



Advanced Card Systems Ltd.
Card & Reader Technologies



AET62

NFC Reader with Fingerprint Sensor

Product Presentation



www.acs.com.hk



Rundown

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4. Product Application





Product Overview





Product Overview

AET62

- Belongs to the Smart Card-Fingerprint Readers product line
- Contactless smart card-based reader with fingerprint sensor that can easily be integrated into a simple yet secure biometric system





Product Overview

AET62



Secure Authentication

AET62 combines a silicon swipe fingerprint sensor and a contactless NFC smart card reader for highly secure authentication in contactless applications.

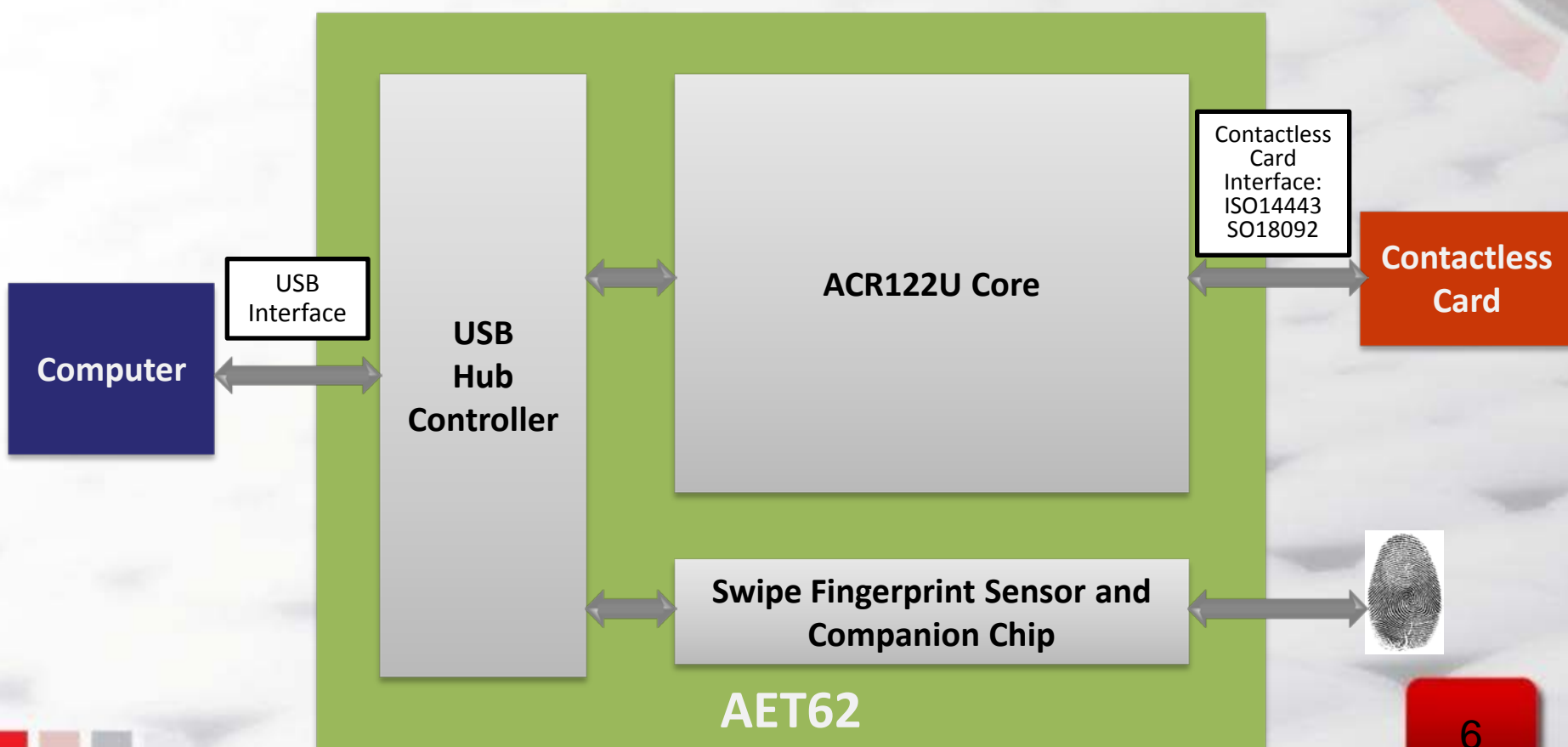
High-level Security

The default algorithm of AET62 performs template extraction & matching within the device itself – not in the PC that is vulnerable to security attacks.



Product Overview

AET62 System Block Diagram





Product Features



What are the Key Features of AET62?



Fingerprint Image Accuracy

- UPEK's TouchStrip TCS4 Sensor with 508 dpi image resolution

3rd Party Fingerprint Algorithm Support

(e.g. Precise Biometrics)

Enhanced Security

- Match-on device authentication using default algorithm
- Encrypted fingerprint template stored in smart card
- Optional SAM slot

Ease of Application Development

- Compliant with BioAPI and Windows Biometric Framework
- Possible independent use of Smart Card Reader and Fingerprint Sensor

Supported Card Types

- ISO 14443 Types A & B
 - Mifare
 - FeliCa
- NFC Tags

Certifications/Compliance

- ISO14443 Parts 1-4
- ISO/IEC 18092
 - PC/SC
 - BioAPI 1.1
- Windows Biometric Framework
- CE, FCC, RoHS & WHQL

Supported OS

- Windows XP, Vista & 7
- Windows Server 2003, Server 2008 & Server 2008 R2
- Linux



Product Features

UPEK TCS4 Sensor

- Active sensor size: 9.6 x 0.2 mm
- Array size: 192 x 4 pixels
- Image resolution: 508 DPI high-resolution imaging
- Patented TouchStrip CMOS active-pixel technology:
 - Ability to capture wider range of fingerprints according to different environmental conditions and skin types
 - Ability to capture the best-quality fingerprint image



Match-On Device Authentication

- Using the default algorithm, all biometric algorithm processes (e.g. fingerprint template extraction & matching) happens within the device through the TouchStrip chipset (which is a combination of a swipe sensor and its companion chip).





Product Features

Ease of Application Development

- Designers can integrate fingerprint authentication into smart card-based applications without an in-depth knowledge of biometrics
- Compliance with the BioAPI specification provides interoperability between different software applications and biometric technologies developed by different vendors
- Compliance with Windows Biometric Framework enables designers to manage different biometric devices in Windows and provides software developers with a common platform and interface



- Applications can be programmed to accept either 1 or both of the 2 inputs of AET62: smart card and/or fingerprint
- Easy adoption / expansion of existing systems utilizing 3rd party fingerprint algorithms (e.g. Precise Biometrics) is supported by AET62



Product Value





What are the Key Benefits of AET62?

High-Level Security

- Swipe sensors are immune to anti-security threats posed by the reactivation of latent image (e.g. fabrication of false fingerprints by breathing or dusting on the sensor surface)
- AET62 is more secure than smart card-alone or fingerprint-alone readers as it provides 3-factor authentication that verifies:
 - Something “you have” (smart card)
 - Something “you know” (PIN/password)
 - Something “you are” (fingerprint)





What are the Key Benefits of AET62?

More Efficient & Cost-Effective than Conventional Fingerprint Scanners

- By storing fingerprint templates in smart cards, matching involves checking the live fingerprint against the stored template, eliminating the need for a complex back-end system
- Users carry fingerprint templates with them & fingerprint verification authenticates only the smart card owner, eliminating privacy & security concerns posed by lost or stolen cards & dummy fingerprints.



What are the Key Benefits of AET62?

Simple Fingerprint System

- Only AET62, a PC & contactless smart cards (e.g. Mifare cards) are needed
- No need for external hardware & software
- No need for super-server, mega-database & complicated software
- Readily deployable in both new & existing, large & small, online & offline projects
- Undemanding system administration & maintenance



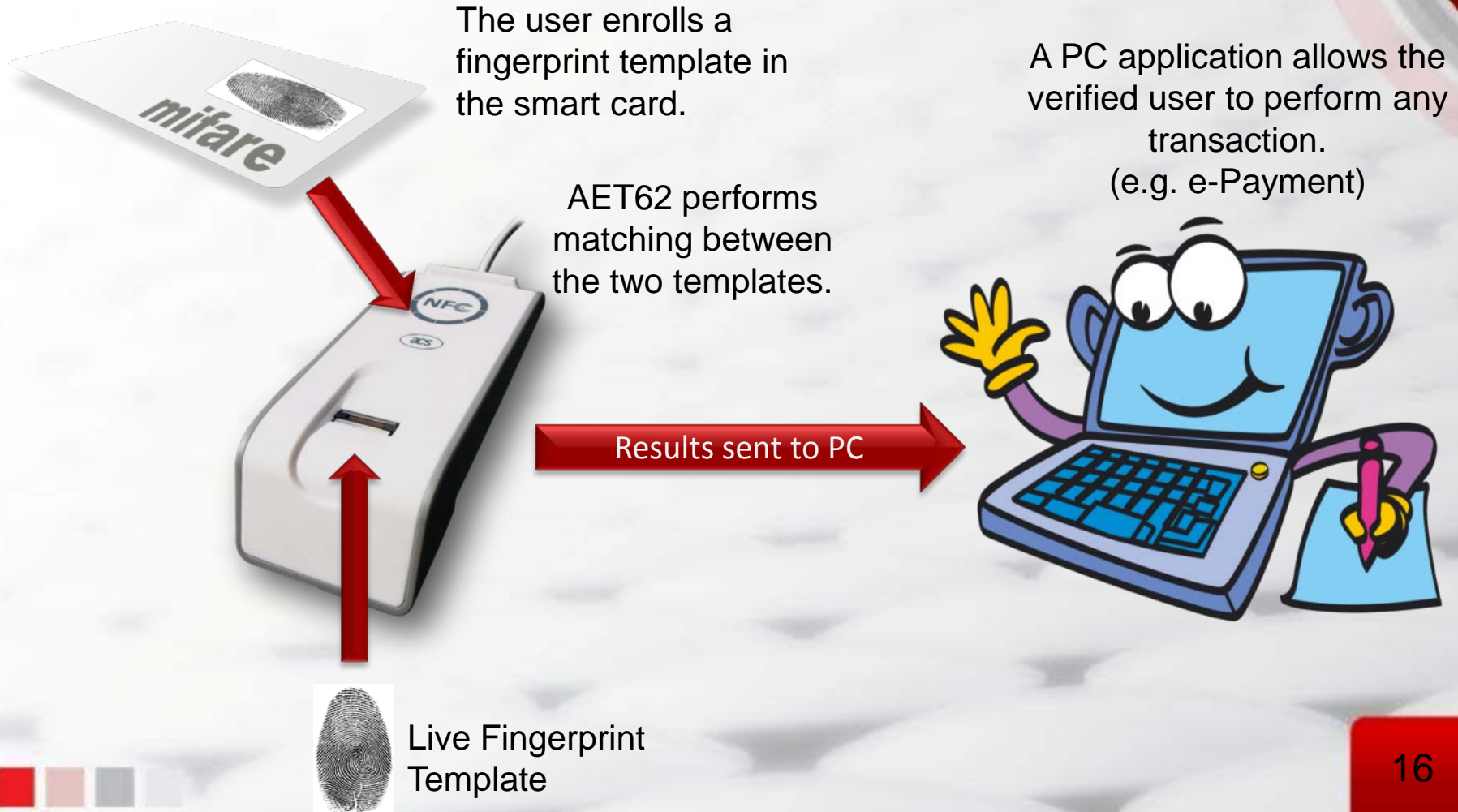


Product Application





How does AET62 work?





In what areas can we apply AET62?



e-Commerce



e-Payment



File Encryption



e-Healthcare



e-Government



Logical/Physical Access





Thank You!!!



More information on:

http://acs.com.hk/index.php?pid=product&prod_sections=0&id=AET62

<http://www.aet62.com>