



Biometric ID Card Without Chip



New Generation of Secure 2D Barcode

BIOMETRIC CARD **WITHOUT A CHIP**

Shortages in sourcing semiconductor products are affecting the secure credentials sector as well. Many new projects are delayed or cancelled as raw materials, especially the secure IC cannot be sourced, or at a much higher price.

Is it possible to launch or modernize an ID project, while making no compromise on security?

We at Toppan are convinced it is, with the newest generation of secure 2D Barcode.



ID CARD WITH A **HIGH-DENSITY SECURE QR CODE**

One of the main benefits of a chip is to tie the document with the holder, by storing his biometric data. The data can be compared with the document holder and this confirms his authenticity.



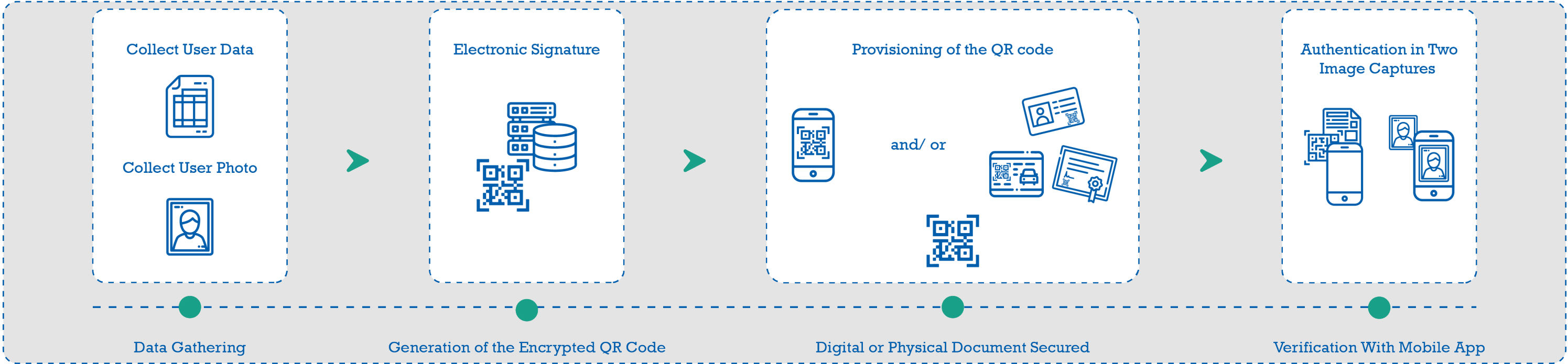
Toppan Biometric ID card carries a high-density secure barcode that entails the biometric data of the document holder (portrait and / or fingerprints).

Our solution supports the most widespread high density QR code formats: Datamatrix, 2D Doc, following ISO / IEC standards for complete transparency of the solution.

KEY **BENEFITS**

- ✓ **Cost efficient solution**
- ✓ **Fast implementation**
- ✓ **Free of charge verification App**
- ✓ **iOS and Android**
- ✓ **Security by design**
- ✓ **Offline authentication**
- ✓ **Multilingual Support**
- ✓ **GDPR compliance**

SOLUTION **PROCESS**



Visible Digital Seal (**VDS**)

A VDS is a digitally signed barcode, based on the same infrastructure already used to support worldwide ePassport issuance and authentication in over 145 countries.



ELECTRONICALLY SIGNED ENCODED DATA SET

On the barcode personal information as well as biometric data of the card holder will be securely stored. For this purpose, the most secure cryptographic algorithms available for securing documents are being used.



QR CODE READABILITY

The code can be read locally without access to a database; person verification and authentication can be done completely offline. Moreover, the QR Code entails redundancy so that scratches, even hiding part of the code will not affect the system.



VERIFICATION VIA AN APP

The verification is done through an App available on iOS and Android stores. Most smartphones available today become a valid verification device. The App will use the phone's camera to compare biometric data stored on the card with the card holder.



DOCUMENT AUTHENTICATION VALIDATION

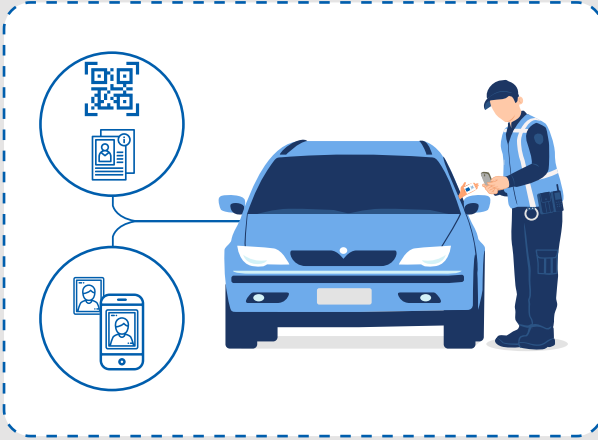
The legitimacy of the document is validated by a trusted third party, that ensures that all steps - from the generation of ID / code to the verification of the document, are genuine and certified. The code itself, visible on the card, is generated via highly secure cryptographic mechanisms. A fraudulent attempt to modify its size or content will result in an alarm, or error message.

USE CASES

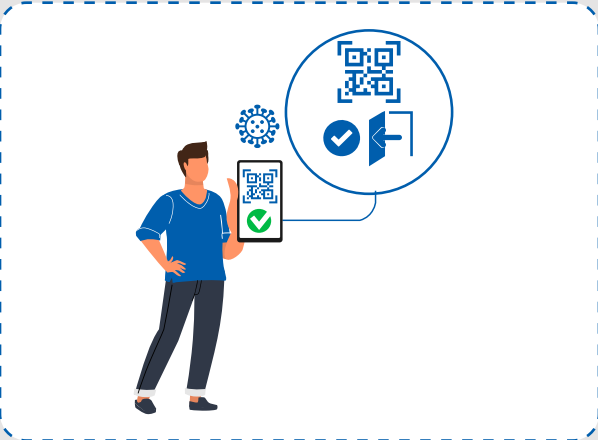
ACCESS CONTROL



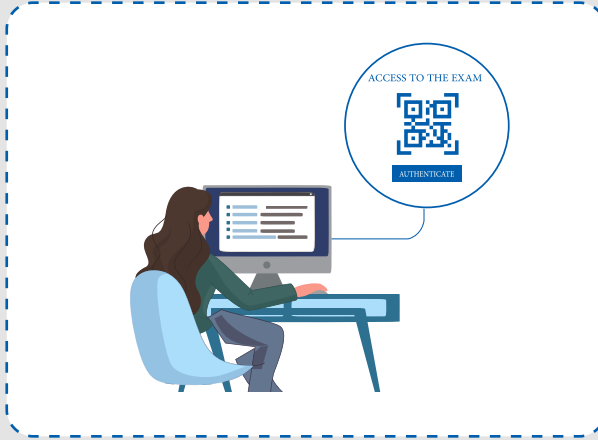
IDENTIFY DRIVER



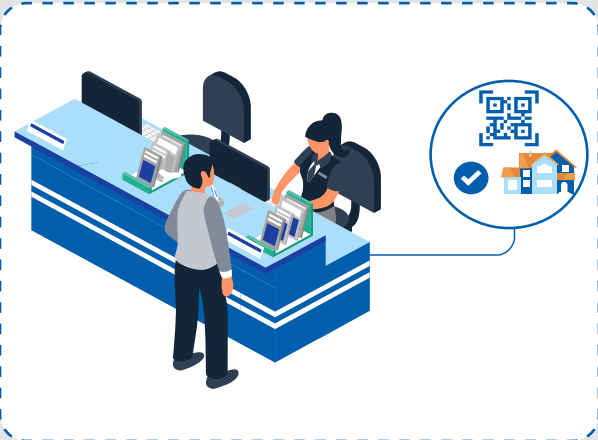
CERTIFICATE AUTHENTICATION



EXAM ACCESS



PROPERTY DEEDS



SECURE IBAN



Dubai	Toppan Gravity	Ubora Office Tower, Office1204, Business Bay, P.O. Box 9051, Dubai, UAE
Sharjah	Toppan Gravity	University City Road, Industrial Area 13 P.O. Box 150199, Sharjah, UAE.
Paris	Toppan Gravity SAS	43-47 Avenue de la Grande Armée, Paris 75116, France
Madrid	Toppan FutureCard Spain	c/ Alcalá 20 28014 Madrid, Spain
Hong Kong	Toppan Gravity Limited	Unit A, 20/F, Lee & Man Commercial Center, 169 Electric Road, Hong Kong
South Africa	Toppan FaceTech	1st Floor, Block B Southdowns Office Park, cnr John Vorster and Karee Streets, Irene X54, 0157, South Africa
Taiwan	Toppan iDGate	6F., No. 1, Ningbo E. St., Zhongzheng Dist., Tai- pei City 10093, Taiwan (R.O.C.)



Dubai Office: +971 4 361 5997
Sharjah Office: +971 6 538 9488



www.toppangravity.com
info@toppangravity.com