



IDEX Access Biometric Solution IDX5601/IDX6601

IDEX Access enables biometric cards to reach consumers faster and at scale

The IDEX Access solution enables smart card manufacturers, card personalization offices, cybersecurity system resellers, cybersecurity system integrators, crypto exchanges, javacard applet developers to introduce a biometric card within their product portfolio

Key features

- OEM business model
- Available from individual components to finish card¹
- 6 touch initial enrollment
- Large fingerprint sensing area
- Biometric authentication < 250ms
- Passive inlay, with card construction limited to two modules

Highest security and privacy


- No fingerprint image is stored in the IDEX Digital Authentication
- Only fingerprint templates are stored encrypted in the secure element. Hence the sensitive data is protected against any modification and memory extraction.
- Fingerprint authentication is performed in the secure element

Key benefits

- Best user experience
- Address the entire value chain, from smart card OS vendor up to cybersecurity system integrators and resellers
- Battery less
- Optimized power management (biometric transaction as low as 1.5 A/m)
- Mobile SDK to develop enrollment application on iOS and Android devices

Supported applications

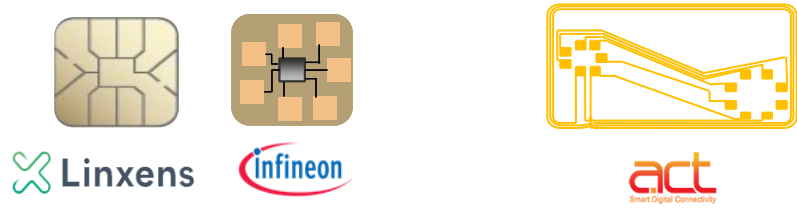
- PKI
- FIDO2
- Crypto wallet
- Physical access control
- Logical access control
- Proprietary systems
- OEM – Javacard OS 3.0.5 for applet development

 **IDEX** partners with global industry experts for the components of the IDEX Access solution



⁽¹⁾ Via a partner

IDEX has designed an optimized dual interface module and passive inlay for biometric card specificities. Both designs are registered within industry leading partners and provide you with best-in-class quality and performance.



IDEX Access shares the platform with IDEX Pay. It has the same robustness and has been thru the Mastercard Card Quality Management (CQM) and Cart Structure Integrity (CSI) certifications.

Standards and technical specifications

IDX5601/IDX6601 derivatives / family	Supported standard
<p>IDEX Access 1.0, based on:</p> <ul style="list-style-type: none">Dual interface module with SLC38 and IDEX OS loadedInlay with ID1 antenna from ACTGG and custom panelIDX5409 / IDX6409 fingerprint sensor with its firmware <p>With a biometric authentication time < 250ms It complies with the state of the art (payment schemes) requirements in term of FRR@FAR with Presentation Attack Detection Fingerprints templates are stored encrypted in the secure element Biometric matching decision happens in the secure element</p>	<ul style="list-style-type: none">IDEX OS<ul style="list-style-type: none">Java Card OS 3.0.5Card specification 2.3.1Amendment D 1.1.2 (SCP03)Financial Configuration 1.0.2Support for ECC and RSA asymmetric cryptographySecure communication between the fingerprint sensor and the secure element (AES)64kBytes free NVM for 3rd party appletsApplets<ul style="list-style-type: none">IDEX IBA (biometric API and enrollment)Communication interfaces<ul style="list-style-type: none">ISO14443 L4 Type AISO7816 T=0, T=1
<p>Sensor Module</p> <ul style="list-style-type: none">IDX5409 / IDX6409 (for SLC38 Secure Element with IDEX Biometric Stack)	<ul style="list-style-type: none">Off-chip capacitive sensor, with 40nm ASICMCU up to 160MHzSensing area : 9.5mm x 9.5mmSensor size : 16mm x 16mmFRR@FAR : <1.5% @ 1:20k6 enrollment touches onlySupport up to 2 fingers
<p>Components</p> <ul style="list-style-type: none">Dual interface module with SLC38BML800 mounted, IDEX OS and IDEX IBA applet already loaded <ul style="list-style-type: none">Inlay with ID1 antenna from ACTGG and custom panel	<ul style="list-style-type: none">Dual interface secure element with support for off-chip fingerprint sensor40nm, 800kBytes SOLID FLASH™ NVM, 24kBytes RAM32-bit ARM® SecureCore® SC300 , clock speed up to 100 MHzCryptographic support : RNG, RSA up to 4096-bit, ECC up to 521-bit, AES up to 256-bit, Triple DESHardware common criteria certified at the level EAL6+ (BSI-DSZ-CC-1169-V2-2022) and EMVCo hardware approval (ICCNO280)
<p>Services (via a partner)</p>	<ul style="list-style-type: none">Applet loading on IDX5601 or IDX6601Card personalization

[More information: sales@idexbiometrics.com](mailto:sales@idexbiometrics.com)

Date of release: April 2024
Document number : IDEX Access factsheet v1.2

