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Fingerprint Security Solutions



BioMini Combo



SFU-S20



BioMini Slim

Fingerprint Security Solutions

Faster, Smarter & Versatile Fingerprint Security Solutions

Suprema's fingerprint-based security solutions provide high level biometric security for desktops as well as complex network environments. Our latest range of high-performance fingerprint USB scanners are supported by powerful software development kit (SDK) which features the world's best Suprema fingerprint algorithm.

Suprema offers an unrivalled versatile development platform for leading security companies, system integrators and hardware manufacturers.

BioMini Slim

FBI PIV and Mobile ID FAP20 Certified USB Fingerprint Scanner

BioMini Slim has specially been designed to provide a high level security solution for PC based identity access management solutions. With IP65 grade dust and waterproof form factor, BioMini Slim provides a sleek ergonomic design with the latest 500dpi slim optical sensor, which boasts a large platen size for easy and reliable fingerprints capturing as well as advanced LFD (Live Finger Detection) technology.

BioMini Slim maintains the highest standards and has received both FBI-PIV and mobile ID FAP20 certifications which enable the users to capture any types of fingerprints even under the direct sunlight environment. Combining with its comprehensive SDK solution, BioMini Slim offers superior hardware and software compatibilities which could be an ideal platform for developers.

BioMini Slim Features



- FBI PIV/FIPS 201 and FBI Mobile ID FAP20 certificates
- NIST certified interoperable image & template format standards (ANSI-378/ISO 19794-2, ISO 19794-4)
- Image Compression Standard (WSQ)



- Advanced Live Finger Detection (LFD) Technology



- World's best performing fingerprint algorithm : Top results in NIST MINEX tests and FVC
- FIPS 201 certified template extractor and matcher
- Fast matching speed : 100,000 match / second (with Intel Core2Duo)



- USB 2.0 high speed interface
- Supports multiple device handling
- Automatic finger placement detection
- Ergonomic Indication LED



- 500 dpi optical fingerprint sensor
- Rugged IP65 dust and waterproof form factor
- Large Platen Size: 0.71" X 1.0" (18.0mm x 25.4mm) (FAP20 standard: 0.6" x 0.8")



- BioMini SDK for easy application software development
- Supports MS Windows / Linux
- Supports multiple programming languages : VC++, VB, VB.NET, C#, Java
- Multi-threaded code design fully utilizing multi-core CPU power



- Works under direct sunlight



FRONT VIEW



TOP VIEW

BioMini Slim Specifications

Fingerprint Sensor	• Optical
Resolution	• 500 dpi / 256 gray
Platen Size	• 18.0mm x 25.4mm (0.71" X 1.0")
Sensing Area	• 17.0mm x 25.0mm (0.67" x 0.99")
Image Size	• 320 x 480 pixels
Interface	• USB 2.0 High Speed
O/S	• Microsoft Windows / Linux
Operating Temp.	• -10 ~ 50°C
Certification	• CE, FCC, KCC, CB, WHQL, USB-IF, WEEE
Size (W x L x H)	• BioMini Slim : 82.0mm x 57.7mm x 27.0mm SFU-S20 : 66.5mm x 40.0mm x 20.8mm



SFU-S20 (OEM Module)

BioMini Combo

Contact Smart Card Reader with USB Fingerprint Scanner

Suprema BioMini Combo has been designed specially to provide high leveled dual-authentication security solution for desktop PC and complex network environments. With its proven reliability, BioMini Combo features advanced live finger detection (LFD) technology.

Packed in an ergonomic design, it features Suprema's latest slim 500dpi optical sensor with large platen size for easier capturing and contact smart card reader for stronger authentication. Combined with its comprehensive SDK solution, BioMini Combo offers superb hardware and software compatibility makes it an ideal platform for developers.

BioMini Combo Features



- NIST certified interoperable image & template format standards (ANSI-378 / ISO 19794-2, ISO 19794-4)
- Image Compression Standard (WSQ)



- Advanced Live Finger Detection (LFD) Technology



- World's best performing fingerprint algorithm : Top results in NIST MINEX tests and FVC
- Template extractor and matcher
- Fast matching speed : 100,000 match / second (with Intel Core 2 Duo)



- USB 2.0 High speed interface
- Supports multiple device handling
- Automatic finger placement detection
- Ergonomic indication LED



- 500 dpi optical fingerprint sensor
- Large Platen Size : 0.71" X 1.0" (18.0mm x 25.4mm) (FAP20 standard: 0.6" x 0.8")



- Compliant with ISO 7816 Contact Smartcard and EMV 2000 version 4.1
- Transmission rate : 2 Kbps to 500 kbps
- Supports 5V (55mA), 3V (50mA), 1.8V (20mA) Smart Card
- Supports SAM Slot (Optional)



- BioMini SDK for easy application software development
- Supports MS Windows / Linux
- Supports multiple programming languages : VC++, VB, C#, VB.NET, Java
- Multi-threaded code design fully utilizing multi-core CPU power



BioMini Combo Specifications

Fingerprint Sensor	• Optical
Resolution	• 500 dpi / 256 gray
Platen Size	• 18.0mm x 25.4mm (0.71" x 1.0")
Sensing Area	• 17.0 x 25.0 mm (0.67" x 0.99")
Image Size	• 320 x 480 pixels
Interface	• USB 2.0 High Speed
Operating System	• Microsoft Windows / Linux
Operating Temp.	• -10 ~ 50°C
Certification	• CE, FCC, KCC, CB, WHQL, USB-IF, WEEE
Smart Card	• ISO 7816 and EMV 2000 Contact Smart Card with • SAM Slot (Optional)
Size (W x L X H)	• 95.7 mm x 114.8 mm x 52.6 mm

BioMini

High Performance USB Fingerprint Scanner

Suprema's fingerprint-based PC solution has been designed specially to provide high level biometric security for desktops as well as complex network environments. Our latest range of high-performance fingerprint USB scanners are supported by powerful software development kit (SDK) which features Suprema's award-winning algorithm and ranked top in FVC and NIST MINEX tests. Suprema PC solution provides unrivalled versatile platform for development to leading security companies, system integrators and hardware manufacturers.

BioMini Features



- World's best performing fingerprint algorithm
: Top results in NIST MINEX tests and FVC
- FIPS 201 certified template extractor and matcher
- NIST certified interoperable image & template format standards (ANSI-378/ISO 19794-2, ISO 19794-4)
- Image Compression Standard (WSQ)
- Fast matching speed : 100,000 match / second (with Intel Core2Duo)



- USB 2.0 high speed interface
- Supports multiple device handling



- 500dpi optical fingerprint sensor
- IP65(sensor surface)



- BioMini SDK for easy application software development
- Supports MS Windows, Linux and WinCE6.0
- Supports multiple programming languages

*with Intel Core2Duo 2.13GHz



FRONT VIEW



SIDE VIEW



TOP VIEW

BioMini Specifications

Fingerprint Sensor	• Optical (IP65 sensor surface)
Resolution	• 500 DPI / 256 gray
Sensing Area	• 16 x18 mm
Imaging Size	• 288 x 320 pixels
Interface	• USB 2.0 High speed
O/S	• Microsoft Windows & Linux
Operating Temperature	• -10~50°C
Certification	• CE, FCC, KCC, WHQL
Size	• 66 x 90 x 58 mm (W x L x H)



SFU300(OEM version)

BioMini SDK

BioMini SDK is suitable for applications where fingerprint enrollment and recognition can be done on PC or network based systems with Suprema BioMini , BioMini Combo and SFU series scanners.

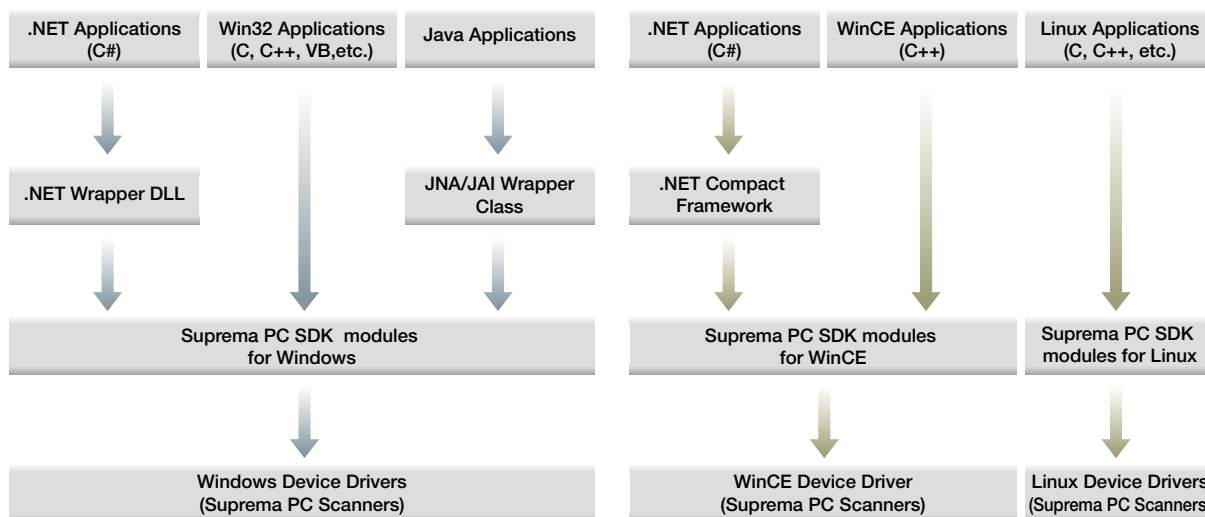
BioMini SDK Features

- World's best performing fingerprint algorithm
: Top results in NIST MINEX tests and FVC
- FIPS 201 certified template extractor and matcher
- Fast matching speed : 100,000 match / second (with Intel Core2Duo)
- Supports MS Windows and Linux
- Supports multiple programming languages: VC++, VB, VB.NET, C#, Java
- Multi-threaded code design fully utilizing multi-core CPU power
- Fingerprint templates compatible with Suprema Products

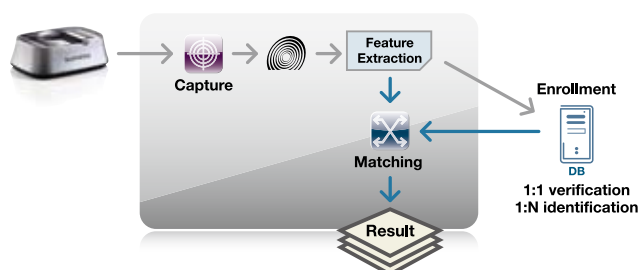
BioMini SDK Specifications

Template Size	• 1024 Bytes (Configurable)
Enrollment Time	• < 0.1 second
Verification Time	• < 0.1 second
Identification Time	• 100,000 matches / second (with Intel Core2Duo)
Programming Languages	• VC, VB, C#, VB.NET, JAVA
Database	• Microsoft Access (Sample)
Encryption	• 256 bit AES
Operating System	• Windows 8 / 7 / Vista / XP, Linux

Structure



Operation Flow



Contents

- Fingerprint algorithm library for PC Windows or Linux
- Sample application program with source code (VC, VB, C#, VB.NET, Java)
- Technical documents
- Fingerprint scanner

Database(MDB) Demo



Enroll/Verify/Identity Demo



Multiple Scanner Demo

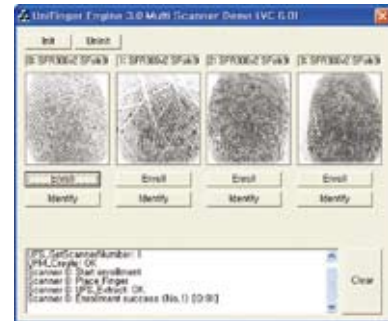


Image SDK

Image SDK is a software development kit for PC based fingerprint application development. Unlike BioMini SDK that works with Suprema scanners, Image SDK does not depend on a specific scanner hardware but works with general fingerprint images captured by different fingerprint sensor devices.

Features

- World's best performing fingerprint algorithm : Top results in NIST MINEX tests and FVC
- FIPS 201 certified template extractor and matcher
- NIST certified interoperable template and image format standards(ANSI-378/ISO19794-2/ISO19794-4)
- Image Compression Standard (WSQ)
- Fast matching speed : 100,000 match / second (with Intel Core 2 Duo)
- Multi-threaded code design fully utilizing multi-core CPU power
- Multiple Devices handling support
- Supports fingerprint images captured by 3rd party scanners
- Supports different image resolution and quality
- Supports multiple programming languages : Visual C++, Visual Basic, C#, VB.NET, Java

Functions

- Enroll (Image to Template)
- Verify (1:1)
- Identify (1:N)
- Get Enrollment Quality

Contents

- Fingerprint algorithm library for PC Windows
- Sample application program with source code in VC, VB, C# and VB.NET
- Technical documents
- HSM(USB dongle) for license control

Operation Flow

