



# ST25TA-EB

## Innovative NFC tag for trusted authentication & digitization



### Combines NFC and blockchain tech for superior brand protection and robust physical product digitization

The ST25TA-EB tag IC authenticates physical products using its on-chip ECDSA signature —ensuring secure, robust, and unpredictable communication patterns for advanced security.

Beyond strong authentication, the ST25TA-EB tag securely connects the physical and digital worlds, creating new services for brands and their customers.

The ST25TA-EB tag IC stands out for its ease of integration and implementation.

#### KEY FEATURES

- NFC Forum Type 4 ISO/IEC 14443A
- 2-Kbit flash memory
- 68 pF tuning capacitance
- Native NDEF support
- Augmented NDEF
- Edge TruST25 digital signature (on-chip ECDSA)
- Asymmetric based cryptography
- Secure key storage: 2 slots
- 24-bit general purpose counter
- Anonymous / kill modes
- 25 years of data retention

#### KEY BENEFITS

- Secure & unpredictable signature
- Blockchain compliant signature
- Light weight key infrastructure
- Internal & external personalization flows

#### KEY USE CASES

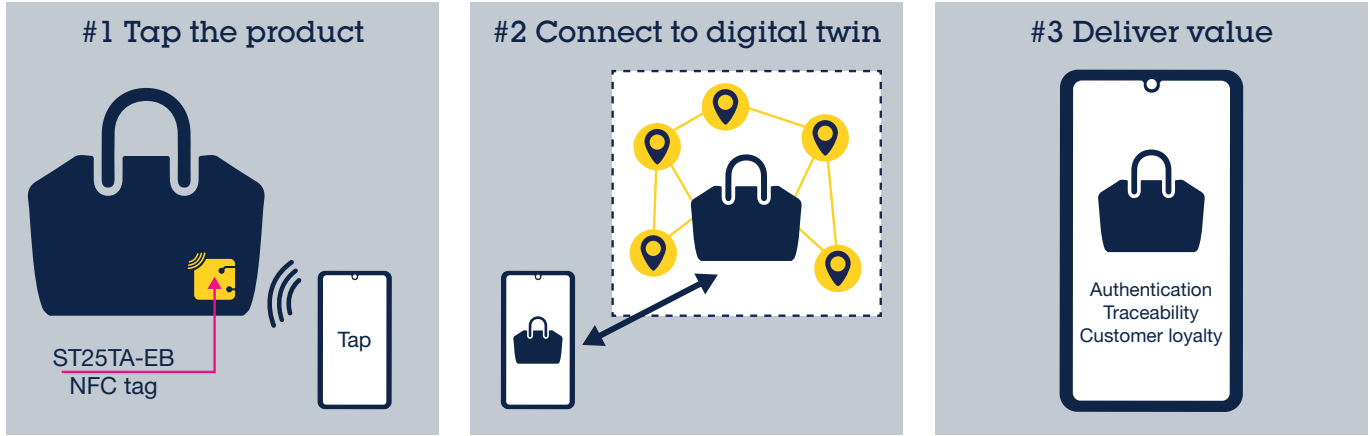
- Traceability
- Proof of ownership & authenticity
- Fights against counterfeiting, etc.
- Personalized digital experiences

#### KEY APPLICATIONS

- Luxury
- Wine & spirits
- Industrial & medical
- Art

The ST25TA-EB tag IC is well-suited for blockchain-based brand protection, thanks to its on-chip ECDSA signature —natively supported by blockchain-based architectures. This integration allows applications to directly utilize the chip without the need for additional data formatting.

The ST25TA-EB creates an unbreakable link between a physical product and its digital counterpart. It ensures that critical data, such as certificates of authenticity, ownership records, and product traceability, are immutably stored on the blockchain. The ST25TA-EB tag is a robust solution for verifying the authenticity of products and tracking their history.



Device summary

Part number	RF interface	NFC certification	Data protection	Memory size	Privacy services	Special features	Package
ST25TA-EB	ISO 14443-A / NFC Forum Type 4	Yes	Password + lock file	2-Kbit	Anonymous + kill modes	- Edge TruST25 digital signature - 24-bit GPO counter - Augmented NDEF	SBN140* SBN075*

\*Note  
 SBN075: Sawm and bumped wafer (die form), 75 µm thickness  
 SBN140: Sawm and bumped wafer (die form), 140 µm thickness



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