISO14443B FUNCTION

### 3.4.1 ISO14443B Transceive

Prototype: int WINAPI rf\_transceive(unsigned char crcon,  
 unsigned char \*pTxData,  
 unsigned char sendLen,  
 unsigned char \*pRxDate,  
 unsigned char \*pMsgLg)

Parameter: crcon: [IN] not 0 means sending to crc, and calculated by reader,  
 Equal to 0 means not sending to CRC  
 pTxData: [IN] sending data  
 sendLen: [IN] length of sending data  
 pRxDate: [OUT] response data from tag  
 pMsgLg: [OUT] length of response data

Return: return 0 on success

### 3.4.2 REQB

Prototype: int WINAPI rf\_atqb(unsigned char model,  
 unsigned char \*pData,  
 unsigned char \*pMsgLg)

Parameter: model: [IN] 0=REQB, 1=WUPB  
 pData: [OUT] response data from tag,  
 according with ISO14443 protocol  
 pMsgLg: [OUT] length of response data

Return: return 0 on success

### 3.4.3 T=CL Protocol Transceive

Prototype: int WINAPI rf\_cos\_command(unsigned char \*pCommand,  
  unsigned char cmdLen,  
  unsigned char \*pData,  
  unsigned char \*pMsgLg)

Parameter: pCommand: [IN] COS command  
            cmdLen: [IN] length of COS command  
            pData: [OUT] response data from tag, including SW1 &SW2  
            pMsgLg: [OUT] length of response data

Return: return 0 on success

### 3.4.4 T=CL Protocol Deselect

Prototype: int WINAPI rf\_cl\_deselect(void)

Return: return 0 on success

### 3.4.5 AT88RF020 Authenticate

Prototype: int WINAPI rf\_at020\_check (unsigned char \*pKey)

Parameter: pKey: [IN] 8 bytes password

Return: return 0 on success

### 3.4.6 AT88RF020 Count

Prototype: int WINAPI rf\_at020\_count(unsigned char \*pData)

Parameter: pData: [IN] signature, 6 bytes

Return: return 0 on success

### 3.4.7 AT88RF020 Read

Prototype: int WINAPI rf\_at020\_read (unsigned char page,  
  unsigned char \*pData,  
  unsigned char \*pMsgLen)

Parameter: page: [IN] page address, 0 ~ 31  
            pData: [OUT] response data from tag  
            pMsgLen: [OUT] length of response data

Return: return 0 on success

### 3.4.8 AT88RF020 Write

Prototype: int WINAPI rf\_at020\_write(unsigned char page,  
  unsigned char \*pData)

Parameter: page: [IN] page address, 0 ~ 31  
            pData: [IN] written data, 8 bytes

Return: return 0 on success

### 3.4.9 AT88RF020 Lock

Prototype: int WINAPI rf\_at020\_lock(unsigned char \*pData)

Parameter: pData: [IN] data, 4 bytes

Return: return 0 on success

### 3.4.10 AT88RF020 Deselect

Prototype: int WINAPI rf\_at020\_deselect(void )

Return: return 0 on success

Explanation: card will exit active state after receiving this order and never respond other command until enter active state again.

### 3.4.11 ST Select

Prototype: int WINAPI rf\_st\_select(unsigned char \*pChip\_ID)

Parameter: pChip\_ID: [IN] return card ID number, one byte

Return: return 0 on success

### 3.4.12 SR176 Read

Prototype: int WINAPI int rf\_sr176\_read block (unsigned char block,  
unsigned char \*pData,  
unsigned char \*pLen)

Parameter: block: [IN] block address

pData: [OUT] response data from tag

pLen: [OUT] length of response data

Return: return 0 on success

### 3.4.13 SR176 Write

Prototype: int WINAPI int rf\_sr176\_write block (unsigned char block,  
unsigned char \*pData)

Parameter: block: [IN] block address

pData: [IN] written data, 2 bytes

Return: return 0 on success

### 3.4.14 SR176 Lock

Prototype: int WINAPI int rf\_sr176\_protect block (unsigned char lockreg)

Parameter: lockreg: [IN] LOCKREG

Return: return 0 on success

Explanation: SR176 has 16 modules, every lockreg controls 2 modules

lockreg	BLOCK	bit_setting	
b7	14 & 15	0:Write Enable	1:Block set as ROM
b6	12 & 13	0:Write Enable	1:Block set as ROM
b5	10 & 11	0:Write Enable	1:Block set as ROM
b4	8 & 9	0:Write Enable	1:Block set as ROM
b3	6 & 7	0:Write Enable	1:Block set as ROM
b2	4 & 5	0:Write Enable	1:Block set as ROM
b1	2 & 3	0:Write Enable	1:Block set as ROM
b0	0 & 1	0:Write Enable	1:Block set as ROM

### 3.4.15 SRIX4K Get UID

Prototype: int WINAPI int rf\_srix4k\_getuid (unsigned char \*pUid,  
unsigned char \*pLen)

Parameter: pUid: [OUT] response data from tag, UID

pLen: [OUT] length of UID

Return: return 0 on success

### 3.4.16 SRIX4K Read

Prototype: int WINAPI int rf\_srix4k\_readblock (unsigned char block,  
unsigned char pData,  
unsigned char \*pLen)

Parameter: block: [IN] block address

pData: [OUT] response data from tag

pLen: [OUT] length of response data

Return: return 0 on success

### 3.4.17 SRIX4K Write

Prototype: int WINAPI int rf\_srix4k\_writeblock (unsigned char block,  
unsigned char \*pData)

Parameter: block: [IN] block address

pData: [IN] written data, 4 bytes

Return: return 0 on success

### 3.4.18 SRIX4K Lock

Prototype: int WINAPI int rf\_srix4k\_protectblock (unsigned char lockreg)

Parameter: lockreg: [IN] LOCKREG

Return: return 0 on success

Explanation: 7-15 blocks of SRIX4K card can be written-protect

lockreg	BLOCK	bit_setting	
b7	15	1:Write Enable	0:Block set as ROM
b6	14	1:Write Enable	0:Block set as ROM
b5	13	1:Write Enable	0:Block set as ROM
b4	12	1:Write Enable	0:Block set as ROM
b3	11	1:Write Enable	0:Block set as ROM
b2	10	1:Write Enable	0:Block set as ROM
b1	9	1:Write Enable	0:Block set as ROM
b0	7 & 8	1:Write Enable	0:Block set as ROM

### 3.4.19 ST Desactivated

Prototype: int WINAPI rf\_st\_completion(void )

Return: return 0 on success

### 3.4.20 THR1064 Read

Prototype: int WINAPI rf\_thr1064\_read (unsigned char page,  
 unsigned char \*pData,  
 unsigned char \*pMsgLen)

Parameter: page: [IN] page address, 0 ~ 3  
 pData: [OUT] response data from tag  
 pMsgLen: [OUT] length of response data

Return: return 0 on success

### 3.4.21 THR1064 Write

Prototype: int WINAPI rf\_thr1064\_write ( unsigned char page,  
 unsigned char \*pData,  
 unsigned char \*pMsgLen);

Parameter: page: [IN] page address, 0 ~ 3  
 pData: [IN] written data  
 pMsgLen: [IN] length of written data

Return: return 0 on success

### 3.4.22 THR1064 Authenticate

Prototype: int WINAPI rf\_thr1064\_check (unsigned char \*pKey)

Parameter: pKey: [IN] 8 bytes password

Return: return 0 on success

## 3.5 ISO15693 FUNCTION

### 3.5.1 ISO15693\_Inventory

Prototype: int WINAPI ISO15693\_Inventory (unsigned char \*pData,  
unsigned char \*pLen)

Parameter: pData: [OUT] response data from tag, 1byteDSFID + 8bytesUID  
pLen: [OUT] length of response data

Return: return 0 on success

### 3.5.2 ISO15693\_Inventorys

Prototype: int WINAPI ISO15693\_Inventorys (unsigned char \*pData,  
unsigned char \*pLen)

Parameter: pData: [OUT] response data from tag, every 9 bytes is a team,  
the structure of every team is: 1byte DSFID + 8bytesUID  
pLen: [OUT] length of response data

Return: return 0 on success

### 3.5.3 ISO15693\_Get\_System\_Information

Prototype: int WINAPI ISO15693\_Get\_System\_Information (unsigned char model,  
unsigned char \*pUID,  
unsigned char \*pData,  
unsigned char \*pLen)

Parameter: model: [IN] bit0=Select\_flag,bit1=Address\_flag,bit2=Option\_flag  
pUID: [IN] 8 bytes UID  
pData: [OUT] response data from tag  
pLen: [OUT] length of response data

Return: return 0 on success

Explanation: If set Select\_flag, only the cards on Selected state respond this command  
If set Address\_flag, only the cards that the UID are congruous will respond  
this command  
Clear Option\_flag

### 3.5.4 ISO15693\_Select

Prototype: int WINAPI ISO15693\_Select(unsigned char \*pUID)

Parameter: pUID: [IN] 8 bytes UID

Return: return 0 on success



### 3.5.5 ISO15693\_Reset\_To\_Ready

Prototype: int WINAPI ISO15693\_Reset\_To\_Ready( unsigned char model,  
unsigned char \*pUID)

Parameter: model: [IN] bit0=Select\_flag,  
bit1=Address\_flag,  
bit2=Option\_flag  
pUID: [IN] 8 bytes UID

Return: return 0 on success

Explanation: If set Select\_flag, only the cards on Selected state respond this command  
If set Address\_flag, only the cards that the UID are congruous will respond  
this command  
Clear Option\_flag

### 3.5.6 ISO15693\_Stay\_Quiet

Prototype: int WINAPI ISO15693\_Stay\_Quiet(unsigned char \*pUID)

Parameter: pUID: [IN] 8 bytes UID

Return: return 0 on success

### 3.5.7 ISO15693\_Get\_Block\_Security

Prototype: int WINAPI ISO15693\_Get\_Block\_Security ( unsigned char model,  
unsigned char \*pUID,  
unsigned char block,  
unsigned char number,  
unsigned char \*pData,  
unsigned char \*pLen)

Parameter: model: [IN] bit0=Select\_flag,  
bit1=Address\_flag,  
bit2=Option\_flag  
pUID: [IN] 8 bytes UID  
block: [IN] block address  
number: [IN] the number of module to be read, < 0x40  
pData: [OUT] response data from tag  
pLen: [OUT] length of response data

Return: return 0 on success

Explanation: If set Select\_flag, only the cards on Selected state respond this command  
If set Address\_flag, only the cards that the UID are congruous will respond  
this command  
Clear Option\_flag

### 3.5.8 ISO15693\_Read

Prototype: int WINAPI ISO15693\_Read(unsigned char model,  
 unsigned char \*pUID,  
 unsigned char block,  
 unsigned char number,  
 unsigned char \*pData,  
 unsigned char \*pLen);

Parameter: model: [IN] bit0=Select\_flag,  
 bit1=Address\_flag,  
 bit2=Option\_flag  
 pUID: [IN] UID 8 bytes  
 block: [IN] block address  
 number: [IN] the number of module to be read, max 16 blocks  
 pData: [OUT] response data from tag  
 pLen: [OUT] length of response data

Return: return 0 on success

Explanation: If set Select\_flag, only the cards on Selected state respond this command  
 If set Address\_flag, only the cards that the UID are congruous will respond  
 this command  
 Clear Option\_flag

### 3.5.9 ISO15693\_Write

Prototype: int WINAPI ISO15693\_Write (unsigned char model,  
 unsigned char \*pUID,  
 unsigned char block,  
 unsigned char \*pData);

Parameter: model: [IN] bit0=Select\_flag,  
 bit1=Address\_flag,  
 bit2=Option\_flag  
 pUID: [IN] 8 bytes UID  
 block: [IN] block address  
 pData: [IN] written data, 4bytes

Return: return 0 on success

Explanation: If set Select\_flag, only the cards on Selected state respond this command  
 If set Address\_flag, only the cards that the UID are congruous will respond  
 this command  
 If write TI card, set Option\_flag,  
 If write I.CODE SLI card, clear Option\_flag

### 3.5.10 ISO15693\_Lock\_Block

Prototype: int WINAPI ISO15693\_Lock\_Block (unsigned char model,  
unsigned char \*pUID,  
unsigned char block)

Parameter: model: [IN] bit0=Select\_flag,  
bit1=Address\_flag,  
bit2=Option\_flag

pUID: [IN] 8 bytes UID

block: [IN] block address

Return: return 0 on success

Explanation: If set Select\_flag, only the cards on Selected state respond this command  
If set Address\_flag, only the cards that the UID are congruous will respond this command  
If write TI card, set Option\_flag,  
If write I.CODE SLI card, clear Option\_flag

### 3.5.11 ISO15693\_Write\_AFI

Prototype: int WINAPI ISO15693\_Write\_AFI (unsigned char model,  
unsigned char \*pUID,  
unsigned char AFI)

Parameter: model: [IN] bit0=Select\_flag,  
bit1=Address\_flag,  
bit2=Option\_flag

pUID: [IN] 8 bytes UID

AFI: [IN] written AFI

Return: return 0 on success

Explanation: If set Select\_flag, only the cards on Selected state respond this command  
If set Address\_flag, only the cards that the UID are congruous will respond this command  
If write TI card, set Option\_flag,  
If write I.CODE SLI card, clear Option\_flag

### 3.5.12 ISO15693\_Lock\_AFI

Prototype: int WINAPI ISO15693\_Lock\_AFI(unsigned char model,  
unsigned char \*pUID)

Parameter: model: [IN] bit0=Select\_flag,  
bit1=Address\_flag,  
bit2=Option\_flag

pUID: [IN] 8 bytes UID

Return: return 0 on success

Explanation: If set Select\_flag, only the cards on Selected state respond this command  
If set Address\_flag, only the cards that the UID are congruous will respond this command

If write TI card, set Option\_flag,  
If write I.CODE SLI card, clear Option\_flag

### 3.5.13 ISO15693\_Write\_DSFDID

Prototype: int WINAPI ISO15693\_Write\_DSFDID (unsigned char model,  
unsigned char \*pUID,  
unsigned char DSFDID)

Parameter: model: [IN] bit0=Select\_flag,  
bit1=Address\_flag,  
bit2=Option\_flag  
pUID: [IN] 8 bytes UID  
DSFDID: [IN] written DSFDID

Return: return 0 on success

Explanation: If set Select\_flag, only the cards on Selected state respond this command  
If set Address\_flag, only the cards that the UID are congruous will respond this command  
If write TI card, set Option\_flag,  
If write I.CODE SLI card, clear Option\_flag

### 3.5.14 ISO15693\_Lock\_DSFDID

Prototype: int WINAPI ISO15693\_Lock\_DSFDID (unsigned char model,  
unsigned char \*pUID)

Parameter: model: [IN] bit0=Select\_flag,  
bit1=Address\_flag,  
bit2=Option\_flag  
pUID: [IN] 8 bytes UID

Return: return 0 on success

Explanation: If set Select\_flag, only the cards on Selected state respond this command  
If set Address\_flag, only the cards that the UID are congruous will respond this command  
If write TI card, set Option\_flag,  
If write I.CODE SLI card, clear Option\_flag