

## PRODUCTS

# Fingerprint Template Generator Software Development Kit (SDK)



**SDK enables fast and accurate minutiae fingerprint template generation as a basis for 1-to-1 and 1-to-multiple matching purposes.**

**MINEX Certified & PIV Compliant**



The Cross Match Technologies Fingerprint Template Generator SDK can be used to produce standards compliant fingerprint minutiae data from standard image file formats. The template generator is one step in providing easy utilization of your Cross Match fingerprint scanners for a wide variety of applications such as computer access control, check cashing fraud prevention, secure area access control, welfare fraud

prevention, driver's license verification, and border entry/exit control. The minutiae output format follows the ANSI-INCITS 378 specification and provides an interoperable template that can be used to match for identification and verification purposes. A number of vendors, including Cross Match Technologies, have a matching SDK that can be used to provide 1:1 (verification) and 1:N (identification) template matching.

# Fingerprint Template Generator SDK

## How It Works

Minutiae are specific points in a fingerprint image. The two main types are known as ridge endings and bifurcations. The number and location of these minutia points vary from finger to finger in any particular person and from person to person for any particular finger. It is this set of minutiae for each finger that allows fingerprints to be unique for each individual. The number and precise locations of the minutiae are recorded, in the form of numerical coordinates, for each finger. The result is an output that can be saved and stored in a computer database. This information then allows a computer to rapidly compare this template with that of anyone else in the world whose finger image has been saved.

The Fingerprint Template Generator, using an image processing algorithm, will find these unique minutiae points and provide them in a standards compliant fashion. The output is provided as either:

- ANSI-INCITS 378 - (<http://www.incits.org>)
- AAMVA - American Association of Motor Vehicle Administrators, Version 1.0 minutia. (<http://www.aamva.org>)

The ANSI-INCITS 378 is the default and preferred format as it was designed to provide interoperable templates.

## Fingerprint Template Generator SDK Benefits

- Standards-based
  - Produces high quality ANSI/NIST compliant templates
  - Also accommodates older AAMVA standard for backwards compatibility
- Fast – Image extraction times of < 1 second on typical desktop PC
- Easy integration – detailed documentation, sample applications and customer support
- NIST certified, PIV compliant during MINEX04 test

## Provides

The Fingerprint Template Generator SDK is provided as both a Microsoft Windows C-language DLL and a corresponding Microsoft .NET interface library. This allows your programs easy access to the generated templates through all Microsoft Windows programming environments. Extensive help files and sample applications are also provided in the SDK to help get your application developers up to speed quickly.

## Technical Requirements

- Microsoft Windows operating system - Windows 2000 or better
- C development system, such as Microsoft Visual C++

- A .NET version of the library is also provided. If .NET support is required you must have Visual Studio .NET 2003 or later development environment installed
- Versions for Windows CE, Linux and Solaris operating systems are also available.

## Customer Support

Cross Match views our customers and integration partners as critical to our success. We offer 24 x 7 helpdesk support at 1-877-474-0228. In addition, our top-notch engineers are available to assist you with your integration initiatives.



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