

# Advanced Card Systems Ltd.











# Card & Reader Technologies



"Asia Pacific's Top Supplier of PC-Linked Readers"

- Frost & Sullivan

Advanced Card Systems Ltd.

Email: info@acs.com.hk Website : www.acs.com.hk







# **Company Profile**



#### **Company Vision**

Smart cards and readers are no longer limited to be used in specialized applications. They have become increasingly popular in many other areas such as banking, national health cards, public transportation, government ID cards and Internet security. They have proven to add significant value to businesses by providing a more efficient, effective, reliable and secure environment to streamline their operations and this has accounted for the rapid growth in demand of smart cards and readers in the recent years. Advanced Card Systems Limited (ACS) believes this trend is set to continue and vast business opportunities will be opened up for a serious smart card and reader provider like ACS.

#### **Company Background**

Founded in 1995, ACS is a leading smart card product developer and manufacturer. The company's mission is to become the leading technology provider enabling smart card-based solutions on a global scale. ACS develops, manufactures, and distributes a wide range of high quality smart card reading/writing devices and smart card operating systems, which facilitates an easier adoption of smart card applications within different industries.

#### Customers

ACS has established excellent relationships with numerous reputable companies within the smart card industry around the world. ACS now distributes its products to over 80 countries worldwide including the Americas, Europe, Asia, and Africa. Customers include smart card companies, solution houses, system integrators, equipment manufacturers, distributors and re-sellers.

#### Chairman's Message

Advanced Card Systems Holdings Limited, a listed company on the Hong Kong Stock Exchange, is one of a select group of global companies at the forefront of the smart card revolution. It is a revolution which has seen continued rapid growth in the acceptance and use of various smart card related technologies, with analysts predicting nearly 30% compound annual growth rates in such areas as the smart card & reader market over the next few years. Smart card related technologies are now being used in fields as diverse as banking, healthcare, education, and e-commerce, with more and more users taking advantage of the efficient, fast and secure options provided by smart cards and readers.

Named in 2006 as the world's fourth and Asia Pacific's number one supplier of smart card readers used with PCs [Source: research report issued by Frost & Sullivan in 2006], ACS has the technology, expertise and global networks to bring the next generation of smart card versatility to users around the world. When ACS was established in 1995, we were among the pioneers of the industry; we now move forward with the reputation as a major international player, known for our cutting-edge design and technology, reliability, and cost-effectiveness. We are determined to stay at the forefront when it comes to providing the best possible technology and equipment to support the expanding smart card revolution.



# ACM133 Area Fingerprint Controller Module Evaluation Kit

The ACM133 area fingerprint controller module is a standalone, battery-operated lock-controller for physical access control applications. It employs the most advanced fingerprint scanning and recognition technology that can accurately authenticate the user's identity.

The ACM133 Area Fingerprint Controller Module Evaluation Kit (ACM133 EVK) is an extension of the ACM133 fingerprint controller module. It is a standalone and ready-to-use evaluation kit showcasing the application of physical access control under the concept of "fingerprint is your key". Without worries of forgetting passwords or losing keys, users can enjoy the merits of the fingerprint controller and safely protect their assets.

The ACM133 EVK shows you how ACM133 can be applied to physical access control for door locks, safes, time and attendance control devices application, etc.

#### ACM133 EVK Contents:

- ACM133 Area Fingerprint Controller Module
- CD-ROM including reference materials



ACM133S EVK





ACM133 EVK

# ACM133S Strip Fingerprint Controller Module Evaluation Kit

The ACM133S strip fingerprint controller module is a standalone, battery-operated electronic controller that regulates the strip fingerprint sensor/recognition unit and other peripheral devices. Upon successful verification, the controller will send an electrical signal to activate the door lock mechanism.

The ACM133S Strip Fingerprint Controller Module Evaluation Kit (ACM133S EVK) is an extension of the ACM133S fingerprint controller module. It is a standalone and ready-to-use evaluation kit showcasing the application of physical access control under the concept of "fingerprint is your key". Without worries of forgetting password or losing keys, users can enjoy the merits of the fingerprint controller and safely protect their assets.

The ACM133S EVK shows you how ACM133S can be applied to physical access control for door locks, safes, time and attendance control devices application, etc.

#### ACM133S EVK Contents:

- ACM133S Strip Fingerprint Controller Module
- CD-ROM including reference materials



ACR100 SDK



# ACR88 Handheld Portable Reader Software Development Kit

The ACR88 is a handheld portable reader with a built-in keypad, LC display, bi-color LED and buzzer features. It can also host the feature of non-volatile memory to give better support to your system. In addition, its on-board memory enables future firmware and application enhancements that guarantee against obsolescence.

The ACR88 is designed for multi-applications. It is capable of performing secure authentication, displaying rich information from the card and conducting online or offline transactions.

ACR88 is also programmable through ACR88 ScriptBuilder. Developers can now quickly build their own standalone applications using the easy-to-use and well-defined script commands provided by ACS. With ACR88, you can have full rein of realizing the limitless possibilities which your application will bring.

The ACR88 Handheld Portable Reader Software Development Kit (ACR88 SDK) enables effective development of customized applications and systems by using smart cards, card readers, and PCs. It can serve as an ideal training and development tool for those who are interested in knowing smart card technologies.

#### ACR88 SDK Contents:

- ACR88 Handheld Portable Reader
- 5 ACOS3 16Kbyte Microprocessor-based cards
- 5 ACOS3 16Kbyte Microprocessor-based SIM-sized plug-in cards
- CD-ROM including drivers, source codes, demo software, tools and utilities, and reference materials

# ACR100 SIMFlash Software Development Kit

The ACR100 SIMFlash is a two-in-one device functioning as a smart card reader and a mass storage device. It can read SIM-sized ISO 7816 compliant smart cards, hence it is ideal for various applications, such as GSM management software, PKI involved applications, VoIP applications, electronic payment systems, home banking, computer/network access and transportation payment systems. Having a built-in flash memory, ACR100 SIMFlash can function as a portable storage drive for any confidential files.

The ACR100 SIMFlash Software Development Kit (ACR100 SDK) contains useful tools and sample codes that will aid developers in programming ACR100-compatible applications. It contains sample codes that are written using the following programming languages: Borland Delphi 7, MS Visual Basic 6.0, MS Visual Basic .NET, MS Visual C# and MS Visual C++ 6.0. Two sample applications, ACSGina (Windows login application) and SIMmate2, are also offered for your system development.

#### ACR100 SDK Contents:

- ACR100 SIMFlash Plug-in (SIM-sized) Smart Card Reader
- 5 ACOS3 16Kbyte Microprocessor-based SIM-sized cards
- CD-ROM including drivers, source codes, demo software, tools and utilities, and reference materials

ACR88 SDK



# ACOS5 Cryptographic Smart Card Software Development Kit

ACOS5 cryptographic smart card is an advanced cryptographic smart card that fully complies with ISO 7816-1/2/3/4/8/9. It is specially designed for public-key based applications and RSA public-key cryptographic operations which is essential in smart card PKI, digital signature and high level security requirements. ACOS5 provides 32KB EEPROM of secure data storage. Typical applications include payment system, e-banking, e-commerce, stock trading, network security, corporate identity, Microsoft windows logon, PKI application, and any application that uses CSP and PKCS#11 middleware layers.

The ACOS5 Cryptographic Smart Card Software Development Kit (ACOS5 SDK) is designed for professional developers who are interested in creating cryptographic PKI applications supporting the ACOS5 Cryptographic Smart Card. The Development Kit can greatly reduce your R&D time, cost and time-to-market. Your application can be developed over supplied PKCS#11 or CSP. Development is facilitated through the use of ACS unique tool - ACS Card Tool – and it allows you to send commands directly to any PC/SC-compliant smart card readers and cards.

#### ACOS5 SDK Contents:

- 5 ACOS5 Cryptographic Smart Cards
- 5 ACOS5 Cryptographic SIM-sized plug-in Smart Cards
- ACR38 Smart Card Reader
- ACR38T Plug-in (SIM-sized) Smart Card Reader
- CryptoMate USB PKI Token
- CD-ROM including drivers, source codes, demo software, tools and utilities, and reference materials



CryptoMate Client Kit







# **CryptoMate Client Kit**

The CryptoMate is a 2-in-1 USB token, combining seamlessly the security of a cryptographic smart card chip with the convenience of a USB connector. It is always ready to be plugged into the USB port at anytime and anywhere, either for logging on Windows or paying online. Everything is well prepared for you, so that you will never get into the trouble with seeking inter-operable smart card and smart card reader!

The CryptoMate Client Kit is a secure and easy-to-use package solution to manage and protect your electronic certificate(s). All sensitive credentials and private keys are now stored inside the CryptoMate but not the vulnerable computer. As the information will never leave the USB token, ultimate security is reached.

#### CryptoMate Client Kit Contents:

- CryptoMate USB PKI Token
- CD-ROM including drivers, middleware, tools and utilities, and reference materials



# ACR120 Contacless Smart Card Reader Software Development Kit

The ACR120 contactless smart card reader is a compact and cost-effective contactless reader. It is developed on the 13.56MHz contactless smart card (RFID) technology, supporting Mifare® ISO 14443 A and B cards. Its proximity operating distance is up to 5 cm, depending on the type of contactless tag in use.

The versatile reader is available in both USB and Serial interface, which can be easily integrated into PC environment as well as other systems in a snap. It is ideal for a broad range of applications, including public transport terminal, physical and logical access control, and even vending machines.

The ACR120 Contactless Smart Card Reader Software Development Kit (ACR120 SDK) enables effective development of customized applications and systems by using Mifare® cards, contactless readers, and PCs. Software development companies can use the kit to develop systems specific to their requirements to meet customers' demanding needs or to incorporate various contactless smart card technologies into their current applications.

#### ACR120 SDK Contents:

ACR120 Contactless Reader (USB or Serial RS-232 interface)

- ACR38DT DualKey (A Key for both physical and logical access control)
- 5 1K Mifare® Contactless Cards
- 1 Combi card
- CD-ROM including drivers, source codes, demo software, tools and utilities, and reference materials

# ACR38 Smart Card Reader Software Development Kit

The ACR38 smart card reader is a USB full speed device that acts as an interface for the communication between a computer and a smart card. It is designed for the PC environment, and is the ultimate smart card peripheral for a PC. It is a low cost, yet reliable and effective smart card-to-PC interface with design focusing on convenient use and harmony with other PC peripherals in shape and color. It can be used as access control to a computer or network. It is also very simple to use and install. It is ideal for electronic commerce, home banking or e-purse facilities, secure computer access or any of a multitude of other applications.

Providing secure network computing environment by its data encryption function, the ACR38 Smart Card Reader Software Development Kit (ACR38 SDK) allows users to develop their own card-based application. With the smart card demo programs, reference materials, utility tools and sample codes stored in the SDK, developers can explore how the ACR38 and smart card are brought forth to the security world.

#### ACR38 SDK Contents:

- ACR38 Smart Card Reader
- ACR38T Plug-in (SIM-sized) Smart Card Reader
- ABR08LS Balance Reader
- 5 ACOS3 16Kbyte Microprocessor-based cards
- 5 ACOS3 16Kbyte Microprocessor-based SIM-sized plug-in cards
- 5 SLE 4428/5528 memory cards
- 5 SLE 4442/5542 memory cards
- CD-ROM including drivers, source codes, demo software, tools and utilities, and reference materials



ACR120 SDK







AET60 SDK

# **AET63 BioTRUSTKey Software Development Kit**

The AET63 BioTRUSTKey combines the highly reliable silicon fingerprint sensor with a smart card reader to achieve ultra-secure authentication. This compact device is a fully integrated fingerprint-based biometric subsystem that combines fingerprint sensing and algorithm processing. All biometric algorithm processing is carried out in a custom chip installed at the back of the silicon fingerprint sensor.

With the AET63 BioTRUSTKey Software Development Kit (AET63 SDK), you have all the hardware and software you need to add biometric security to your custom applications. Since the fingerprint templates are stored inside a smart card, you can improve security in your applications while retaining ease-of-use. This is because both the template extraction and matching algorithms run within the secure environment of the device instead of a PC, which is much less secure. This also enhances portability and eliminates privacy concerns.

#### AET63 SDK Contents:

- AET63 BioTRUSTKey Smart Card/Fingerprint Reader
- 10 ACOS3 16Kbyte Microprocessor-based cards
- CD-ROM including drivers, source codes, demo software, tools and utilities, and reference materials

# AET60 BioCARDKey Software Development Kit

By combining a fingerprint sensor using the Active Capacitive Sensing technology with a smart card reader, the AET60 BioCARDKey ensures the highest quality fingerprint images to be used with full-sized smart cards.

Since fingerprints cannot be lost, duplicated, stolen or forgotten, the product range is widely regarded as providing a more reliable and convenient solution than traditional security devices. With the AET60 BioCARDKey, security is improved further by storing the fingerprint templates inside a smart card instead of the PC.

As a proven solution for biometrics, the AET60 BioCARDKey is an ideal device for a broad range of applications including e-business, network access, home banking, secure e-mail, file encryption, and government security.

With the simple Application Programming Interface, the AET60 BioCARDKey Software Development Kit (AET60 SDK) facilitates designers to integrate the fingerprint authentication features to their applications. Thus, the developer can build applications very quickly without an in-depth knowledge of biometrics.

#### **AET60 SDK Contents:**

- AET60 BioCARDKey Smart Card/Fingerprint Reader
- 10 ACOS3 16Kbyte Microprocessor-based cards

 $\bullet$  CD-ROM including drivers, source codes, demo software, tools and utilities, and reference materials



AET63 SDK

