



1.0. Introduction



The ACR1252U is a PC-linked NFC Reader that is NFC Forum–certified.

The ACR1252U runs on the 13.56 MHz contactless technology and supports ISO 14443 Type A and B cards, MIFARE®, FeliCa, ISO 18092-compliant NFC tags, and other NFC devices. It has an ISO 7816-compliant Class A SAM (Secure Access Module) slot that can be used together with a SAM card for key diversification and mutual authentication, providing high level of security in contactless transactions. Post-deployment firmware upgrade is also supported, eliminating the need for additional hardware modification.

The ACR1252U can use all three modes of NFC: Card Reader/Writer, Card Emulation and Peer-to-Peer Communication. These features make the ACR1252U ideal for NFC applications like Smart Posters for advertising and marketing with most NFC-enabled mobile phones and SIM cards in the market.



2.0. Features

- USB Full Speed Interface
- CCID-compliant
- Smart Card Reader:
 - Contactless Interface:
 - Read/Write speed of up to 424 Kbps
 - Built-in antenna for contactless tag access, with card reading distance of up to 50 mm (depending on tag type)
 - Supports ISO 14443 Part 4 Type A and B cards, MIFARE Classic®, FeliCa, and all four types of NFC (ISO/IEC 18092 tags)
 - Built-in anti-collision feature (only one tag is accessed at any time)
 - Supports extended APDU (max. 64 KB)
 - NFC Support:
 - Card reader/writer mode
 - Peer-to-Peer mode
 - Card Emulation mode
 - SAM Interface:
 - One SAM Slot
 - Supports ISO 7816-compliant Class A SAM cards
- Built-in Peripherals:
 - User-controllable bi-color LED
 - User-controllable buzzer
- Application Programming Interface:
 - Supports PC/SC
 - Supports CT-API (through wrapper on top of PC/SC)
- USB Firmware Upgradeability
- Supports Android™ 3.1 and later¹
- Compliant with the following standards:
 - EN 60950/IEC 60950
 - ISO 18092
 - ISO 14443
 - ISO 7816 Class A (SAM Slot)
 - NFC Forum Certification Mark
 - Felica Performance Certification
 - PC/SC
 - CCID
 - CE
 - FCC
 - RoHS
 - REACH
 - J-LIS (Japan)
 - VCCI (Japan)
 - MIC (Japan)
 - KC (Korea)
 - Microsoft® WHQL

¹ Uses an ACS-defined Android Library