BioSign 2.0
World's Best Mobile Fingerprint Authentication Algorithm
WHY BioSign 2.0?

FAST MATCHING
- 2-stage fast matching algorithm with patented "Entropy Point Pairing" method
- Optimal architecture for mobile embedded applications
- Hardware independent: free from hardware acceleration (ARM-NEON / GPU / DSP)
- No floating point arithmetic and all codes are fully written in C/C++

ROBUSTNESS OVER TIME
- Intelligent self-learning algorithm to reflect users’ fingerprint condition and habit
- Highly compressive template to cover full finger area and variations
- Smart template management to enable algorithm to deal with variation and habit of user

FLEXIBILITY IN DESIGN
- Sensor-specific pre-processing algorithm (capacitive / optical / under glass (up to 300um))
- Sensor independent features and patterns
- Satisfactory FRR even with smallest sensor size (13 mm²)
- No dependency to the sensor shapes (square/rectangle)

UNRIVALED ACCURACY
- Enhanced robustness to the variation/distortion of fingerprints by Suprema’s patented technologies
- Reconstruction of discriminative fingerprint patterns from various noises
- Unique pattern analysis technique to ensure consistent performance over low-quality fingerprints (wet/dry skin, partial wound, crease)

When speed matters
Matching speed more than twice as faster as the leading competitor

Take the most secure solution available today
45% to 70% lower FRR than major players

A technology gets smarter with use.
Self-learning algorithm to reflect user’s changing habits and conditions.
BioSign 2.0 allows greater design flexibility by supporting various sensor form-factors

[ Wide Range of Sensor Sizes & Form-factors ]

A  4 X 3.2 mm  F  7 X 3.5 mm
B  4 X 4 mm  G  8 X 4 mm
C  5 X 4 mm  H  8 X 8 mm
D  5 X 5 mm  I  9.5 X 3 mm
E  6 X 6 mm

BioSign 2.0 ensures the best performance regardless of sensor types from conventional capacitive to latest under-glass sensors

BioSign 2.0 I Sensor Compatibility

BioSign 2.0 I Efficiency & Integration

In-depth Intelligent Fingerprint Pattern Analysis Requiring Minimal Computing Resources

BioSign 2.0 offers uncompromising security with the lowest error rate. Using Suprema’s proprietary biometric technologies, from pre-processing, feature extraction, to matching stages, BioSign 2.0 provides the maximum level of security with minimal processor and memory usage.

Seamless Integration Support

Easy Integration with Android Fingerprint API and Full Support for Trusted Execution Environment (TEE)
WHY SUPREMA?

6 reasons why customers choose Suprema as the most preferred technology partner in fingerprint biometrics.

1. The World’s best performing fingerprint technology provider.
   - Matcher & Extractor Algorithms Ranked No.1 in US Govt. NIST MINEX Test
   - Suprema Fingerprint Scanners Received Full Compliance and Final STQC Certification for India Government’s UID Project
   - Suprema Fingerprint Scanners Received Highest Image Quality Certification from FBI IAFIS Appendix F

2. The World’s most widely-used biometric technology.
   - Over 1,000,000 Fingerprint Devices Installed Worldwide
   - Over 1,000,000 Fingerprint Modules Sold Worldwide
   - Suprema solutions used in over 100 Countries

3. Proven market leadership with leading industry awards & recognitions.
   - Named to the World’s TOP 50* Security Company Ranking from 2010-2016
   - No. 1 Biometric Vendor of EMEA regions in Market Share in 2015
   - ASIA’s 200 Best Small Caps Forbes
   - Technology Fast 500 Asia Pacific Deloitte

   - $300m Market Capital (listed company in KOSDAQ)
   - 12% CAGR during 2010-2015
   - A+ Excellent Financial Stability (by Korea Investment Services)

5. Global penetration: partnering with multi-nationals and governments.
   - Key Global Partners: Bosch, Honeywell, Hikvision, Tyco, BOSCH, Honeywell, HIKVISION, Tyco
   - Public ID Projects: US 2010 Census, China Ministry of Public Security, India Unique Identification (500+ Million Users), Korea National Police Agency (500+ Million Database), Japan National Police Agency
   - Over 10,000,000,000 Fingerprints processed by Suprema solutions

6. End-to-end biometric technology provider.
   - Mobile Fingerprint Authentication
   - Biometric Time Attendance
   - Public Identification
   - Civil Identification
   - Fintech
   - Physical Access Control
   - Forensic Science
   - Law Enforcement

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