

AET63 BioTrustKey



TECHNICAL SPECIFICATIONS

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1.0 Introduction



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

Our biometric products leverage ACS technology and experience in implementing readers in smart card based authentication programs. By partnering with leading biometric sensor and algorithm supplier, we are providing a high level of security and convenience for applications in the government, corporate, financial and healthcare sectors.

With BioTRUSTKey, you have all the hardware and software you need to add biometric security to your custom applications. For PC applications, the BioTRUSTKey provides the highest level of security. This is because both the template extraction and matching algorithms run within the device itself - not in the PC.

The BioTRUSTKey significantly reduces development time and cost. Therefore new product design can be validated quickly and accurately. With the simple Application Programming Interface (API) provided, designers can easily add fingerprint authentication and smart card features into their products/applications. A system can be developed very quickly, without an in-depth knowledge of biometrics.

2.0 Features

- USB Plug and play interface
- Require no additional power supply
- High-resolution 508 DPI imaging
- Utilize CMOS active capacitive pixel-sensing technology, resulting in quality of fingerprint image capture
- The template extraction and matching algorithms run within the device itself - not in the PC
- Large active sensor size – 12.8 mm x 18.0 mm
- Supports all micro-controller cards, with T=0 or T=1 protocols
- Supports one SAM card (optional)

3.0 Typical Applications

- Remote Electronic Voting
- Secure E-commerce
- Secure Home-banking
- Computer System Logon
- Healthcare applications
- E-government applications

4.0 Supported Card Types

MCU Cards

The AET63 can operate MCU card with T=0 and T=1 protocol.

6.0 Software Development Kit Specifications

AET63 SDK is a complete package containing all the vital components required for smart card/finger print application development. It provides developers with a convenient and effective way to incorporate fingerprint and smart card authentication as part of their solutions.

Using the simple Application Programming Interface, designers can easily integrate fingerprint authentication features into their applications. The interface can be developed quickly without any in-depth knowledge of biometrics.

Package Contents

- AET63 BioTRUSTKey - A smart card reader integrated with fingerprint sensor
- 10 ACOS1 8Kbyte Microprocessor-based Card
- Installation and operation CD-ROM (including drivers, source codes, and demo software)

The SDK CD-ROM includes:

- Demo – Post-enrollment, the user can access 3 demo programs: ID, Door and Bank, demonstrating the variety and range of application of BioTRUSTKey.
- Reference Manuals
- Samples – Sample codes are given Delphi, Visual Basic and Visual C
- Utility Tools – Besides CardTools to test the protocol transfer between the reader and the PC,
- FormatACOS and TFM EEPROM Loader are included to initialize your ACOS1 cards, as well as the EEPROM in the TFM.
- SDK User Manual

