

Product brief

Secured NFC tags – NFC4TCxxx

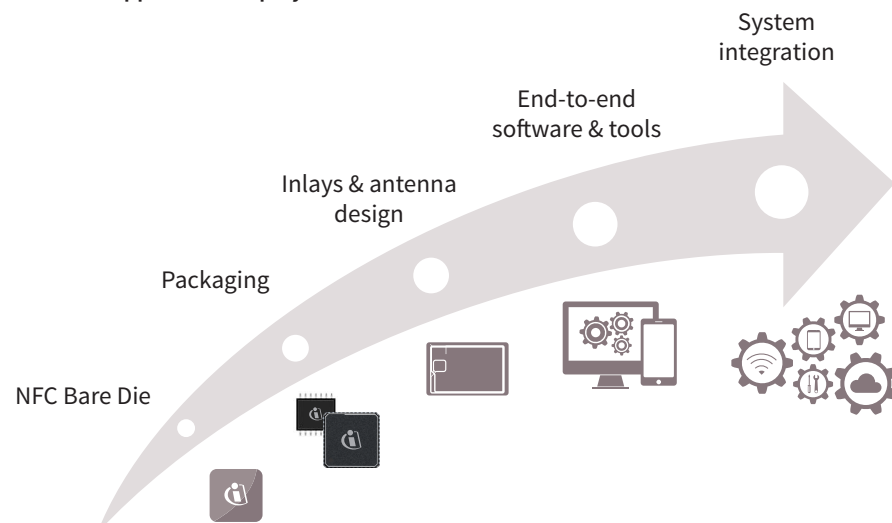
Contactless solution for anti-counterfeiting, identification and authentication

The Secured NFC tag products are based on the CIPURSE™ open standard security architecture for superior anti-counterfeiting, identification and authentication of products and accessories. It supports contactless interface ISO/IEC 14443 Type A and NFC Forum Type 4 Tag certified with built-in command set and a fully configurable file system based on ISO/IEC 7816-4/9.

The NFC4TCxxx products are designed to meet highest levels of security needed for proving authenticity. The NFC4TCxxx Secured NFC tags incorporate the CIPURSE™ V2 security architecture and is compliant to the CIPURSE™ V2 cryptographic protocol specification using AES-128. Commands and transmitted data can be secured using the CIPURSE™ V2 cryptographic protocol which is inherently resistant against physical attacks like Differential Power Analysis (DPA) and Differential Fault Analysis (DFA).

With 304 bytes, 1 KB, 2 KB and 4 KB of user memory, the Secured NFC tags allow users to store small to large amount of NFC standard NDEF data combined with state-of-the-art security to build custom applications for anti-counterfeiting, identification and authentication combined with customer engagement schemes, e.g. enabling re-orders of consumables or accessories just by tapping an NFC tag with a smartphone.

Infineon offers complete product-to-solution ecosystem support to enable fast customer application deployment:



Key features

- > Contactless Secured NFC tags for secured and non-secured NFC applications
- > Superior anti-counterfeiting based on CIPURSE™ open standard security architecture
- > Contactless interface ISO/IEC 14443
- > Type A, NFC Forum Type 4 304 Bytes, 1 KB, 2 KB and 4 KB user memory options for NDEF data storage
- > Built-in command set based on ISO 7816-4/-9
- > Fully configurable file system based on ISO/IEC 7816-4

Certification

- > NFC Forum Type 4 Tag certified
- > CIPURSE™ certified

Applications

- > For reliable anti-counterfeiting, identification and authentication of products and accessories
- > Enabling customer engagement schemes
- > Suitable for all general-purpose NFC applications



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Product summary

Sales code	NFC4TC304BP	NFC4TC1K0BP(HC) NFC4TC2K0BP(HC) NFC4TC4K0BP(HC)
Product description	Contactless security controllers for secured and non-secured NFC applications. Superior anti-counterfeiting based on CIPURSE™ security architecture and suitable for all general-purpose NFC applications.	
Interfaces	ISO/IEC 14443 Type A, NFC Forum Type 4 Tag configurable	
Memory	304 Bytes user memory for application data storage	1 KB, 2 KB or 4 KB user memory for application data storage
CPU	8 bits	16 bits
Symmetrical cryptography	Mutual authentication using AES-128	Mutual authentication and secured messaging using AES-128
System features	Secured communication using AES-128 and session key derivation	
Ambient temperature	Operating temperature range: -25°C to +70°C Storage temperature range: -40°C to +125°C	Operating temperature range: -25°C to +85°C Storage temperature range: -25°C to +125°C
Input capacitance	17 pF	27 pF and 78 pF (HC)
Delivery forms	Sawn wafer 75 µm, NiAu bump 20 µm, MCC8-2-6	Sawn wafer 75 or 150 µm, NiAu bump 20 µm, MCC8-2-6
Typical applications	Superior anti-counterfeiting based on CIPURSE™ security architecture for brand protection, authentication and identification of products and accessories. Suitable also for all general-purpose NFC applications.	
Certification	NFC Forum Type 4 Tag certified CIPURSE™ certified	

NFC 2Go starter kit for brand protection

To fast-track your application deployment, Infineon offers you the NFC 2Go starter kit for brand protection.

Contents

- NFC4TC4K0 stickers (size configurable with PC tool)
- Cloud-based brand protection scheme
- iOS and Android mobile apps on App store
- Backend Cloud authentication software
- Tag personalization tools
- Downloadable sample software
- User manual



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