



**Advanced Card Systems Ltd.**  
Card & Reader Technologies



# ACR1281U-C1 DualBoost II

## USB Dual Interface Reader

**A Product Presentation**





# Rundown

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2. Product Features
3. Product Value
4. Product Application



# Product Overview





## Product Overview

# ACR1281U-C1 DualBoost II USB Dual Interface 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.



The FIPS 201 certified 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.



# Product Features





# What are the Key Features of ACR1281U-C1?



**Intelligent Support**  
Hybrid and Combi Cards

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

Device Firmware Upgradeable  
via USB Interface

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

**Supported Card Types**  
ISO 14443 Type A and B  
Mifare® Classic, Mifare Plus®,  
Mifare® DESFire® EV1  
ISO 7816 Class A, B, C  
Memory Cards

**User-controllable Peripherals:**  
LEDs  
Buzzer

**Others/Miscellaneous**  
Supports Contactless Extended  
APDU

**Certifications/Compliance**  
ISO 14443, ISO 7816  
FIPS 201  
CE, FCC, RoHS  
PCSC, CCID  
Microsoft® WHQL

**Operating System Support**  
Windows® 2000, Windows® XP,  
Windows Vista®, Windows® 7,  
Windows® 8, Windows® Server  
2003, Windows® Server 2008,  
Windows® Server 2008 R2,  
Windows® Server 2012  
Linux®, Mac OS X  
Android™ 3.1 and above



## Product Features

### Intelligent Support for Combi and Hybrid Cards

- For combi cards, if the card is inserted into the contact card slot, the ICC interface will be used and the PICC interface will be disabled as well as PC/SC polling function for PICCs.
- For hybrid cards, if the card 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.

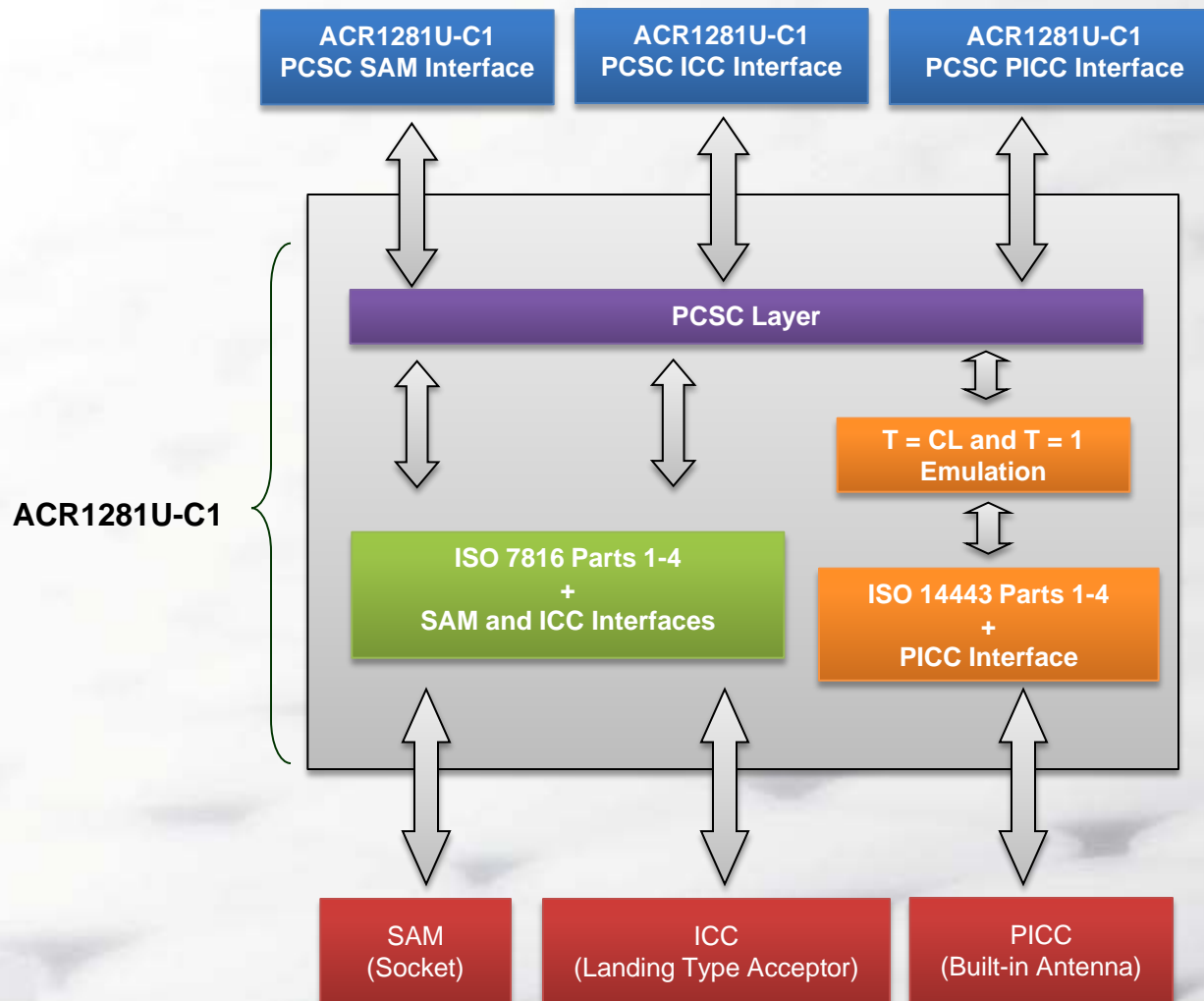


# Product Features

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



# ACR1281U-C1 Architecture





# 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.

## **High Security**

- SAM on board (Contact Interface)

## **PICC Support**

- Supports both Type A and B cards

## **High-speed Transaction**

- Baud rate up to 848 Kbps (contactless)

## **Contemporary Style and Durability**

- Card alignment tray for contactless card
- Landing type contact connector
- Easy to replace SAM

## **Ease of integration**

- PCSC interface
- Native T=CL support

## **Ease of Technology (Migration/Upgrade)**

- Quick and easy migration from contact to contactless technology
- Firmware upgradable



# Product Application





# In what areas can we apply ACR1281U-C1?



**Transportation**



**Payment System  
(e-Purse, etc.)**



**Campus Facility  
Management**



**Network Access**



**Physical Access Control**



# Thank you!



For more information, please visit:  
<http://www.acr1281.com>