AET63 BioTRUSTKey Software Development Kit

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

With BioTRUSTKey, 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 for your next project 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.

Since fingerprints cannot be lost, duplicated, stolen or forgotten, the biometric security option is proven to provide a more reliable and convenient solution than traditional security devices. Not only can users carry their fingerprint templates with them, they can also be assured that they are the only ones authorized to use their smart cards, should they become lost or stolen.

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 suppliers, we are providing a high level of security and convenience for applications in the government, corporate, financial and healthcare sectors.

Using a simple Application Programming Interface, it is extremely easy for designers to integrate the fingerprint authentication features into their applications. The developer can develop the interface very quickly without in-depth knowledge of biometrics.

Contents	
AET63 Finger Print Scanner with Smart Card Readers:	• Integrated fingerprint scanner/smart card reader • USB interface • Requiring no additional power supply • High-resolution 508 DPI imaging • Utilizes CMOS active capacitive pixel sensing technology, resulting in high quality fingerprint images in any environment • The template extraction and matching algorithms run within the device itself - not in the PC • Large active sensor size - 12.8mm x 18.0mm • Smart Card Reader: ISO 7816-3 and PC/SC compliant Supports all micro-controller cards, with T=0 or

	T=1 protocols
10 Test Cards	• 10 x ACOS2 microprocessor-based card with DES/Triple DES and MAC security capability, 8K EEPROM for user data
CD-ROM	• **Software drivers - to support Windows 98, Me, 2000, and XP** • **Demo programs - to showcase smart card features and capabilities** o Post-enrollment, the user can access 3 demo programs after registration: ID, Door and Bank, demonstrating the variety and range of application of BioTRUSTKey. Only authorized users can access the system provided that the fingerprint stored in the smart card matches. • **Evaluation software - PCSC CardTool and PCSC Learning Tool & Perfect Print Testing Tool** o Besides CardTool to test the protocol transfer between the reader and the PC, FormatACOS and TFM EEPROM Loader are included to initialize your ACOS2 cards, as well as the EEPROM in the TFM. • **Sample code written in various programming languages** o Used to demonstrate basic commands used to communicate with the card and reader o Visual Basic 6, Visual C++, Delphi