Advanced Card Systems Ltd.
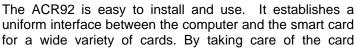Card & Reader Technologies

ACR92

Technical Specifications

Table of Contents

1.0. Introduction

The ACR92 is a specially designed smart card peripheral for notebook and portable computers and complies with all major standards including PC/SC, FCC and ISO 7816. It is also EMV Level 1 Certified which makes it suitable for applications related to banking services and credit card payments.

The ACR92 is easy to install and use. It establishes a uniform interface between the computer and the smart card for a wide variety of cards. By taking care of the card specific particulars, the software engineers need not to understand the full technical details of the smart card/computer interface to carry out the implementation of a smart card system. It also allows future firmware and application upgrade.

2.0. Features

- Read and write all microprocessor cards (MCU) with T=0 and T=1 protocols
- Support 5V and 3V smart cards
- Certificate of conformance: PC/SC, FCC, EMV 2000 Level1
- ISO7816-Class A and AB
- On-board flash provides firmware upgrades
- Transmission speed (with PC: 16Mbit/sec)
- Transmission speed (with Card: up to 344Kbit/sec)
- Win 98/ME/NT4/2000/XP/Server 2003/Vista/Linux, MacOS X
- 8MHz CLK frequency
- Sliding connectors (8 contacts)
- Min 100,000 card insertion cycles
- Microsoft PC/SC compliant application programming interface
- Stainless steel case material
- 30g weight
- Compliant to PCMCIA mechanical specifications

3.0. Typical Applications

- Home Banking and Home Shopping
- Electronic Commerce
- Network access control
- Digital signature
- Physical access control
- Identification
- Online gaming

4.0. Technical Specifications

Power supply	
Host Interface..	PCMCIA Type II
Supply voltage	5V

API	
Type	PC/SC, CT-API

Smart Card Interface	
Standard	ISO 7816 Class A and AB
Protocol……………………………………..	T=0, T=1
Smart card read / write speed...............	344,105 bps
CLK frequency	8MHz
Card connector	sliding contacts (8 contacts)
Card insertion cycles............................	100,000 insertions

Interface	
Type	PCMCIA, Plug and Play support

Physical Specifications	
Type	PCMCIA Type II card
Dimensions	85.6 x 54 x 5 mm
Case material	Stainless steel
Weight..	30g

Operating Conditions	
Temperature	0 - 50° C

Certifications/Compliance

FCC, VCCI, cULus, RoHS Compliant, Microsoft WHQL 2000, Server 2003, XP, Vista, 7

Device Driver Operating System Support

Windows ® 98, ME, 2000, Server 2003, XP, Vista, Server 2008, 7
Linux, Mac OS X