Advanced Card Systems Ltd.
Card & Reader Technologies

ACR1281U-C1 DualBoost II
Dual Interface Smart Card Reader

Product Presentation

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Product Overview

Product Overview

ACR1281U-C1 DualBoost II
Dual Interface Smart Card Reader

The ACR1281 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.

ACR1281U-C1 DualBoost II is the second generation of ACR128 DualBoost. Belonging, to the Contactless Product Family, it also features support for contact smart cards.

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Product Features

What are the Key Features of ACR1281U-C1?

Intelligent Support
Hybrid and Combi Cards

User-Controllable Peripherals:
LEDs
Buzzer

Smart Card Interfaces:
PICC (Contactless)
ICC (Contact)
SAM

Others/Misc:
Supports Contactless Extended
APDU

Device Firmware Upgradeable
via USB Interface

Protocols & Standards:
ISO 14443 Parts 1-4 Contactless
Native T=CL
ISO 7816 T= 0 & 1 Contact
PCSC and CCID
USB V2.0 (12 Mbps)
CE, FCC, RoHS

High-Speed Transaction
106 kbps – 848 kbps (Max)

Supported Card Types:
ISO 14443 Type A & B
Mifare, Mifare Plus, DESFire EV1
ISO 7816 Class A, B, C
Memory Cards

OS Support:
Windows 2000, XP, Vista, 7, Server
2003, Server 2008, Server 2008 R2
Linux, Mac

Product Features

Intelligent Support for Combi and Hybrid Cards

• For Combi Card, if it is inserted into the contact card slot, ICC interface will be used and PICC interface will be disabled, as well as PC/SC Polling function for PICCs.

• For Hybrid Card, if it is inserted into the contact card slot, both ICC and PICC interfaces will be used to access the Hybrid card.

Combi card = ONE IC chip is shared by two interfaces
Hybrid card = TWO IC chips for two interfaces

Product Features

Power-Saving mode

• Antenna power is only turned on if required
• Most of time the antenna is turned off
• User is able to control the period of time for turning the antenna on/off

Product Features

Auto PPS (PICC)

• Whenever a PICC is recognized by the reader:

- The reader can change the communication speed between the PCD and PICC by the maximum connection speed

- The Maximum connection speed depends on the card type

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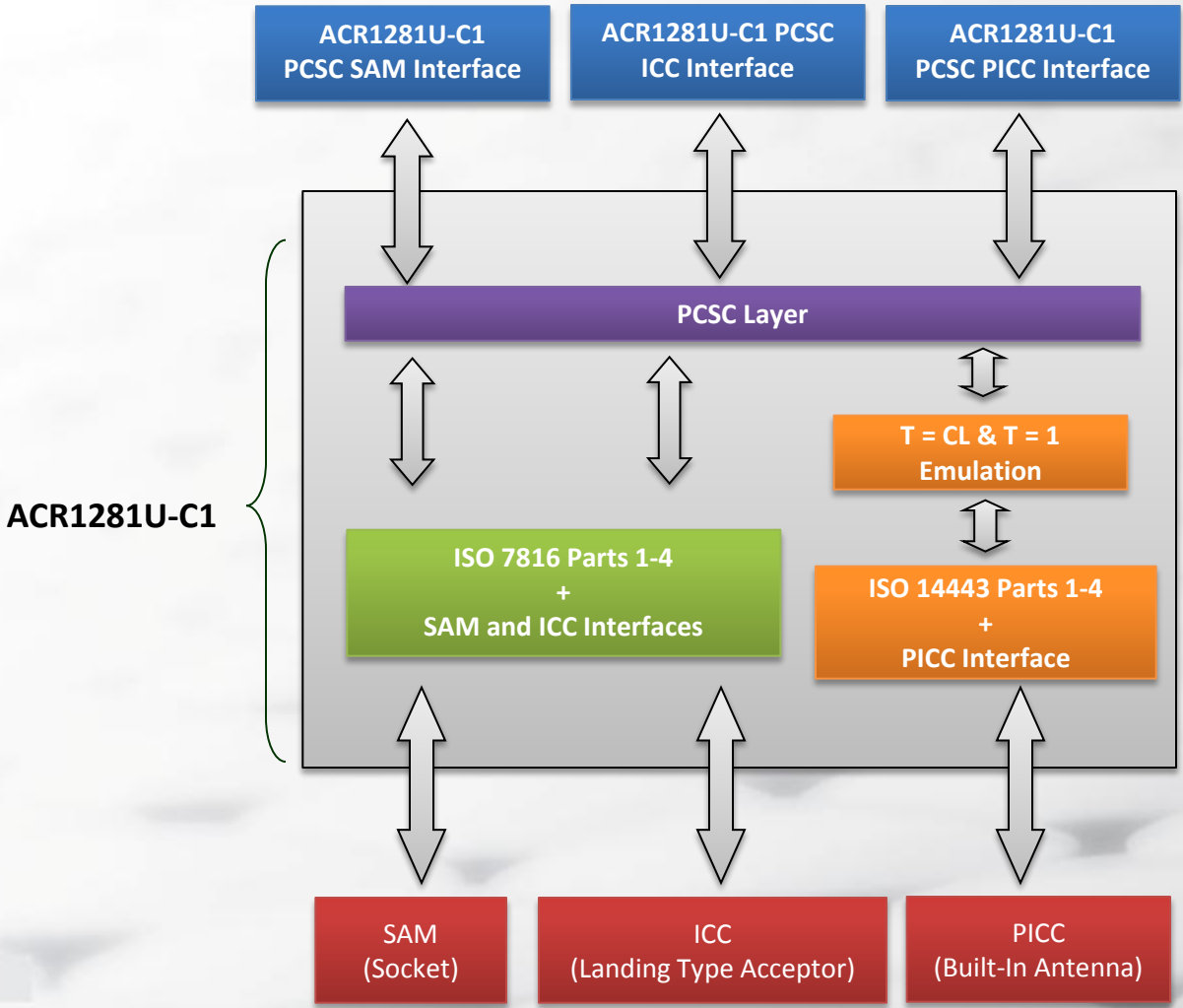Card & Reader Technologies

Product Features

- ACR1281U-C1 is built based on a more advanced architecture
- Suitable for high speed transactions
- Suitable for highly secure environment

ACR1281U-C1 Architecture

| ACR1281U-C1 PCSC SAM Interface | ACR1281U-C1 PCSC ICC Interface | ACR1281U-C1 PCSC PICC Interface |

PCSC Layer

T = CL & T = 1 Emulation

ACR1281U-C1

ISO 7816 Parts 1-4 + SAM and ICC Interfaces

ISO 14443 Parts 1-4 + PICC Interface

| SAM (Socket) | ICC (Landing Type Acceptor) | PICC (Built-In Antenna) |

Product Value

What are the Key Benefits of ACR1281U-C1?

Cost Efficient
Single reader provides additional design and cost-saving benefits for systems integrators and card users.

Contemporary Style & Durability
Card alignment tray for contactless card
Landing type contact connector
Easy to replace SAM

High Security
SAM on board (Contact Interface)

Ease of integration
PCSC interface
Native T=CL support

PICC Support
Supports both Type A and B cards

Ease of Technology (Migration/Upgrade)
Quick and easy migration from contact to contactless technology
Firmware upgradable

High-Speed Transaction
Baud rate up to 848 Kbps (contactless)

Product Application

In What Areas can We Apply ACR1281U-C1?

Transportation

Payment System (ePurse, etc.)

Campus Facility Management

Network Access

Physical Access Control

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Thank You!!!

More information on:

www.acr1281.com