



Advanced Card Systems Ltd.
Card & Reader Technologies



ACR122S

Serial NFC Reader

A Product Presentation





Rundown

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Product Overview





Product Overview

ACR122S Serial NFC Reader

The ACR122 Series is a family of Contactless Smart Card Readers sharing the same core. The readers are developed based on the 13.56 MHz RFID technology and the ISO/IEC 18092 NFC standard.

ACR122S, the serial interface extension of the ACR122 Series, is especially designed for embedded systems and POS terminals employing different smart card applications.

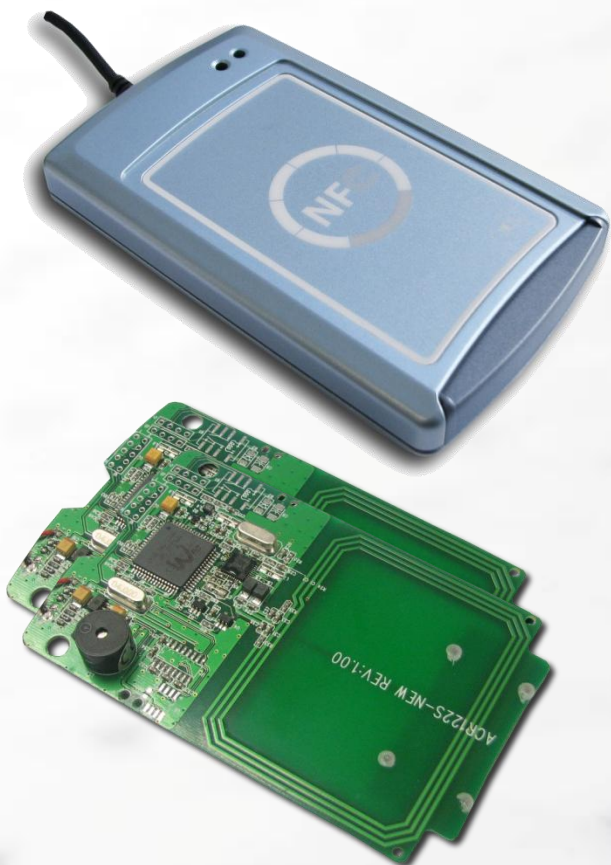


Product Features





What are the Key Features of ACR122S?



RS232 for Data Transmission
(RS485, Upon request) and
USB for Power Supply (PS/2,
Upon request)

Supported Card Types
ISO 14443 Type A & B
Mifare
FeliCa
NFC Tags

Access Speed
Up to 424 Kbps (for FeliCa Tags)

User-Controllable Peripherals
Duo LED
Buzzer
ISO 7816 SAM Slot

Anti-Collision Support
(At least 1 card is detected
when multiple cards are
presented)

Driverless Operation

Selective/Direct Card Polling
Capability
(The specific card is polled
when multiple cards are
presented)

Advanced Settings by Direct
Commands (For reduced
antenna power, faster card
processing, etc.)

Certifications/Compliance
CE, FCC, VCCI & ROHS



Product Features

NFC Technology-Enabled

NFC Tag Support

- Tag 1: based on ISO 14443 A (96 bytes), e.g. Topaz
- Tag 2: based on ISO 14443 A (48 bytes), e.g. Ultralight
- Tag 3: based on Japanese Industrial Standard, e.g. FeliCa
- Tag 4: based on ISO 14443 A and B, e.g. DESFire

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





Product Features

Responding to the Growing Demand for Contactless Applications

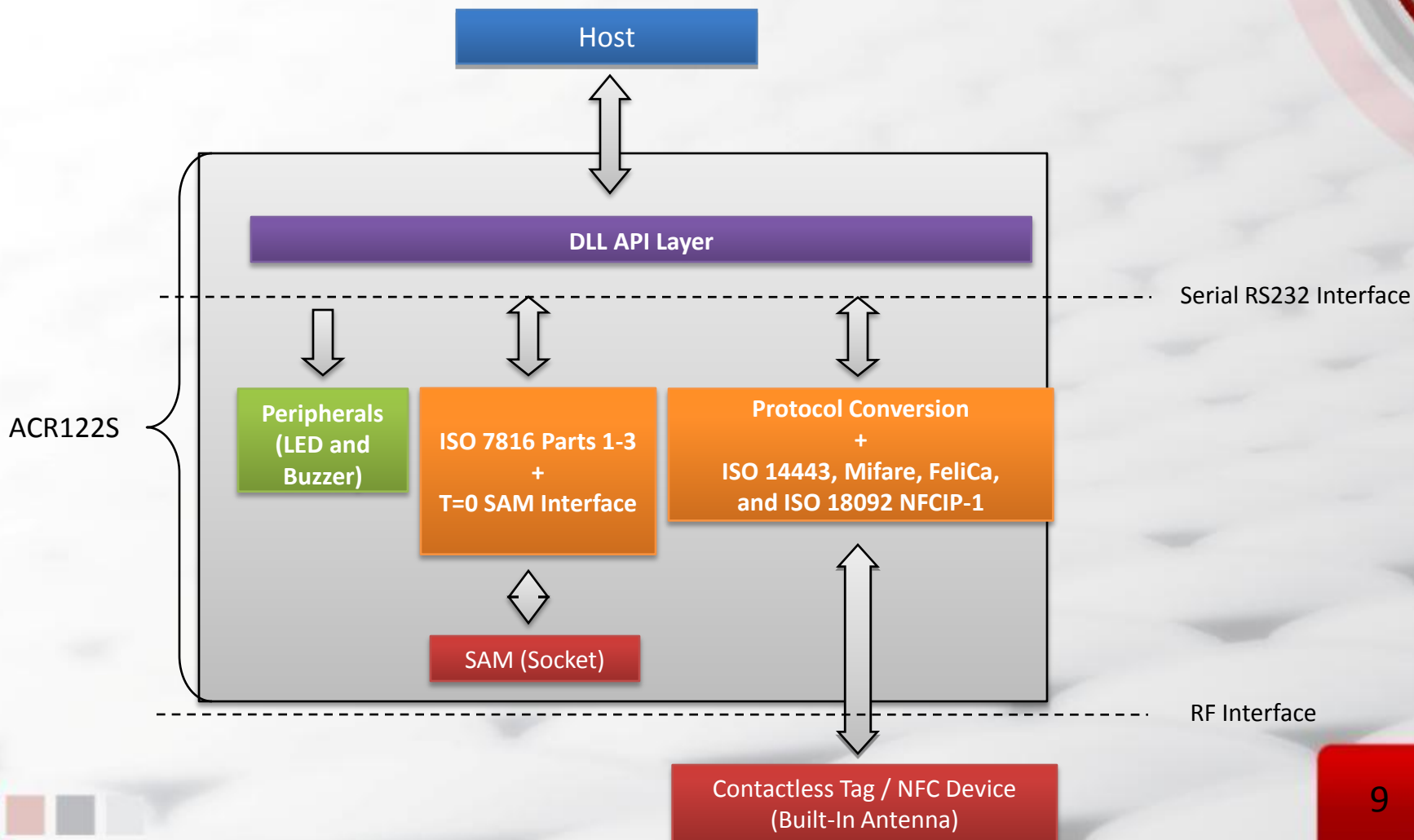
Recognizing the growing use of contactless smart card technology globally, ACR122S embraces different card types, common user scenarios and application environments.

- ACR122S supports a wide range of cards and phones (i.e. ISO 14443 Type A & B, Mifare, FeliCa, NFC).
- ACR122S supports anti-collision and direct polling on specific card type (e.g. Work with FeliCa card only even when both FeliCa and Type A cards are presented).
- ACR122S' serial interface and PCBA module availability facilitates integration into embedded systems and POS terminals.
- ACR122S comes with a built-in SAM slot to secure the overall contactless operation.





ACR122S Architecture





Product Value





What are the Key Benefits of ACR122S?

Great Convenience to Consumers

ACR122S supports anti-collision and direct polling on specific card type. Users just have to tap their purses even when they have several cards inside.

NFC-Enabled

Supports NFC tags Type 1 to Type 4 for different applications

Ease of Integration

ACR122S' serial interface and PCBA module availability, along with its driverless operation facilitates its integration into different platforms.

Great Convenience to Developers

ACR122S supports advanced settings by direct commands (i.e. Reduce antenna field strength to reduce card reading distance).

Multi-Protocol Support

ACR122S works with a wide range of contactless tags, cards and devices. Merchants do not need another reader for different cards and applications in most cases .





Product Application





In what areas can we apply ACR122S?



Automatic Fare Collection



Smart Posters



Cashless Payment



Vending Machines



Network Access



Physical Access Control





Thank You!!!

