# THALES

# Committed to securing your passports

# Committed to securing your passports

**Identity & Biometric Solutions**

With steady growth in traveler numbers, the introduction of new travel document standards and the emergence of digital credentials, high security travel documents are becoming increasingly important. Thales has robust and future-proof components and solutions, supported by all the necessary know-how, enable you to produce trustworthy passports and prepare fully for the challenges ahead.

## The future of travel documents

How to prepare for the future of travel documents represents one of the major challenges now facing high security printers and public authorities.

### How to design a passport that protects against current and future attacks?
The threats posed by fraudsters are now as broad as they are serious. Many countries are moving to more secure passports made of polycarbonate to meet the high public and political expectations for trustworthy travel and identity documents.

### How to keep up-to-date with digitization and the latest standards?
With the introduction of new travel document standards, LDS2 (Logical Data Structure version 2), a new generation of electronic passports will soon store travel information such as eVisas and entry/exit stamps digitally, supporting even more efficient immigration control. Furthermore, the emergence of digital travel credentials offers new opportunities to support and complement physical documents.
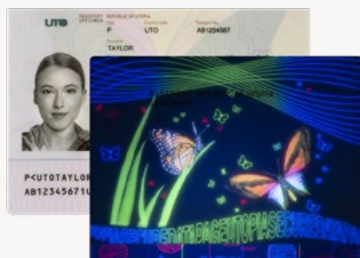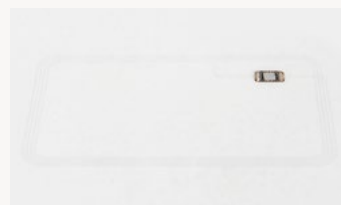
# Secure components and solutions

In response to these challenges, Thales offers high security printers and public authorities state-of the-art, future-proof components and solutions for creating exceptional passports of the highest security and quality. Tailored to suit your individual requirements, we provide a comprehensive range of products and solutions for booklet configuration and support for efficient integration of components into your manufacturing process.

Our clients enjoy access to field proven, cutting-edge components and solutions, along with all the know-how needed to produce outstanding passports. We help you stay at the forefront of the latest technology developments, fully prepared for the future of travel documents.

## POLYCARBONATE DATAPAGE SECURITY FEATURES



## INLAYS AND eCOVERS



## SECURE EMBEDDED SOFTWARE



## ISSUANCE SOLUTIONS



# Superior durability

Thales passport components resist the real-world stress of stringent day-to-day use and thus have a lifetime of up to ten years in the field. This is ensured by rigorous durability requirements, surpassing ICAO and ISO standards. Excellent durability translates into fewer field returns and more satisfied citizens, who can enjoy the swift border crossing enabled by a functional chip.

PASSPORT REPUBLIC OF UTOPIA

Type: P
Country code: UTO
Passport No.: AB1234567

Surname: TAYLOR
Given names: EMILY ALEXANDRA
Nationality: UTO
Date of birth: 15.09.1995
Sex: F
Date of issue: 01.02.2017
Date of expiry: 31.01.2027
Code: 123456
Personal No.: 500101620
Place of birth: UTOPIA CITY
Issuing authority: POLICE
Holder's signature: Signature

P<UTOTAYLOR<<EMILY<ALEXANDRA<<<<<<<<<<<<<<08
AB12345671UTO9509159F2701312<<<<<<<<<<<<<<08

# Polycarbonate datapage

**Polycarbonate has won the trust of governments across the world. Over 40 countries have chosen it for their national passport programs.**

The security industry is constantly engaged in research and development aimed at creating new and innovative security features for polycarbonate documents. Recent innovations, such as color laser personalization and enhanced visual and tactile effects, are providing additional opportunities for high security printers and public authorities to seriously consider polycarbonate for their document projects.

Thales offers polycarbonate datapages for the highest level of security. We use innovative security measures that combine electronic, optical and visual features. Made of 100% polycarbonate layers, the Gemalto Datapage offers a long lifespan. This is enabled by a fused polycarbonate material with an integrated hinge and tamper-resistant laser engraving personalization, with color or grey scale portrait.

Built-in, leading-edge security features further reduce the risk of falsification.

## Thales' datapage: Smooth integration into production

- Available with or without chip module
- Designed for booklet production and personalization by all established manufacturing systems
- Flexible binding ensures a flat passport booklet
- Single-step sewing minimizes wear on production tools

**9** 123456
Personal No.
500113420

**8**

**4**

**6**

**3**

**1**

**2**

**11**

**5**

**10**

**7**

### Passport (SPECIMEN)

PASSPORT
SPECIMEN

REPUBLIC OF UTOPIA

Type: P
Country code: UTO
Passport No.: AB1234567

Surname: TAYLOR
Given names: EMILY ALEXANDRA
Nationality: UTO
Date of birth: 15 09 1995
Sex: F
Date of issue: 01 02 2017
Date of expiry: 31 01 2027

CAN: 123456
Personal No.: 500113420
Place of birth: UTOPIA CITY
Issuing authority: UTOPIA
Holder's signature: Signature

UTO 15 09 1995

P<UTOTAYLOR<<EMILY<ALEXANDRA<<<<<<<<<<<<<<<
AB12345671UTO9509159F2701312<<<<<<<<<<<<<<08

**reverse side under 365nm UV**

6

# A benchmark in fraud resistance

**Personalization is an integral part of the document security.**

Thanks to innovative solutions and technologies, a fast, reliable and easy verification can be performed to ensure that the claimed identity is correct and belongs to the authorized document holder.

We offer more than 40 different security features: visually appealing, very difficult to forge and simple to verify. These include a number of unrivaled innovations, enabling almost limitless design potential to be combined with the highest level of security. Moreover, our design experts can provide guidance on the optimum choice of features to fit your needs and requirements;

1. **DOVID** - Diffractive Optically Variable Image Device
2. **CLI/MLI** - Changeable/Multiple Laser Image
3. **Thales Gemalto Dynaprint**
4. **OVI** - Optically Variable Ink
5. **Thales Gemalto LFI** - Latent Filter Image
6. **Thales Gemalto Color Laser Shield** - color portrait
7. **Thales Gemalto True Vision**
8. **Security background** (guilloche/rainbow)

9. **Tactile laser engraving**
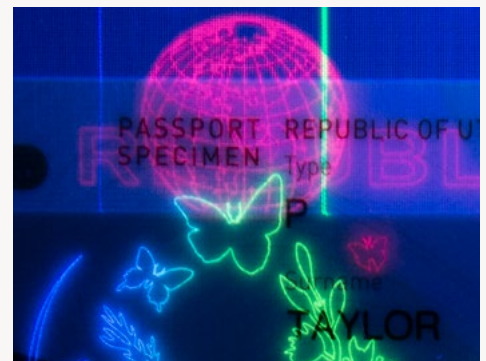10. **Thales Gemalto Window / Window Lock**
11. **Micro lettering**

**Further security features:**
- UV and IR Printing
- Thales Gemalto Secure Surface features
- Thales Gemalto Clear to Cyan Sealer
- Thales Gemalto Laser Engraved Floating Image

# Superior passport handling with Thales Gemalto Hinge

Gemalto Hinge is durable and made from woven fabric, integrated securely into the polycarbonate body. It is irreversibly and securely attached to the datapage and booklet. Gemalto Hinge is highly robust and flexible; the booklet stays open and closes completely.
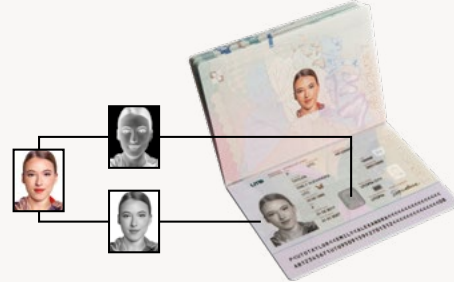
# Security to see, tilt and touch

Highlights of our unique security features for the polycarbonate datapage.

## Thales Gemalto Window Lock

- Secondary portrait created by laser ablation of metallic substrate integrated in the window

- Strong protection against copying and alteration of the portrait after issuance

- Easy to verify, first line security feature

### A new dimension in photo protection



## Thales Gemalto True Vision

- High resolution true-color images visible under UV light

- Impressive and representative customer-specific images thanks to excellent color reproduction and high brilliance

- Enhanced document security, difficult to copy or imitate

- Verification under UV light

### Now you can see



## Thales Gemalto Laser Engraved Floating Image

- Next generation of CLI/MLI

- Laser engraved images appear to float and sink when tilting the datapage

- Strong protection of personalized data

- Swift switch from one personalized image to the next when tilting the datapage

### The most moving feature



## Thales Gemalto Secure Surface

- Combining light reflection, movement and tactile effect in surface embossing

- Enhanced security with flexible design options

- Designed to counter new methods of forgery such as adding an additional overlay on top of the datapage

- Difficult to copy or reproduce

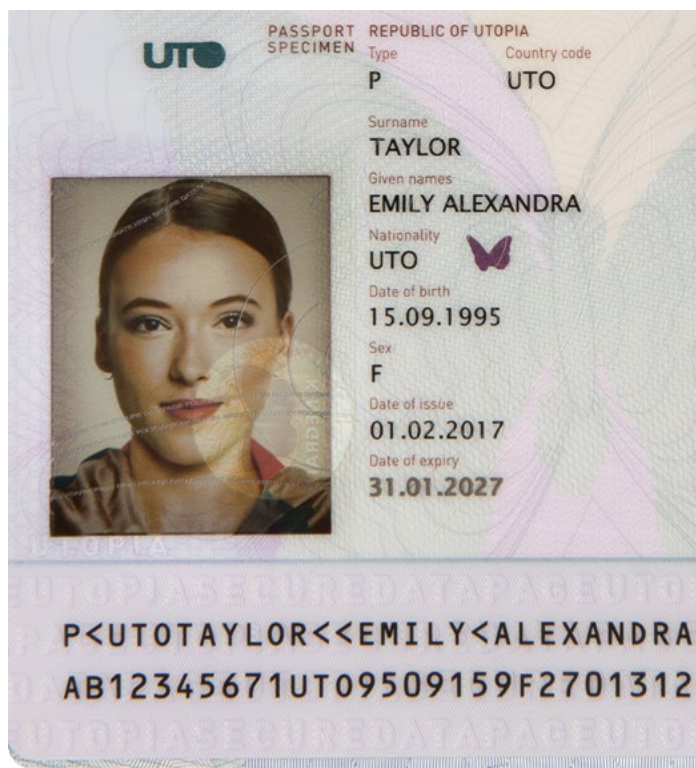- Simple verification by touching, looking or tilting

### Striking-at-glance

# Gemalto Color Laser Shield

**Gemalto Color Laser Shield is a unique solution for securing a color photo within a polycarbonate document.**

Powered by four color lasers hitting a special ink in the document's inner structure, this new issuance solution achieves the highest levels of resolution and counterfeit protection.

Fitting seamlessly with governments' issuance workflow, it uses blank documents uniquely protected against fraudulent personalization.

The unrivaled security performance delivered sets a new benchmark in laser personalization solutions.



### Gemalto Color Laser Shield documents offer numerous benefits:

- Reduced fraud due to technology barriers
- Simple verification
- Seamless integration
- Compliance with best practices
- Available for passports, cards and also high security printers

# Thales Gemalto Color Laser Inlay for your polycarbonate documents

For customers manufacturing their own polycarbonate documents, Thales offers Color Laser Inlay for seamless integration into your polycarbonate datapage. Delivered as a customizable polycarbonate sheet with photosensitive ink, Color Laser Inlay enables straightforward document upgrade, fully compatible with standard production flows.

# eCover and Inlay

**Securing biometric data inside the cover.**

Thales Gemalto Premium eCover and Premium Inlay are flexible electronic covers and inlays with an embedded module and antenna to safeguard your passport. They enable easy integration into your booklet manufacturing process, along with support from our experts and technical consultants to ensure optimum results.

- Your choice of material: Teslin® or paper substrate for textile or paper covers
- Flexible dimensioning and positioning of antenna and module
- Mechanically robust, with integrated copper wire antenna for optimum electrical performance
- Adaptable to your booklet specification and manufacturing equipment
- Business continuity with dual sourcing options
- Smooth migration from traditional booklet to ePassport or upgrade to the latest generation of technology

# Secure embedded software

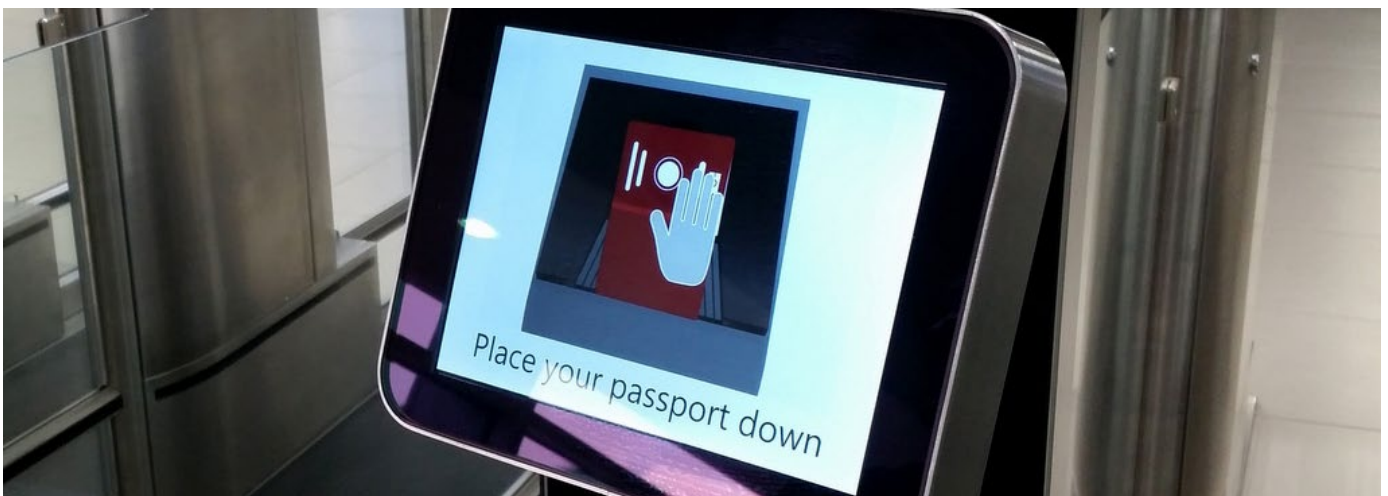**Powering electronic travel data verification.**

Gemalto Premium Inlays and eCovers, as well as eDatapages, contain an embedded chip module featuring Thales Gemalto eTravel, our ICAO-compliant secure embedded software. It offers the highest level of performance and interoperability on the market today.

## Outstanding security, interoperability and performance

The secure embedded software must strike a perfect balance between security, interoperability and performance. Thales' embedded software, developed in-house, has a strong set of Common Criteria Evaluation ratings (EAL 5+ for SAC and EAC) and supports a wide range of algorithms and long key lengths. Gemalto eTravel is one of the fastest and most interoperable products on the market, enabling faster issuance and quicker verification at border control.

## A continually upgraded platform for increasingly enhanced performance

Gemalto eTravel is available on several interchangeable silicon platforms offering guaranteed delivery. Chip platforms are upgraded on a regular basis for enhanced performance and security. Thales' participation in standards bodies enables rapid integration of the latest technologies, thus providing you with the most up-to-date products, at the earliest opportunity, and with the lowest risk.





Place your passport down

# Thales Gemalto Secure Issuance Solutions

**Proven and trusted document issuance solutions - ready to adapt to your infrastructure**

An essential aspect of securing an ID document is ensuring that the document is linked to the true identity of the document holder, via secure personalization.

Thales Gemalto Issuance Solutions combine software, hardware and integration services. They enable governmental customers to personalize and issue any secure document, including e-passports, driver's licenses, health care and national identity cards.

## Gemalto Secure Issuance Solutions ensure flexibility by:

- Adapting to your specific processes: centralized, semi-centralized, decentralized or incorporating instant issuance
- Integrating with your personalization equipment and PKI (Public Key Infrastructure) systems
- Managing all types of documents and meeting the highest security requirements
- Offering integration, consulting and business continuity services
- Incorporating the ability to deploy new applications at a later date, thanks to an inherently modular and extensively scalable platform design

Thales has proven capability to offer dedicated and unique solutions that are ready to adapt to any legacy infrastructure. We have unrivaled expertise in system integration, thanks to integration and consulting services teams located around the world.

**300m**
**Passport components and products delivered**

**40+**
**National ePassport projects**

**40+**
**Security features for Passports**

**6**
**Certified security printing sites worldwide**

**160**
**Years of expertise in high security printing**

**150+**
**Security and Quality Certifications**

# Global expertise

**Collaboration with customers lies at the heart of our process.**

We help them deliver unique travel documents that become works of art and symbols of pride in the hands of millions.

Thanks to over 160 years' experience in high security printing, we use our expertise and know-how to share best practices with customers. As a result, we possess a unique ability to deliver customized solutions that solve challenges in any aspect of passport manufacturing and the issuance process.

Our unique expertise in digital security means we provide innovative, trusted solutions that you can rely on.

As a trusted partner, Thales contributes to over 40 passport programs worldwide. Our products and solutions are deployed in over 200 public safety and law enforcement programs globally.

Thales' experience, solutions and resources are key assets for the success of your passport project. And every step of the way, Thales will do more than simply listen; we make sure that the solution is shaped precisely to your unique requirements.

One of our objectives is to achieve CarbonNeutral® status on our products. For this purpose, Thales is working with Natural Capital Partners, experts in the delivery of solutions for positive impact on carbon and renewable energy.

# THALES

> Thalesgroup.com <