

Demonstrate your Commitment to Superiority with Identix® BioEngine® Technology...

...and join the world's leading system integrators incorporating cutting-edge fingerprint solutions. With BioEngine® Software Development Kit (SDK), you can increase the security and efficiency of your ID system and other verification applications with fingerprint technology that is accurate and easy to implement. And, by working with the industry leaders, you can have confidence in our 20+ years experience and unmatched professional services team.

BIOENGINE FACTS

- More than 100 million templates issued worldwide
- Consistently a top performer in independent government tests
- Provided as easy-to-integrate software modules
- Interfaces with Identix® BioTouch® and approved third party devices

SUPERIOR TECHNOLOGY

Identix BioEngine technology is a proven, minutiae-based algorithm that analyzes the fingerprint image for endings, splits and bifurcations in the ridge patterns. The strength of the BioEngine algorithm is its ability to discern fingerprint images over an extended period of time. For this reason, millions of people around the world every day use systems enabled by BioEngine that help them access their bank records, receive pension benefits, secure patient records and protect against identity and voter fraud.

COMMITMENT TO SERVICE

Working with Identix means more than superior technology. System integrators and developers are supported by our professional services group, which provides a full range of offerings that include exceptional RFI and RFP assistance, integration and implementation support, and custom solutions design. The Identix professional services team includes personnel specializing in sales engineering, custom solutions, integration and consulting, and program management. This group of seasoned professionals is prepared to provide pre-implementation, implementation and post-implementation support to meet your business objectives. Our RFI and RFP support is based on extensive experience in large-scale biometric projects and customer knowledge, proof-of-concept support with equipment and staff expertise.



BACKED BY EXPERIENCE AND LEADERSHIP

Founded over twenty years ago as one of the first fingerprint companies on the market, Identix is highly regarded as a leader in the biometrics industry. With fingerprint deployments worldwide, Identix has the broadest range of experience in developing, installing and supporting fingerprint matching applications.

Some examples include: voter registration programs in Costa Rica, Panama, and Dominican Republic; driver license programs in the U.S., India and El Salvador; secure banking applications in Brazil, Colombia, U.K. and Indonesia; and healthcare organizations across the United States.

SDK COMPONENTS

- Input sub-system: Provides an interface with a fingerprint input device and helps to ensure a high quality fingerprint image.
- Feature extraction algorithm: Creates a fingerprint description or template out of the original fingerprint image.
- Fingerprint matching and storage: Compares two fingerprint templates and determines their similarity. Also stores the fingerprint templates in a database, if desired.

EASY-TO-INTEGRATE BIOENGINE COMPONENTS

BioEngine technology is packaged into an easy to use SDK that enables software developers and system integrators to integrate fingerprint matching technologies with any Microsoft Windows-based application.

- The BioEngine Verification SDK is designed for one-to-one (authentication) applications; comparing two minutiae templates and returning a score. Users set a threshold that tells the system what constitutes a match.
- The BioEngine Identification SDK is designed for one-to-many applications; comparing a minutiae template against records in BioEngine's own minutiae template database.

The database structure optimizes the minutiae templates for rapid searching and allows BioEngine to handle all aspects of implementation of a pipelined identification search, including the use of indexing and pattern classification to speed the search.

BioEngine SDK Libraries

Framegrabber Library	Integrates a fingerprint reader into a fingerprint application.
Quality Control Library	Helps to ensure the captured images are high quality and that the finger is correctly placed on the reader.
Fingerprint Processing Library	Rapidly extracts minutiae information from a fingerprint image and produces an accurate and compact fingerprint template.
Search Library	Performs both verification (one-to-one matching between two fingerprint templates) and identification (one-to-many matching between one fingerprint template and a database of templates).
Image Input/Output Library	Provides disk and memory input-output operations for images.
Visualization Custom Control	Provides the ability to easily display captured fingerprint images on the screen.
BioAPI Library	Provides the capability for Biometric API compliant applications to use the BioEngine verification technologies, including fingerprint capture, process and match.

Also included in the BioEngine SDK are sample applications in Microsoft Visual Basic and Visual C++. These samples provide code to capture a fingerprint from a reader, display the fingerprint and the minutiae, extract minutiae, evaluate the print quality, and perform one-to-one matching.

The BioEngine SDK works with Identix single fingerprint readers and supported 3rd party fingerprint readers, and is compatible with Microsoft Visual C++ and Microsoft Visual Basic development systems.

Technical Specifications

Platforms Supported	Windows 2000/NT/XP
Input	Works with Identix BioTouch® and DFR fingerprint readers and Identix approved third party devices
Speed	Template creation: Less than one second Matching: Less than 50 milliseconds
Template Size	Variable. Can be as small as 125 bytes. Average size 600 bytes.

Included in the Package

- BioEngine libraries
- Sample applications
- Developer's Guide (printed and electronic copies)

System Requirements

- Microsoft Windows NT, Windows 2000, or Windows XP operating system
- Develop with Microsoft Visual C++ 6.0 or above or Microsoft Visual Basic 5.0
- 500 MHz Pentium PC (or higher)
- 125 MB available hard disk space
- CD-ROM drive



www.identix.com • info@identix.com

5600 Rowland Road
Minnetonka, MN 55343 USA
Phone: +1 952-932-0888
Fax: +1 952-932-7181

3975 Fair Ridge Drive
Fairfax, VA 22033 USA
Phone: +1 703-259-5000
Fax: +1 703-259-5001

Identix, the Identix logo, Empowering Identification, BioEngine and BioTouch are registered trademarks or trademarks of Identix Incorporated. All other company and product names may be registered trademarks or trademarks of their respective owners. Copyright 2004 Identix Incorporated. All rights reserved. Printed in the USA.
REV 12/04