

MSR880/860



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MSR880/860 User Manual



WWW.OSAYDE.COM

Reader/writer Demo Application Instruction

Version 1.0

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Supports Windows 98/2000/XP/Vista/7/8/10, to provide convenient DLL secondary development. Provide complete dynamic library functions, development, main points, call example source code examples, and various development language (including: the vb6.0 by use of vc + +, Java 6.0)

Application software download address (Contains the API, Tool, the API Guide, DLL, software Demo User Manual)

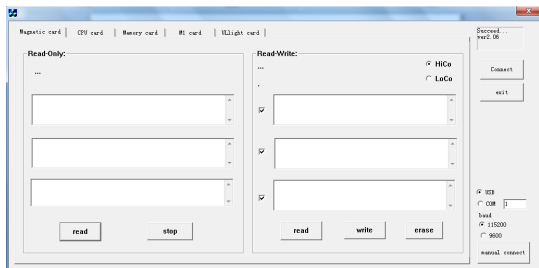
https://www.dropbox.com/s/sywl2f3epkjqwr/MSR880_Demo_Ver1.0.zip?dl=0

or you can visit our website www.osayde.com to download it.

Comment:The software demo applies to all types of our desktop reader and writer devices with USB interface. However, not all devices support all the listing functions.If there is any question or any need for the latest version material, please contact us.

Depending on different computer and system, it may take a few seconds when you connect the device to your computer for the first time.

Software Diagram



1. Initialization

Any card operation must be done after successful initialization.

Open the software, if it shows "succeed" at top right corner means it initiated successfully, but if shows "failed" means there were some problem with the connection. Then, you need to check the connection.

How to confirm whether the device is connected to a computer?

USB insertion to PC and lit on light doesn't mean the device is connected to a computer.

Interface aging and wearing will result in dis-communication. Then how to confirm if the device is correctly connected to PC?

USB connection:

Right click "My Computer" icon ("Computer" for WIN7) —> "management" —> "Human Interface Device" to check if the device is inserted. In addition, unplug the device then insert again, to check if there is any response in "Human Interface Device".

If the device connects but shows a yellow triangle like the picture shows, it means your computer has found the device but can't identify it. Please right click it to update driver. **Serial Interface Connection:**

Baud Rate:

Baud rate refers to microcontroller or computer transmission rate in serial data communication.

We provide two types: 115200 (Baud) and 9600 (Baud).

Note: When using a serial interface, if it fails to connect, please unplug the device, close

software and try again from the beginning.

Serial or USB selection should be based on device communication type.

Connection here do not need to switch baud rate or select serial interface number.

When select serial and USB interface, click to connect the device, it will show connect successfully. If it fails to show, pull out of device, close software and try again.

That is, only MSR880/860, its magnetic card operation part needs to connect to device, the rest operations are the same as those of initialization before.

2.Magnetic Card

Brief introduction: Magcard (magnetic card) applies to many fields. Three tracks are provided to record data with terminal devices,such as credit cards,security cards,membership cards,inquiry cards, stored-valued cards and entrance tickets and so on, which are magnetic recorder dielectric cards. This card is made by high-strength, high-temperature plastic or plastic coated paper so that it's moisture proof wear-resisting and flexible, very easy to carry,and more stable and reliable for use.

MSR880/860 magcard demo:

If your device support card write , u can use "read-write"part to write data into the card,

Remark: MSR860 no "write-erase" function .

The screenshot shows a software window titled "Read-Write:". Inside the window, there are three radio buttons for selecting the card type: "HiCo" (selected) and "LoCo". Below the radio buttons, there are three empty text input fields, each preceded by a checked checkbox. At the bottom of the window, there are three buttons labeled "read", "write", and "erase".

3.CPU Card

Brief introduction: with high data processing capability and computing power and large storage capability, especially its improved security technology system and program-oriented adaptability and flexibility, smart IC card has gained great concern and favor from relevant applications(domains)since its appearance. Smart IC card is quite suitable for sensitive applications which requires data security and reliability. So far, major smart IC card application areas include credit cards of financial field, SIM cards of telecommunication field (mobile phone identification card) etc. In addition, the concept of multi-purpose card, supported and represented by smart IC card, has been greater valued. In the future, the development and application of smart IC card will play an importance part in all fields. We will benefit theconvenience, security and efficiency and related quality services.

Demo Software operation procedure:

A.click"IC card reset", please note: contact IC card and the PSAM deck use0~4 slot corresponding channel number, while test contactless CPU card, the channel number should be above 5. Proceed subsequent operation after normal reset.

The screenshot shows a software interface with a menu bar at the top containing: Magnetic card, CPU card (selected), Memory card, M1 card, and VLight card. Below the menu, a text box displays "reset succeed: 68 00 FF 4A 4F 4B 41 76 30 30 31". Underneath is a "slot:" label with a dropdown menu showing "1" and a note: "Note:0~4 used for contact,>5 used for contactless,B card any." Below this is a section for APDU commands with fields for CLA (00), INS (84), P1 (00), P2 (00), LC (empty), DATA (empty), and LE (08). At the bottom left, there are radio buttons for "type A" and "type B", with "type B" selected. In the center, there are two buttons: "IC reset" (highlighted with a red box) and "IC off". On the right, there is a button labeled "APDU command".

B.Input APDU commands in the corresponding area when testing, then click "APDU command send" button. The demo demo software sends APDU commands randomly by default namely:CLA=0x00, IINS=0x84, P1=0x00, P2=0x00 when data is empty, Le=08.

Magnetic card | CPU card | Memory card | M1 card | ULight card

IC card re:

WA:00
WB:00

slot: Note: 0~4 used for contact, >5 used for contactless, B card any.

CLA INS P1 P2 LC DATA: LE

APDU:

☒ type A
☐ type B

C. In the "message box" section, you can see the result of returning APDU commands. The corresponding result will be analyzed by SW1, SW2 status bit. SW1:90 SW2:00 denotes command operation is successful.

4. Memory Card:

Memory card belongs to logical encryption card, SLE4442 and SLE4448 are common used.

security features:

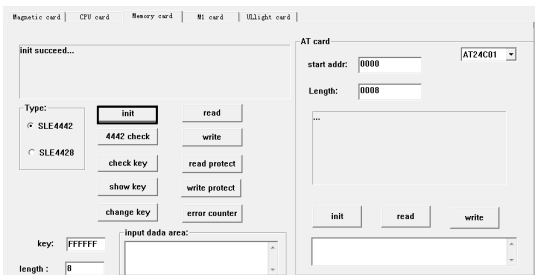
Before password checked correctly, all data only can be read, but not written.

After password checking, only when it's correct, all data can be changed, including the password. Each byte of protected writing area (first 32 bytes) can be protected read and written individually. After the protected area is written, the content can not be changed. (ie. curing data)

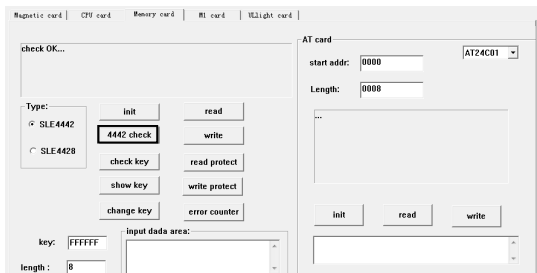
Program Demo:

Write-protected area (first 32 bytes) of each byte can be individually write protected post write-protected content can not be changed (ie, curing data). Currently, the test is mainly to the IC card function of type SLE4442/SLE4428. Take SLE4442 as an example (similar to 4428).

A. Click "IC card initialization", after success tip, continue to subsequent operations.



B. Click “4442 check” to test if the IC card is a SLE4442 card. If the tip is “Detected Success!”,



The card is a 4442. If test fails, it isn't a 4442 card. After successful test, continue the subsequent operations.

Magnetic card | CPU card | Memory card | M1 card | ULight card

password correct...

Type:
☒ SLE4442
☐ SLE4428

init 4442 check check key read write read protect show key write protect change key error counter

key: FFFFFFFF
length: 8

input data area:

AT card
start addr: 0000
Length: 0008
AT24C01

init read write

C. Enter card password in the password test area, then click “check key”. Before all the writing operations, the password should be checked first(the password must be correct). The default password has been input by the demo software,please click to check the password directly.

D. Click “Read Password”, the card password will show in the message box.

E. Change password. Enter new password in the corresponding area as following picture. Enter new password here:112233.

Magnetic card | CPU card | Memory card | M1 card | ULight card

password: 112233

Type:
☒ SLE4442
☐ SLE4428

init 4442 check check key read write read protect show key write protect change key error counter

key: FFFFFFFF
length: 8

input data area:
112233

AT card
start addr: 0000
Length: 0008
AT24C01

init read write

Note: The password has been changed to 112233,if start initialization now, you should enter112233 in the password area to the the password,otherwise, the it will show password incorrect and the subsequent operations can't be proceeded anymore. Each time operation error appears, please restart initialization and proceed other operations.

F. Reading cards. Enter the data length in need in the corresponding area as following picture shows. Then click “read”.

Magnetic card | CPU card | Memory card | M1 card | ULight card

read succeed...
data:112233FFFFFFFF

Type:
☒ SLE4442
☐ SLE4428

init 4442 check check key show key change key

read write read protect write protect error counter

key: FFFFFFFF input data area: 112233

length: 8

AT card

start addr: 0000 AT24C01

Length: 0008

init read write

G.Writing cards. Input required data in the corresponding area(Hexadecimal data, enter 1234means 0 x12, 0 x34). Then click "write "

Magnetic card | CPU card | Memory card | M1 card | ULight card

write failed...

Type:
☒ SLE4442
☐ SLE4428

init 4442 check check key show key

read write read protect write protect error counter

key: FFFFFFFF input data area: 112233

length: 8

AT card

start addr: 0000 AT24C01

Length: 0008

init read write

5.M1/RFID Proximity Card

1. For its low price, M1 card is very suitable for use as consumables.
 2. Anti-collision, can be used in various applications.
 3. Good encryption performance.
 4. M1 card door lock system configuration has been updated--a fully functional communication controller.
 5. M1 card door lock system configuration has been updated--- fully open self-service multifunctional software.
- select sectors and blocks need to be tested, enter the sector password, click "find the card. Authorization." If the password is incorrect authorization fails, you can not continue down operations

M1 Card Demo

A. Select sectors and blocks those needs testing,enter password of that section,click"Request,authorization". If the password is incorrect, authorization will fails, the subsequent operations cannot be continued,After successful authorization, continue the proceeded operations.

Please note: All the read and write operations need inputting section password. Please remember.

The screenshot shows the M1 Card Demo software interface. At the top, there are tabs for 'Magnetic card', 'CPU card', 'Memory card', 'M1 card', and 'ULlight card'. The main area displays 'do not detect card...'. Below this, there are settings for 'key type' (A-key selected), 'sector' (00), and 'block' (00). The 'input data area' contains three blocks: 'block 00' with the value '11223344556677889900AABBCCDDEEFF', 'block 01' with '11111111111111111111111111111111', and 'block 02' with '22222222222222222222222222222222'. To the right, there is a 'key' field with 'FFFFFFFFFFFF' and a 'new key' field. A 'change key' button is also present. At the bottom, there are buttons for 'Request,authorization' (highlighted with a red box), 'Off', 'read block', 'write block', 'read sector', and 'write sector'.

B. Click "read block ", data shows in the the corresponding section area.The 00 sector 00 block cures M1 card ID information, and all the three sector blocks-3 are configuration password information. In the following picture, 00 sector 00 block data is being read. And the default setting password has been filled in by the software.

The screenshot shows the M1 Card Demo software interface after clicking 'read block'. The 'Request,authorization' button is still highlighted. The 'input data area' now shows the data for 'sector 0 block 0': '04 C1 9B CC 92 08 04 00 62 63 64 65 66 67 68 69'. The other settings and buttons remain the same as in the previous screenshot.

- C. When writing block data, select the required sector and block, then input required data in the corresponding area on the right. Click "data block write", after successful writing, the written data can be read directly, as shown in the following figure:

The screenshot shows the 'Magnetic card' tab selected. At the top, a message box says 'write succeed...'. Below this, the 'key type' is set to 'A-key' (radio button selected). The 'sector' is set to '01' and the 'block' is set to '00'. The 'input data area' contains three text boxes: 'block 00:' with the value '11223344556677889900AABBCCDDEEFF', 'block 01:' with '11111111111111111111111111111111', and 'block 02:' with '22222222222222222222222222222222'. To the right, the 'key' is 'FFFFFFFFFFFF' and the 'new key' is empty. A 'change key' button is below the new key field. At the bottom, there are buttons for 'Request, authorization', 'Off', 'read block', 'write block' (which is highlighted with a black border), 'read sector', and 'write sector'.

After successful writing, with confirmation, then to read the 01th sector of block data:

The screenshot shows the same software interface. The 'write block' button is no longer highlighted. The 'input data area' now displays the data for 'sector 1 block 0: 11 22 33 44 55 66 77 88 99 00 AA BB CC DD EE FF'. The 'read block' button is now highlighted with a black border. All other settings and buttons remain the same as in the previous screenshot.

- D. All the data in sector is supported to read(except 00 sector). Select the needed sector, enter the password of the needed sector, with authorization, click "read sector data " directly. Read after the successful writing. The process of reading the 00th sector data is as following figure.

Magnetic card | CPU card | Memory card | M1 card | ULight card |

read succeed...

block 00: 04 C1 9B CC 92 08 04 00 62 63 64 65 66 67 68 69
 block 01: 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11
 block 02: 22 22 22 22 22 22 22 22 22 22 22 22 22 22 22 33
 block 03: 00 00 00 00 00 00 FF 07 80 69 FF FF FF FF FF FF

key type: ☒ A-key ☐ B-key

sector: 00

block: 00

input data area:

block 00: 11223344556677889900AABCCDDEEFF
 block 01: 11111111111111111111111111111111
 block 02: 22222222222222222222222222222222

key: FFFFFFFFFF

new key:

change key

Request,authorization Off read block write block **read sector** write sector

write all the data into the 01th sector once.

Magnetic card | CPU card | Memory card | M1 card | ULight card |

write succeed...

key type: ☒ A-key ☐ B-key

sector: 01

block: 00

input data area:

block 00: 11223344556677889900AABCCDDEEFF
 block 01: 11111111111111111111111111111111
 block 02: 22222222222222222222222222222222

key: FFFFFFFFFF

new key:

change key

Request,authorization Off read block write block read sector **write sector**

Then read the data of the 01th sector: as it's shown, the data has been written into the 01th sector.

Magnetic card | CPU card | Memory card | M1 card | ULight card |

read succeed...

block 00: 11 22 33 44 55 66 77 88 99 00 AA BB CC DD EE FF
 block 01: 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11
 block 02: 22 22 22 22 22 22 22 22 22 22 22 22 22 22 22 22
 block 03: 00 00 00 00 00 00 FF 07 80 69 FF FF FF FF FF FF

key type: ☒ A-key ☐ B-key

sector: 01

block: 00

input data area:

block 00: 11223344556677889900AABCCDDEEFF
 block 01: 11111111111111111111111111111111
 block 02: 22222222222222222222222222222222

key: FFFFFFFFFF

new key:

change key

Request,authorization Off read block write block **read sector** write sector

change password select a sector, enter the current password and new password, then to click

"modify area code" As shown in the following picture:change the password of the 01th Into111111111111, then when new password is needed when visit the 00th sector instead of the default password FFFFFFFF.

Magnetic card | CPU card | Memory card | M1 card | Ultralight card |

sector 1 change key succeed...

key type: ☒ A-key ☐ B-key

sector: 01

block: 00

input data area:

block 00: 11223344556677889900AABCCDDEEFF

block 01: 11111111111111111111111111111111

block 02: 22222222222222222222222222222222

key: FFFFFFFFFF

new key: 111111111111

change key

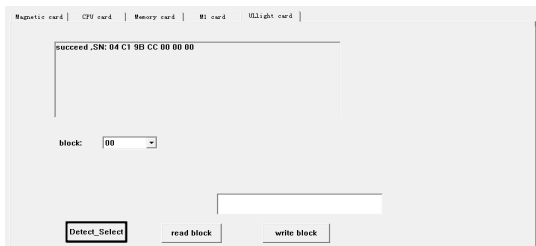
Request,authorization Off read block write block read sector write sector

6. Ultralight Card

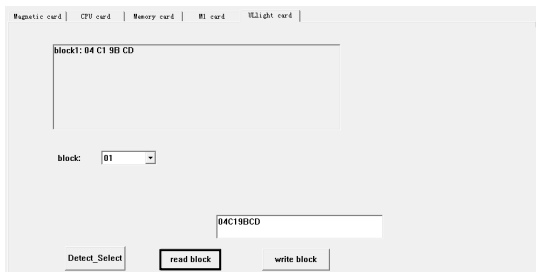
Cards or labels, made by NXP MF0 IC U10, conform to ISO14443A. Blank cards, printing cards, paper stickers, key chains, TOKEN, and various sizes and thickness are provided. Mainly applied to: access control, attendance management, meeting attendance, identification, logistics, industrial automation, various membership cards such as canteen, subway, bus tokens, clubs and other consumer electronics, electronic tickets, animal recognition, target tracking, laundry management, one-card-through etc.

Demo Software:

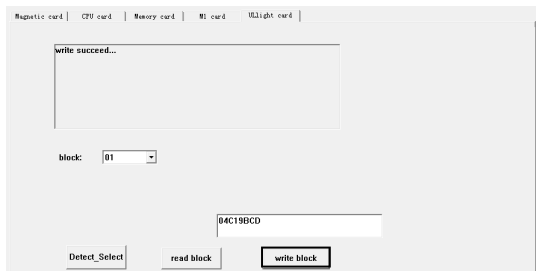
Card searching and selecting operation, as following picture.



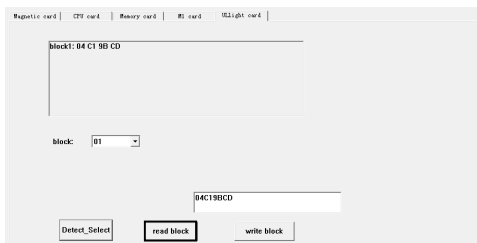
Select the block to read data.



Write block data,as shown in the picture:



Let's check the data which is written just now, as shown in the picture:



Features overview MSR880/860

Product name	OSAYDE MSR880	Compatible Magcard	High/Low resistance to magnetic stripe (300-4000 OE) all three rail, speaking, reading and writing function, support reading card
Product function	Magnetic/IC/RFID/PSAM Reader Writer	Magcard Card Compatibility	ISO/IEC 7811, AMNVA, CADMV
Product connector	USB 2.0 USB Cable L = 1600 mm	RFID Card Compatibility	Operating frequency: 13.56 MHz, RFID induction from 0 to 5 cm.
Product material	ABS high temperature resistant fireproof material	RFID Card Compatibility	ISO14443A, MifareOneS50, MifareOneS70, MIF3 DESFIRE, Ultralight, ISO14443B, SONY felica
Product colour	PANTON Black	IC Card Compatibility	A724C01A/24C02/24C04/24C06/24C16/AT24C64, SLE4432/4442, SLE4418/4428, ISSI 24C01A/16, ISO7816-(1-4) (T=1, T=0)
Standard Compliance	ISO7811, ISO7816, ISO14443, ROHS, CE and FCC	PSAM Card	Plug-in is used in the main support ISO7816 standard booth, booth and can be used 200000 times,
Support system	Windows 98/2000/XP/Vista/7/8/10	PSAM Communication	ISO7816 T=1, T=0 The operation of CPU card
Product feature	Built-in buzzer, writing and reading lamp, provide the SDK libraries, platform can support multiple operating systems and language development		
Product name	OSAYDE MSR860	Compatible Magcard	High/Low resistance to magnetic stripe (300-4000 OE) all three rail, speaking, reading and writing function, support reading card
Product function	Magnetic/IC/RFID/PSAM Reader Writer	Magcard Card Compatibility	ISO/IEC 7811, AMNVA, CADMV
Product connector	USB 2.0 USB Cable L = 1600 mm	RFID Card Compatibility	Operating frequency: 13.56 MHz, RFID induction from 0 to 5 cm.
Product material	ABS high temperature resistant fireproof material	RFID Card Compatibility	ISO14443A, MifareOneS50, MifareOneS70, MIF3 DESFIRE, Ultralight, ISO14443B, SONY felica
Product colour	PANTON Black	IC Card Compatibility	A724C01A/24C02/24C04/24C06/24C16/AT24C64, SLE4432/4442, SLE4418/4428, ISSI 24C01A/16, ISO7816-(1-4) (T=1, T=0)
Standard Compliance	ISO7811, ISO7816, ISO14443, ROHS, CE and FCC	PSAM Card	Plug-in is used in the main support ISO7816 standard booth, booth and can be used 200000 times,
Support system	Windows 98/2000/XP/Vista/7/8/10	PSAM Communication	ISO7816 T=1, T=0 The operation of CPU card
Product feature	Built-in buzzer, writing and reading lamp, provide the SDK libraries, platform can support multiple operating systems and language development		

** this manual tries to keep the accuracy of the information, if still there are wrong images or text content, please kindly point it out so that we can improve.

For more information about us, please visit our website

www.osayde.com.

Thank you very much for choosing OSAYDE.

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Standard Compliance: ISO7811. ISO7816. ISO14443,ROHS, CE,and FCC

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MSR880/860 Benutzerhandbuch



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Lese-/Schreibegerät Demo Applikation Anweisungen

Version 1.0

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Unterstützt Windows 98/2000/XP/Vista/7/8/10 um
angenehme DLL sekundäre Entwicklung zu bieten.
Liefert komplett dynamische Bibliotheksfunktionen,

Entwicklung, Hauptpunkte, Beispielaufufe,
Beispielquellcodes und unterschiedliche
Entwicklungssprachen (inklusive der vb6.0 bei Nutzung
vonvc + +, Java 6.0)

Downloadadresse der Applikationssoftware (Umfasst
das API, Tool, den API Guide, DLL, Software Demo
Benutzerhandbuch)

Ms880:[http://www.osayde.com/wp-content/uploads/
2016/10/OSAYDE-MSR-880-Demo.zip](http://www.osayde.com/wp-content/uploads/2016/10/OSAYDE-MSR-880-Demo.zip)

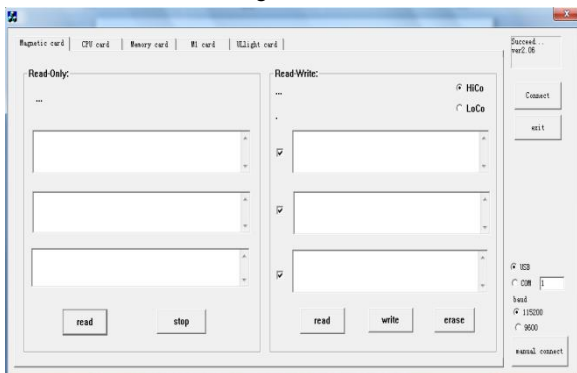
Ms860:[http://www.osayde.com/wp-content/uploads/
2016/10/OSAYDE-MSR-860-Demo.zip](http://www.osayde.com/wp-content/uploads/2016/10/OSAYDE-MSR-860-Demo.zip)

oder besuchen Sie unsere

Webseite:www.osayde.comum dies herunterzuladen.

Kommentar: Die Software Demo passt auf alle Arten von Desktop Lese- und Schreibgeräte mit USB Schnittstelle. Doch nicht alle Geräte unterstützen alle Verzeichnisfunktionen. Sollten Sie Fragen haben oder das Material der neusten Version erfordern, so kontaktieren Sie uns bitte.

Abhängig von unterschiedlichen Computern und Systemen kann es einige Sekunden dauern wenn Sie das Gerät zum ersten Mal mit Ihrem Computer verbinden. Software Diagramm



1. Initialisierung

Jeder Kartenbetrieb muss eine erfolgreiche Initialisierung abschließen.

Öffnen Sie die Software – wenn in der oberen rechten Ecke „erfolgreich“ angezeigt wird, wurde es erfolgreich initialisiert, doch wenn „fehlgeschlagen“ angezeigt wird, gab es einige Probleme mit der Verbindung. Dann müssen Sie die Verbindung prüfen.

Wie bestätigt man ob das Gerät mit dem Computer verbunden ist?

Sollte nach Einführung des USB in den PC ein Licht erleuchten, so ist das Gerät mit einem Computer verbunden. Alterung und Abnutzung der Benutzeroberfläche kann in einer Fehlkommunikation

resultieren. Wie bestätigt man dann, ob das Gerät korrekt mit dem PC verbunden ist?

USB Verbindung:

Rechtsklick"MeinComputer"Icon("Computer" fürWIN7)—>"Management"—>"Human Interface Device" um zu prüfen ob das Gerät eingeführt wurde. Stecken Sie zudem das Gerät aus und erneut ein um zu sehen ob das "Human Interface Device" antwortet. Wenn sich das Gerät verbindet, aber ein gelbes Trigon wie auf dem Bild angezeigt wird, dann bedeutet dies, dass der Computer das Gerät finden konnte, es aber nicht identifizieren kann. Bitte machen Sie einen Rechtsklick um den Treiber zu aktualisieren.

Serielle Schnittstellenverbindung

Baud-Rate:

Die Baud-Rate bezieht sich auf die Microcontroller oder Computerübertragungsrate in der seriellen Datenkommunikation.

Wir bieten zwei Arten: 115200 (Baud) und 9600 (Baud).

Hinweis: Sollte es bei der Nutzung einer seriellen Schnittstelle fehlschlagen, so stecken Sie das Gerät aus, schließen Sie die Software und versuchen Sie es erneut.

Serielle oder USB Auswahl sollte basierend auf dem Kommunikationstyp des Geräts gewählt werden.

Die Verbindung muss die Baud-Rate nicht wechseln oder wählen Sie die serielle Schnittstellennummer.

Wen Sie die serielle oder USB Oberfläche wählen,

klicken Sie um das Gerät zu verbinden – es wird eine erfolgreiche Verbindung anzeigen. Sollte dies nicht angezeigt werden, so stecken Sie das Gerät aus, schließen Sie die Software und versuchen Sie es erneut.

Beim MSR880/860 muss der Magnetkarten

Operationsteil mit dem Gerät verbunden werden – die restlichen Operationen entsprechen der gleichen Initialisierung wie zuvor.

2. Magnetkarte

Kurze Einführung: Magcard (Magnetkarte) findet in vielen Feldern Anwendung. Drei Spuren werden bereitgestellt um Daten mit einem Endgerät aufzunehmen, wie Kreditkarten, Sicherheitskarten,

Mitgliedskarten, Anfragekarten, Geldkarten und Eintrittskarten, etc., welche magnetisch aufzeichnende dielektrische Karten darstellen. Diese Karte wird durch sehr robustes, temperaturresistentes Plastik oder mit Plastik überzogenem Papier hergestellt, sodass diese feuchtigkeitsbeständig, verschleißfest und flexibel, einfach zu tragen und stabiler und verlässlicher für die Nutzung ist.

MSR880/860 MagcardDemo:

Wenn Ihr Gerät das Beschreiben von Karten unterstützt, dann nutzen Sie den „Lesen-Schreiben“ Teil um Daten auf Ihre Karte zu schreiben. Hinweis: MSR860 besitzt keine „Schreiben-Löschen“ Funktion.

Read-Write:

...

.

☒ HiCo

☐ LoCo

☒

☒

☒

3.CPU Karte

Kurze Einführung: mit hohen

Datenverarbeitungsfähigkeiten, Rechenleistung und

großer Speicherkapazität, und besonders durch das

verbesserte Sicherheitstechnologiesystem und

programmorientierte Anpassungsfähigkeit und

Flexibilität, hat die smarte IC Karte seit ihrer

Erscheinung durch viele Applikationen (Domains) ein

großes Anliegen und Wohlwollen gewonnen. Die Smart IC Karte eignet sich für sensible Applikationen, welche Datensicherheit und Verlässlichkeit fordern. Bisher umfassen smart IC Kartenapplikationen Bereiche wie Kreditkarten im finanziellen Bereich, Sim Karten im Telekommunikationsbereich (Identifikationskarten von Mobiltelefonen) etc. Zudem besitzt die Mehrzweckkarte, unterstützt und dargestellt durch die Smart IC Karte, einen größeren Wert. In Zukunft wird die Entwicklung und Anwendung der Smart IC Karte eine wichtige Rolle in allen Bereichen spielen. Wir werden von dem Komfort, der Sicherheit und der Effizienz und damit verbundener Qualität profitieren.

Demo Software Betriebsverfahren:

A. Klicken Sie “IC Karte Zurücksetzen”, Hinweis:

Kontaktieren Sie IC Karte und die PSAM deck use 0-4

entsprechende Kanalnummer. Während dem Test der

kontaktlosen CPU Karte, sollte die Kanalnummer über

5 liegen. Verfolgen Sie die folgende Operation nach

normaler Zurücksetzung.

Magnetic card

CPU card

Memory card

M1 card

ULight card

reset succeed: 6B 00 FF 4A 4F 4B 41 76 3D 30 31

slot : Note: 0~4 used for contact, >5 used for contactless, B card any.

CLA

INS

P1

P2

LC

DATA:

LE

APDU:

☒ type A

☐ type B

IC reset

IC off

APDU command

B. Geben Sie beim Testen APDU Befehle in den entsprechenden Bereich ein, klicken Sie dann “APDU Befehlsenden”. Die Demo Software sendet APDU Befehles tandardmäßig zufällig aus, nämlich: CLA=0x00, IINS=0x84, P1=0x00, P2=0x00 wenn Daten leer sind, Le=08.

C. Im Bereich der “Nachrichtenbox” sehen Sie die Ergebnisse wiederkehren

The screenshot shows a software interface for testing smart cards. At the top, there are tabs for different card types: Magnetic card, CPU card, Memory card, M1 card, and ULight card. Below these, there is a section for 'IC card re:' with fields for 'WA:00' and 'WB:00'. A 'slot:' dropdown is set to '1', with a note: 'Note: 0~4 used for contact, >5 used for contactless, B card any.' Below this, the APDU command fields are displayed: CLA (00), INS (84), P1 (00), P2 (00), LC (empty), DATA (empty), and LE (08). At the bottom left, there are radio buttons for 'type A' (selected) and 'type B'. In the center, there are buttons for 'IC reset' and 'IC off'. On the bottom right, there is a button labeled 'APDU command' which is highlighted with a black rectangle.

der APDU Befehle. Das entsprechende Ergebnis wird durch SW1,SW2 Status Bit analysiert. SW1:90 SW2:00 bedeutet, dass die Befehlsausführung erfolgreich ist.

4.Speicherkarte:

Die Speicherkarte gehört zur logischen

Verschlüsselungskarte, SLE4442 und SLE4448 werden häufig genutzt.

Sicherheitseigenschaften:

Bevor das Passwort korrekt überprüft wird, können alle Daten gelesen aber nicht beschrieben werden.

Nach korrekter Passwortüberprüfung können alle Daten geändert werden, inklusive dem Passwort. Jedes Byte an geschütztem Schreibbereich (die ersten 32 Bytes) können individuell geschützt, gelesen und beschrieben

werden. Nachdem der geschützte Bereich beschrieben wurde, kann der Inhalt nicht geändert werden (z.B. Kettendaten).

Programm Demo:

Schreibgeschützter Bereich (die ersten 32 Bytes) eines jeden Bytes können individuell schreibgeschützt werden. Zuvor schreibgeschützter Inhalt kann nicht verändert werden (z.B. Kettendaten). Aktuell dient der Test hauptsächlich der IC Kartenfunktion des Typs SLE4442/SLE4428. Nehmen Sie SLE4442 als Beispiel (ähnlich zu 4428).

A. Klicken Sie "IC Karteninitialisierung", nach erfolgreicher Eingabe, begeben Sie sich zur nachfolgenden Operatio

Magnetic card | CPU card | Memory card | M1 card | ULight card

init succeed...

Type: ☒ SLE4442 ☐ SLE4428

init read

4442 check write

check key read protect

show key write protect

change key error counter

key: FFFFFFFF

length: 8

input data area:

AT card

start addr: 0000 AT24C01

Length: 0008

...

init read write

B. Klicken Sie “4442 Check” um zu testen ob die IC Karte eine SLE4442 Karte ist. Wenn sollte “DetectedSuccess!” angezeigt wird,

Magnetic card | CPU card | Memory card | M1 card | ULight card |

check OK...

Type:

☒ SLE4442

☐ SLE4428

init

read

4442 check

write

check key

read protect

show key

write protect

change key

error counter

key: FFFFFFFF

length: 8

input data area:

AT card

start addr: 0000

Length: 0008

AT24C01

...

init

read

write

Dann ist die Karte eine 4442. Wenn der Test fehlschlägt, dann ist es keine 4442 Karte. Nach dem erfolgreichen Test, fahren Sie mit den nachfolgenden Operationen fort.

Magnetic card | CPU card | Memory card | M1 card | ULight card

password correct...

Type:

☒ SLE4442

☐ SLE4428

init

read

4442 check

write

check key

read protect

show key

write protect

change key

error counter

key: FFFFFFFF

length: 8

input data area:

AT card

start addr: 0000

Length: 0008

AT24C01

...

init

read

write

C. Geben Sie das Kartenpasswort in den Passworttestbereich ein, klicken Sie dann „Check Key“.

Vor den Schreiboperationen sollte zuerst das Passwort überprüft werden (das Passwort muss korrekt sein).

Das Standardpasswort wurde durch die Demo Software eingetragen, bitte klicken Sie um das Passwort direkt zu prüfen.

D. Klicken Sie “Read Password”, das Kartenpasswort wird in der Nachrichtenbox angezeigt.

E. Passwort ändern. Geben Sie das neue Passwort wie im folgenden Bild in den entsprechenden Bereich ein. Geben Sie hier das neue Passwort ein: 112233.

The screenshot shows a software interface for managing different types of cards. At the top, there are tabs for 'Magnetic card', 'CPU card', 'Memory card', 'M1 card', and 'Ullight card'. The 'Magnetic card' tab is selected. On the left, there is a 'password:' field containing '112233'. Below this, there is a 'Type:' section with two radio buttons: 'SLE4442' (selected) and 'SLE4428'. To the right of these are several buttons: 'init', 'read', '4442 check', 'write', 'check key', 'read protect', 'show key', 'write protect', 'change key' (highlighted with a red box), and 'error counter'. At the bottom left, there is a 'key:' field with 'FFFFFF' and a 'length:' field with '8'. In the center, there is an 'input data area:' with a text box containing '112233'. On the right side, there is an 'AT card' section with a 'start addr:' field (0000), a 'Length:' field (0008), and a dropdown menu showing 'AT24C01'. Below this are 'init', 'read', and 'write' buttons, and a large empty text area at the bottom.

Hinweis: Das Passwort wurde zu 112233 geändert.

Wenn Sie nun die Initialisierung starten, müssen Sie 112233 in den Passwortbereich eingeben, andernfalls wird angezeigt, dass Ihr Passwort nicht korrekt ist und die folgenden Operationen können nicht ausgeführt werden. Starten Sie bei jedem Betriebsfehler die Initialisierung erneut und fahren Sie mit anderen Operationen fort.

F. Karten lesen. Geben Sie die Datenlänge laut dem folgenden Bild in den entsprechenden Bereich ein. Klicken Sie dann „read“.

Magnetic card | CPU card | Memory card | M1 card | ULight card |

read succeed...
data:112233FFFFFFFF

Type:
☒ SLE4442
☐ SLE4428

init read
 4442 check write
 check key read protect
 show key write protect
 change key error counter

key: FFFFFFFF
 length: 8

input data area:
 112233

AT card: AT24C01

start addr: 0000
 Length: 0008

...
 init read write

G. Karten schreiben. Geben Sie die erforderlichen Daten in den entsprechenden Bereich ein (Hexadezimale Daten, Eingabe von 1234 bedeutet 0 x12, 0 x34). Klicken Sie dan „write“.

Magnetic card
CPU card
Memory card
M1 card
ULight card

write failed...

Type:

- SLE4442
- SLE4428

init
read
4442 check
write
check key
read protect
show key
write protect
error counter

key: FFFFFF
length : 8
input data area:
112233

AT card
start addr: 0000
Length: 0008
AT24C01
...
init
read
write

5. M1/RFIDTransponderkarte

1. Zu dem sehr geringen Preis, eignet sich die M1 Karte als Verbrauchsmaterial.
2. Kollisionsschutz kann in mehreren Applikationen verwendet werden.

3. Gute Verschlüsselungsleistung.

4.M1 KarteTürschloss Systemkonfiguration wurde aktualisiert – ein vollständig funktioneller Kommunikationskontroller.

5.M1 KarteTürschloss Systemkonfiguration wurde aktualisiert --- eine vollständig offene Selbstbedienung multifunktionelle Software.

Wählen Sie Sektoren und Blöcke die getestet werden müssen, geben Sie das Sektor Passwort ein, klicken Sie "find thecard.Authorization." Wenn das Passwort falsch ist, schlägt die Autorisierung fehl – Sie können den Betrieb nicht weiterführen.

M1 KarteDemo

A. Wählen Sie Sektoren und Blöcke die getestet werden müssen, geben Sie das Sektor Passwort ein, klicken Sie “Request.authorization”. Wenn das Passwort falsch ist, schlägt die Autorisierung fehl – Sie können den Betrieb nicht weiterführen. Nach erfolgreicher Autorisierung, können Sie den Betrieb weiter ausführen.

Hinweis: Alle Lese- und Schreiboperationen erfordern die Eingabe eines Passworts. Bitte vergessen Sie dieses nicht.

Magnetic card | CPU card | Memory card | BI card | Ulight card

do not detect card...

key type: ☒ A-key ☐ B-key

sector:

block:

input data area:

block 00:

block 01:

block 02:

key:

new key:

B. Klicken Sie “readblock”. Die Daten werden im entsprechenden Sektionsbereich angezeigt. Der 00 Sektor 00 Block heißt M1 Karte ID Information und alle drei Sektorblöcke – 3 sind Konfigurationspasswortinformation. Im folgenden Bild werden 00 Sektor- und 00 Blockdaten gelesen. Und das Standard Einstellungspasswort wurde durch die Software ausgefüllt.

Magnetic card

CPU card

Memory card

M1 card

Ulight card

sector 0 block 0: 04 C1 9B CC 92 08 04 00 62 63 64 65 66 67 68 69

key type:

A-key

B-key

sector: 00

block: 00

input data area:

block 00: 11223344556677889900AABBCCDDEEFF

block 01: 11111111111111111111111111111111

block 02: 22222222222222222222222222222222

key: FFFFFFFFFF

new key:

change key

Request,authorization

Off

read block

write block

read sector

write sector

C. Wählen Sie beim Schreiben von Blockdaten den erforderlichen Sektor und Block aus und geben Sie dann die erforderlichen Daten in den entsprechenden Bereich auf der rechten Seite ein. Klicken Sie nach erfolgreichem Schreiben “data block write” – die Daten können direkt gelesen werden, wie es in der folgenden Abbildung dargestellt wird:

The screenshot shows a software interface for writing data to a card. At the top, there are tabs for different card types: "Magnetic card", "CPU card", "Memory card", "M1 card", and "ULight card". Below these, a message box displays "write succeed...". On the left, the "key type" is set to "A-key" (radio button selected), and the "sector" is set to "01". The "block" is set to "00". In the center, the "input data area" contains three text boxes: "block 00:" with the value "11223344556677889900AABCCDDEEFF", "block 01:" with "11111111111111111111111111111111", and "block 02:" with "22222222222222222222222222222222". On the right, the "key:" field shows "FFFFFFFFFFFF", and the "new key:" field is empty. A "change key" button is located below the "new key:" field. At the bottom, there are several buttons: "Request, authorization", "Off", "read block", "write block" (which is highlighted with a thick black border), "read sector", and "write sector".

Magnetic card | CPU card | Memory card | M1 card | ULight card

write succeed...

key type: ☒ A-key ☐ B-key

sector: 01

block: 00

input data area:

block 00: 11223344556677889900AABCCDDEEFF

block 01: 11111111111111111111111111111111

block 02: 22222222222222222222222222222222

key: FFFFFFFFFFFFFF

new key:

change key

Request, authorization | Off | read block | **write block** | read sector | write sector

Nach erfolgreichem Beschreiben mit Betätigung, lesen
Sie dann den 1. Sektor der Blockdaten:

Magnetic card	CPU card	Memory card	M1 card	ULight card
---------------	----------	-------------	---------	-------------

sector 1 block 0: 11 22 33 44 55 66 77 88 99 00 AA BB CC DD EE FF

key type: ☒ A-key
☐ B-key

sector:

block:

input data area:

block 00:

block 01:

block 02:

key:

new key:

change key

Request,authorization	Off	read block	write block	read sector	write sector
-----------------------	-----	-------------------	-------------	-------------	--------------

D. Alle Daten im Sektor können gelesen werden (außer 00 Sektor). Wählen Sie den erforderlichen Sektor, geben Sie das Passwort des erforderlichen Sektors ein, mit Autorisierung, klicken Sie direkt “readsectordata”. Lesen Sie die Daten nach erfolgreichem Beschreiben. Der Prozess des Lesens von 00 Sektor findet wie folgt statt.

Magnetic card | CPU card | Memory card | M1 card | M2light card

read succeed...

block 00: 04 C1 9B CC 92 08 04 00 62 63 64 65 66 67 68 69
 block 01: 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 99
 block 02: 22 22 22 22 22 22 22 22 22 22 22 22 22 22 33
 block 03: 00 00 00 00 00 00 FF 07 80 69 FF FF FF FF FF

key type: ☒ A-key ☐ B-key

sector: 00

block: 00

input data area:

block 00: 11223344556677889900AABCCDDEEFF
 block 01: 11111111111111111111111111111111
 block 02: 22222222222222222222222222222222

key: FFFFFFFFFF

new key:

change key

Request,authorization Off read block write block **read sector** write sector

Schreiben Sie alle Daten einmal in den 01 Sektor.

Magnetic card | CPU card | Memory card | M1 card | ULight card

write succeed...

key type: ☒ A-key ☐ B-key

sector: 01

block: 00

input data area:

block 00: 11223344556677889900AABBCCDDEEFF

block 01: 11111111111111111111111111111111

block 02: 22222222222222222222222222222222

key: FFFFFFFFFF

new key:

change key

Request,authorization Off read block write block read sector write sector

Lesen Sie dann die Daten des 01 Sektors wie angezeigt. Die Daten wurden in den 01 Sektor geschrieben.

Magnetic card | CPU card | Memory card | M1 card | ULight card

read succeed...

block 00: 11 22 33 44 55 66 77 88 99 00 AA BB CC DD EE FF

block 01: 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11

block 02: 22 22 22 22 22 22 22 22 22 22 22 22 22 22 22 22

block 03: 00 00 00 00 00 00 FF 07 80 69 FF FF FF FF FF

key type: ☒ A-key ☐ B-key

sector: 01

block: 00

input data area:

block 00: 11223344556677889900AABBCCDDEEFF

block 01: 11111111111111111111111111111111

block 02: 22222222222222222222222222222222

key: FFFFFFFFFF

new key:

change key

Request,authorization Off read block write block read sector write sector

Passwort ändern: Wählen Sie einen Sektor, geben Sie das aktuelle Passwort, sowie das neue Passwort ein und klicken Sie dann “modifyareacode” wie es im folgenden Bild angezeigt wird: ändern Sie das Passwort von 01 zu 111111111111. Das neue Passwort ist erforderlich wenn Sie den 00 Sektor besuchen.

Magnetic card | CPU card | Memory card | M1 card | MLight card

sector 1 change key succeed...

key type: ☒ A-key ☐ B-key

sector: 01

block: 00

input data area:

block 00: 11223344556677889900AABBCCDDEEFF

block 01: 11111111111111111111111111111111

block 02: 22222222222222222222222222222222

key: FFFFFFFFFF

new key: 1111111111

change key

Request, authorization | Off | read block | write block | read sector | write sector

6. Ultralight Card

Karten oder Label von NXP MF0 IC U10 entsprechen ISO14443A. Leere Karten, Druckkarten, Papiersticker, Schlüsselanhänger, Token in verschiedenen Größen und Dicken werden angeboten. Hauptanwendung: Zugangskontrolle, Zeitwirtschaft, Meetingteilnahme, Identifikation, Logistik, industrielle Automatisierung, verschiedene Mitgliedschaften wie Kantine, U-Bahn, Bus Token, Clubs und andere Unterhaltungselektronik, elektronische Tickets, Tiererkennung, Zielverfolgung, Wäscheverwaltung, etc.

Demo Software:

Such- und Auswahloperation der Karte laut folgendem Bild:

Magnetic card | CPU card | Memory card | M1 card | ULight card

succeed,SN: 04 C1 9B CC 00 00 00

block: 00

Detect_Select read block write block

Wählen Sie den Block um die Daten zu lesen.

Magnetic card | CPU card | Memory card | M1 card | ULight card

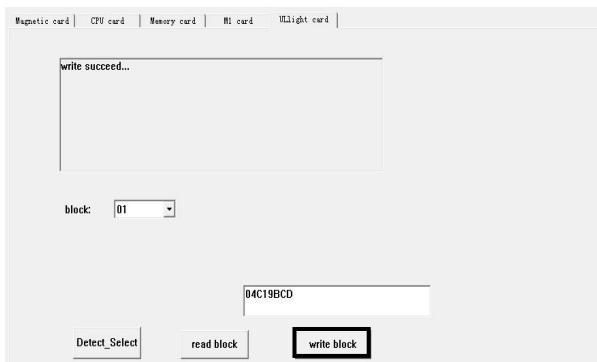
block1: 04 C1 9B CD

block: 01

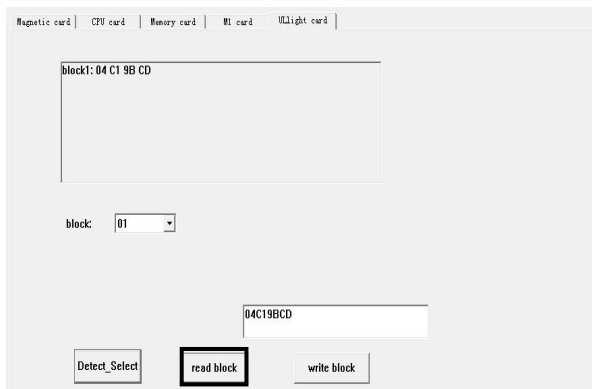
04C19BCD

Detect_Select read block write block

Schreiben Sie die Blockdaten wie im untenstehenden Bild dargestellt:



Prüfen wir die Daten die wir soeben geschrieben haben, wie im unteren Bild dargestellt:



Überblick der Features des MSR880/860

Product name	OSAYDE MSR880	Compatible Magcard	High/low resistance to magnetic stripe (300-4000 OE) all three rail, speaking, reading and writing function, support reading card
Product function	Magnetic/IC/RFID/PSAM Reader Writer	Magcard Card Compatibil	ISO/IEC 7811, AMNVA, CADNV
Product connector	USB 2.0 USB Cable L = 1600 mm	RFID Card Compatibil ity	Operating frequency: 13.56 MHz, RFID induction from 0 to 5 cm.
Product material	ABS high temperature resistant fireproof material	RFID Card Compatibil ity	ISO14443A, MifareOneS50, MifareOneS70, MF3 DESFIRE, Ultralight, ISO14443B, SONY felica
Product colour	PANTON Black	IC Card Compatibil ity	AT24C01A/24C02/24C04/24C08/24C16/AT24C64, SLE4432/4442, SLE4418/4428, ISSI 24C01A/16, ISO7816- (1-4) (T=1, T=0)
Standard Compliance	ISO7811, ISO7816, ISO14443, ROHS, CE and FCC	PSAM Card	Plug-in is used in the main support ISO7816 standard booth, booth and can be used 200000 times,
Support system	Windows 98/2000/XP/Vista/7/8/10	PSAM Communicat ion	ISO7816 T=1, T=0 The operation of CPU card
Product feature	Built-in buzzer, writing and reading lamp, provide the SDK libraries, platform can support multiple operating systems and language development		

Product name	OSAYDE MSR860	Compatible Magcard	High/low resistance to magnetic stripe (OE) 300-4000 all the three track reading function, support reading card
Product function	Magnetic/IC/RFID/PSAM Reader Writer	Magcard Card Compatibil	ISO/IEC 7811, AMNVA, CADNV
Product connector	USB 2.0 USB Cable L = 1600 mm	RFID Card Compatibil ity	Operating frequency: 13.56 MHz, RFID induction from 0 to 5 cm.
Product material	ABS high temperature resistant fireproof material	RFID Card Compatibil ity	ISO14443A, MifareOneS50, MifareOneS70, MF3 DESFIRE, Ultralight, ISO14443B, SONY felica
Product colour	PANTON Black	IC Card Compatibil ity	AT24C01A/24C02/24C04/24C08/24C16/AT24C64, SLE4432/4442, SLE4418/4428, ISSI 24C01A/16, ISO7816- (1-4) (T=1, T=0)
Standard Compliance	ISO7811, ISO7816, ISO14443, ROHS, CE and FCC	PSAM Card	Plug-in is used in the main support ISO7816 standard booth, booth and can be used 200000 times,
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Product feature	Built-in buzzer, writing and reading lamp, provide the SDK libraries, platform can support multiple operating systems and language development		

* * Dieses Handbuch versucht die Genauigkeit der Informationen wiederzugeben. Sollten sich hierin falsche Bilder oder schriftlicher Inhalt befinden, so weisen Sie uns zur weiteren Verbesserung bitte darauf hin.

Für weitere Informationen über uns, besuchen Sie bitte unsere Webseite www.osayde.com.

Vielen Dank, dass Sie OSAYDE gewählt haben.

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Standard Einhaltung:

ISO7811.ISO7816.ISO14443,ROHS, CE, und FCC

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