



THE VALUE OF GENUINE MIFARE® PRODUCTS

MIFARE® is NXP's well-known brand for a wide range of contactless IC products with more than 12 billion contactless and dual interface ICs sold. MIFARE is used in over 40 different applications worldwide.

ABOUT MIFARE

MIFARE is a registered trademark owned by NXP B.V. MIFARE products offer proven and reliable contactless solutions for different markets. The huge installed base of MIFARE products enables service providers to expand their offerings while reducing the overall costs and increasing users' convenience.

Over 1,000 business partners are part of the MIFARE community and ecosystem.

MIFARE leadership:

- MIFARE products are used in more than 750 cities, in over 50 countries, and in more than 40 different applications globally
- More than 77% of all automatic fare collection (AFC) schemes
- More than 80% of all contactless, limited-use ticketing credentials
- More than 10 billion card components shipped
- MIFARE is deployed in more than 2 billion mobile phones

BENEFITS OF USING GENUINE MIFARE PRODUCTS

Genuine MIFARE products have a high level of security, interoperability, stability and reliability across all form factor options demanded by the market for state-ofthe-art contactless schemes. The MIFARE product portfolio ranges from entry-level security to a Common Criteria certified security. This meets the highest security standards designed to offer seamless migration of first-generation systems.

By buying genuine MIFARE items, NXP assures that you get products

- that have undergone NXP's stringent quality procedures,
- with global support service,
- that comply with the ISO/IEC 14443 standard,
- that are cooperatively produced at advanced wafer fabs.

MIFARE OFFERINGS OF 3RD PARTY COMPANIES

The success of MIFARE is also related to NXP's active licensing and certification strategy for its products. Multiple semiconductor and card manufacturers are licensed to offer a wide range of MIFARE products. In addition, certification from independent testhouses like Arsenal Testhouse, UL and LSI-TEC substantially contribute to the functionality and interoperability requirements of MIFARE product-based systems worldwide.

However, be aware that unauthorized, non-licensed and non-certified IC product copies are offered on the market.

These products may lead to several issues of concern to our industry:

- Quality of unauthorized copies does not meet basic requirements, resulting in high field returns and non-working products.
- Interoperability of the system components and credentials is not secured, as ISO standards are not met.
- Uniqueness of IC identifiers is not guaranteed.
- Without Common Criteria certification from accredited authorities, these products do not meet the latest security standards.
- No seamless migration options to higher security products are offered.



Jason Hitipeuw, AdvanIDe

MIFARE TRADEMARK AND IP RIGHTS

NXP is the sole owner of the MIFARE trademarks and the corresponding intellectual property rights (IPR). We do not tolerate infringements of our rights and are fully committed to take all necessary actions against any infringer. If necessary, we will also communicate those infringements to the public.

IPR laws prohibit not only manufacturers to produce, but also OEMs and traders to import, sell, or otherwise dispose of products that include IPR infringing components (components that are made by unlicensed manufacturers or that make unauthorized use of trademarks). Even the advertising of such products may be prohibited.

Counterfeit products can be subject to seizure by customs authorities. In consequence, courts can ban them from the market.

NXP is taking several actions to protect the values of the MIFARE brand and the business of our customers that use genuine products. This includes trademark infringements and unfair competition actions against companies that provide contactless smart cards with fake chips in the brand name of NXP MIFARE, as well as domain name disputes that infringe NXP's trademark rights.

Read the latest anti-counterfeit news.

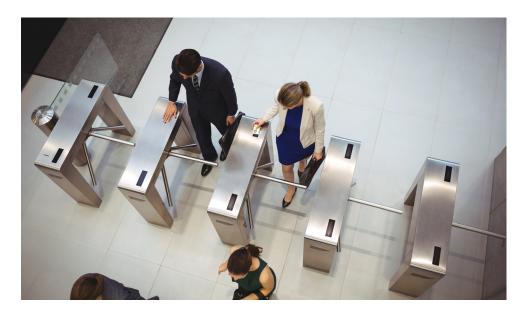
ACTIVITIES AGAINST UNAUTHORIZED COPIES

NXP's Intellectual Property and Licensing Department together with the MIFARE and RFID Intellectual Property Protection team take appropriate actions against unauthorized clone activities.

LEGAL ACHIEVEMENTS

In the past, NXP has initiated several actions against companies that were infringing our trademark rights or have sold unauthorized product copies:

- More than 150,000 unauthorized MIFARE clone product offerings in auctions, webshops, and on webpages have been stopped, resulting in a loss of any marketing investments of these companies.
- A large number of clone product dealers have been stopped and, in many cases, have gone out of business.
- Dozens of individual cases related to the use of fake products converted to genuine MIFARE products have been initiated, including cases involving loyalty cards in Australia, university cards in the U.K. and food court cards in Asia.



- 18 successful MIFARE customs trainings conducted since 2021, more than 500 customs officers were trained worldwide.
- Successful seizures of unauthorized MIFARE product copies had been arranged at exhibitions in Europe and Hong Kong in cooperation with REACT, the Anti-Counterfeiting Network, which resulted in the removal of fake goods, promotional material and booth elements. As a further consequence, lawsuits have been initiated.

"Quality and performance of NXP genuine MIFARE products speak its own language. For reputation and liability reasons any low-cost alternatives never have been an option for LINXENS. Original NXP MIFARE is not just a superior product, it's also backed up by NXP professional support during its entire lifecycle. Linxens is happy to support the introduction of NXP's product improvements & developments which allow a long term future planning for infrastructures and credential deployments and fully answer market expectations."

Frank Germain, LINXENS

GENUINE PRODUCTS FOR RELIABILITY

The MIFARE community, a large network of companies involved in contactless solutions, plays an important role in educating the market about the risks involved and the benefits of genuine MIFARE products. NXP highly recommends sourcing MIFARE products from MIFARE Premium Partners listed on MIFARE.net. Genuine products guarantee quality, performance and interoperability.

NXP constantly improves its product portfolio. As a result, some of our latest ICs include features to identify the product's origin, e.g. through a special originality signature. For security-relevant applications, NXP recommends using contactless products from the MIFARE® DESFire®, MIFARE Plus®, and MIFARE Ultralight® families.



NXP offers the NFC TagInfo App, a convenient tool our clients use to verify the origin of cards they purchase from their suppliers. Additional information can be found here: www.mifare.net/en/products/tools/nfc-taginfo-app

The TapLinx SDK library allows Android™ App developers to check whether the cards that interact with the app are genuine or not. By using genuine NXP products you can rely on the full performance of the SDK. Discover TapLinx online: www.mifare.net/taplinx

If there are still some doubts about an IC's originality, NXP Austria offers physical analysis.

If you are aware of unauthorized, non-genuine MIFARE products, contact us at MIFARE@nxp.com so that NXP can take appropriate action.

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