

# ST25TV SERIES

# NFC tags with Augmented NDEF for an improved user experience



The ST25TV512C and ST25TV02KC NFC Type 5 tags are certified by the NFC Forum and compliant with the industrial ISO 15693 RFID specifications, making them ideal for a wide range of applications.

Thanks to its Augmented NDEF feature (ANDEF), the ST25TV512C and ST25TV02KC tag ICs include a contextual automatic NDEF messaging service, which allows the tag to respond with dynamicallygenerated content when triggered by the end user with a simple "tap".

The ST25TV512C and ST25TV02KC tag ICs offer best-in-class RF performance and provide further improvements to the previous ST25TV tag ICs, such as an untraceable mode and tamper detection.

# **KEY FEATURES & BENEFITS**

- ISO/IEC 15693
- 512-bit and 2-Kbit user memory
- 23 pF tuning capacitance
- Native NDEF support
- Augmented NDEF
- Unique Tap Code (UTC)
- Tamper detection
- Kill / Untraceable mode
- Trust25 Digital Signature
- 64-bit encrypted password
- 64-bit unique identifier
- Highly reliable EEPROM
- 60 years data retention
- 100K erase/write cycles

# **KEY APPLICATIONS**

- Luxury goods
- Wine & spirits
- Consumer Packaged Goods
- Healthcare & wellness
- Pharmaceutical
- Gaming & education

## **KEY USE CASES**

- Consumer engagement
- Brand protection
- Product configuration
- Asset tracking
- Identification
- Tamper-proof applications
- Access control

# **Device summary**

Part number	RF interface	NFC Forum certification	Data protection	Memory size	Privacy services	Tamper indicator	Special features	Package
ST25TV02KC-TFH3	ISO15693 / NFC Forum Type 5	Yes	64-bit encrypted password	2 Kbits	Yes	Yes	Augmented NDEF and Trust25 Digital Signature	UFDFPN5
ST25TV02KC-TFG3	ISO15693 / NFC Forum Type 5							SBN12 (*)
ST25TV02KC-AFG3	ISO15693 / NFC Forum Type 5					No		SBN12 (*)
ST25TV02KC-AFF3	ISO15693 / NFC Forum Type 5							SBN075 (*)
ST25TV512C-AFG3	ISO15693 / NFC Forum Type 5			512 bits				SBN12 (*)
ST25TV512C-AFF3	ISO15693 / NFC Forum Type 5							SBN075 (*)

#### Note:

- SBN075: Sawn and bumped wafer (die form), 75  $\mu$ m thickness;
- SBN12: Sawn and bumped wafer (die form), 120 µm thickness

# Reference design kit

ST25TV02KC-ASEAL discovery kit (Please contact your local ST office for further details)



# **ST25TV Series Eco-System**







e2e community





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/st25tv



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