ST25TN SERIES

NFC Tags for balanced cost and performance

Cost-effective ST25TN512 and ST25TN01K tags, NFC Forum Type 2 certified and ISO 14443 compliant

The new ST25TN-ANDEF series NFC Tags are designed for broad market application to enhance consumer engagement, product identification, smart labelling and gaming experience.

These cost conscious solutions deliver significant operational, logistical and market advantages with flexible messaging, strict product authentication and data protection, highly durable memory, and fast data rates.

KEY FEATURES
- NFC Forum Type 2 ISO/IEC 14443
- 512-bit and up to 1.6-Kbit EEPROM with write protection
- Unique identifier
- Native NDEF support
- Augmented NDEF
- Unique Tap Code (UTC)
- Kill mode with password protection
- Lock block mechanism
- TruST25 Digital Signature
- 50pF tuning capacitance
- 40 years data retention
- 100ku erase/write cycles

KEY FEATURES
- High reliability EEPROM
- Anti-collision mechanism
- Read or write operations
- Privacy protection
- Data transfer of 106 kbits/s

KEY USE CASES
- Consumer engagement
- Identification
- Authentication
- Parameter setting
- Access control
- Gaming

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Device summary

Part number	RF interface	NFC Forum certification	Lock block Data protection	Memory size	Kill mode	Special features	Package
ST25TN01K-AFH5	ISO14443 / NFC Forum Type 2	Yes	Yes	Up to 1.6-Kbit	Yes	Augmented NDEF Trust25 Digital Signature	UFDFPN5
ST25TN01K-AFG5							SBN12*
ST25TN01K-AFF5							SBN075*
ST25TN512-AFG5				512-bit			SBN12*

Note: *SBN075: Sawn and bumped wafer (die form), 75µm thickness; SBN12: Sawn and bumped wafer (die form), 120µm thickness.

WHAT IS AUGMENTED NDEF?

This feature delivers unique and dynamic URLs with personalized information.
It is natively supported by iOS and Android.

WHAT IS TruST25 DIGITAL SIGNATURE?

This in-house industrialization process ensures die authenticity provided by STMicroelectronics to help fight counterfeiting.

ST25 Webserver

This web service demonstrator handles the ST25 Augmented NDEF url stored in the ST25TN512/01K, and shows how to collect tag information dynamically without using a specific mobile application.
The tool fully supports the ST25TN512/01K tag device to provide a comprehensive example of an application use case scenario.

Ecosystem

ST25

Support ecosystem
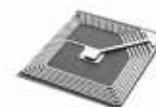
e2e community   PC SW tools   ST25 NFC Tap app   Documentation   Antenna Design Suite

Technical support

The ST25 NFC/RFID Tags family offers a simple and cost-effective implementation. ST can provide supporting material for integrating the antenna into your application: application notes, reference designs, antenna computation tools, e-presentations and e-learning. Visit **www.st.com/st25tn**

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