



Advanced Card Systems Ltd.
Card & Reader Technologies



ACR122U

NFC Reader

A Product Presentation



Rundown

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Product Overview



ACR122U NFC Reader

The ACR38 Series is a family of Contact Smart Card Readers sharing the same core.

It is the world's first CCID-compliant NFC Reader which is designed to interface with a PC for different smart card applications.





Product Features

What are the Key Features of ACR122?



Cost Effective

Smart Card Interface
PICC (Contactless)

Compact and Slim Size
98 X 65 X 12.8mm

Access Speed
Up to 424 Kbps (for Felica Tags)

Supported Card Types
ISO14443 Type A & B
Mifare Classics
FeliCa
NFC Tags

User Controllable Peripherals
Bi-Color LED
Buzzer (on request)
SAM (Optional)

Certifications/Compliance
CE, FCC, VCCI and ROHS

Protocols & Standards
ISO 14443 Parts 4 Contactless
ISO 18092 NFC
PSCS and CCID
USB V2.0 (12Mbps)

The ACS logo, consisting of the letters 'acs' in a stylized, lowercase font, enclosed within a red oval.

NFC technology enabled

- support the NFC tags
- Tag1: based on ISO14443A(96bytes), e.g.: Topaz
- Tag2: based on ISO14443A(48bytes), e.g.: Ultralight
- Tag3: based on Japanese Industrial Standard, e.g.: FeliCa
- Tag4: based on ISO14443A and B, e.g.: DESFire

Source: <http://www.nfc-forum.org/specs/>



Trendy and Slim design

with the compact and slim design of casing, ACR122 could be easily implemented into different embedded systems like kiosks, laptops, etc.

- ACR122U is built based on ISO14443 and ISO 18092
- Supports FeliCa and NFC tags
- Suitable for different applications on various NFC environments



ACR122U Architecture

ACR122U PCSC Interface

USB Interface (CCID)

PCSC Layer

ACR122U

Bi-Color LED
Buzzer (Optional)

Protocol Conversion
+
ISO 14443 and ISO 18092

RF Interface

Contactless Tag
(Built-In Antenna)

acs



Product Value

What are the Key Benefits of ACR122U?

Competitive Cost

ACR122 would be affordable in order to share and promote this technology widely to customers

Driver-Free

The CCID driver would be installed through Windows Update

PICC Support

Supports most of the ISO14443 Type A and B cards, like Mifare Classics

NFC Enabled

Supports NFC tag Type 1 to Type 4 for different applications

Ease of Integration

PCSC interface
Slim design



Product Application

In what areas can we apply ACR122U?



Automatic Fare Collection



Smart Posters



Cashless Payment



Vending Machines



Network Access



Physical Access Control



How to Use ACR122 - Overview

Sample Scenario: Simple Visitor Management



1	Column Name	Visitor Name	Position	Email	Location
2	ACS	Lincoln	FME	lincoln.zhang@acs.com.hk	HK
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					

Record Visitor Information in MS Excel or any Spreadsheet application.

Thank You!!!

More information on:

<http://www.acs.com.hk/acr122.php>

