Advanced Card Systems Ltd.
Card & Reader Technologies

ACR123S
Intelligent Contactless Reader

Product Presentation

Rundown

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Product Overview

Product Overview

ACR123S Intelligent Contactless Reader

Designed to revolutionize payment transactions, the ACR123S is an intelligent contactless reader that can be integrated to existing (Point-of-Sale) terminals or cash registers to offer the convenience of a cashless payment system.

The ACR123S is compliant and certified with major payment and safety standards such as MasterCard®, Visa, EMV Level 1 and EMV Level 2 making it compatible with EMV-based contactless payment applications such as MasterCard® PayPass™ and Visa payWave®.

Product Features

What are the Key Features of ACR123S?

Serial RS-232 interface with RJ45 connector for data communication USB Full Speed (12 Mbps) for power

Smart Card Interfaces
PICC (Contactless)
Three ISO 7816 SAM slots

ARM 32-bit Cortex™-M3 Processor

PICC Access Speed
Maximum of 848 Kbps

Anti-collision Support

Supported Card Types
MasterCard® PayPass™
Visa payWave®
ISO 14443 Part 4 Types A & B
MIFARE® series

User Controllable Peripherals
Graphical LCD (128 x 64 pixels)
Tapping Region Backlight in three Colors
Four LEDs
Speaker

Other Features
SD Card Memory Expansion
USB Firmware Upgradability
Removable and adjustable
Base Stand

Operating System Support
Windows® CE
Windows® XP and above
Mac OS X 10.5 and above
Linux®

Certifications/Compliance
ISO 14443
CE, FCC, RoHS, REACH, VCCI, KC
EMV Level 1
EMV Level 2

What are the Key Features of ACR123S?

EMV Level 1

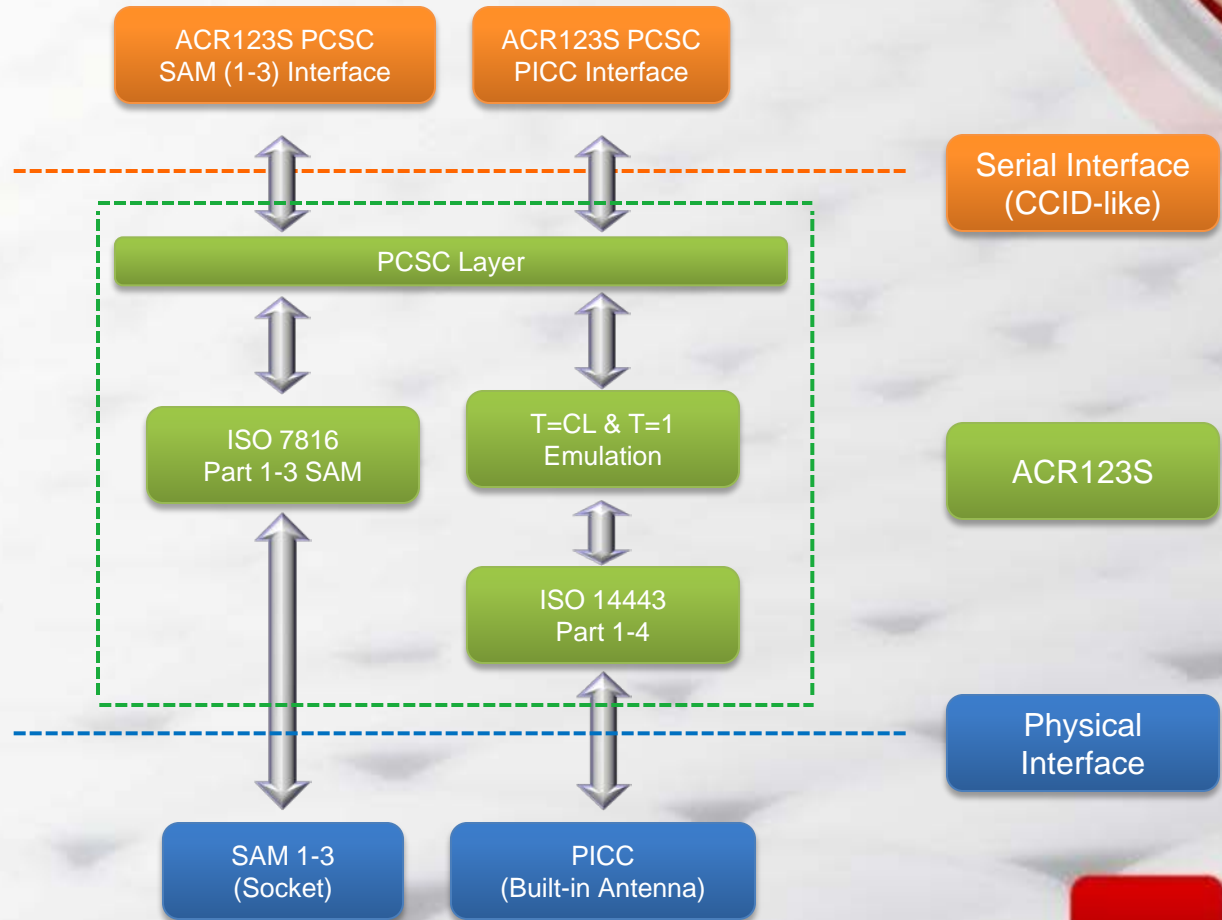EMV Level 2 PayPass™

EMV Level 2 payWave®

EMV Level 2 American Express

ACR123S Architecture

ACR123S PCSC SAM (1-3) Interface

ACR123S PCSC PICC Interface

Serial Interface (CCID-like)

PCSC Layer

ISO 7816 Part 1-3 SAM

T=CL & T=1 Emulation

ACR123S

ISO 14443 Part 1-4

Physical Interface

SAM 1-3 (Socket)

PICC (Built-in Antenna)

Product Value

What are the Key Benefits of ACR123S?

Multi-protocol Support
ACR123S supports MasterCard® PayPass™ and Visa payWave® compliant cards as well as ISO 14443 Type A and B cards.
ACR123S also supports ISO 7816 Compliant SAM Cards with T=0 and T=1 protocol.

Rich User Interaction
The large tapping region with backlight provides end-users a simple and user-friendly experience when tapping their MasterCard® PayPass™ or Visa payWave® cards on the ACR123S.

Ease of Integration
The protocol between ACR123S and PC (Host) uses CCID-like protocol commands. The communication between ACR123S and PICC is also PC/SC Compliant. This allows interoperability with different applications and platforms.

Great Convenience to Consumers
Users can complete their payment by simply tapping their cards and not rifle through their wallets for cash. ACR123S supports anti-collision and direct polling.

High-speed Transaction
ACR123S has a high communication speed of up to 848 kbps.

High Security
ACR123S has three built-in SAM slots to add a security layer for contactless operations.

Ease of Upgrade
ACR123S has quick and easy firmware upgradeability through its USB 2.0 Full Speed Interface.

Product Application

In what areas can we apply ACR123S?

e-Banking and e-Payment

Contactless Mobile Payment

Loyalty Program

e-Healthcare

Transportation

Thank you!

For more information, visit:
http://www.acs.com.hk/index.php?pid=product&prod_sections=0&id=ACR123