

ST25TV SERIES

NFC Tags for Consumer Engagement and Tracking



NFC forum certified Tag Type 5, with ISO15693 RF interface, TruST25 Digital Signature, Tamper Detect and privacy features

ST's ST25TV ICs provide NFC forum tags that enable consumer to experience a digital life. The embedded EEPROM memory density spans from 512 bits to 64 Kbits, covering a wide spectrum of applications including Brand protection and Access control.

The ST25TV series delivers state-of-the-art RF performance together with strong protections such as block lock mechanism and encrypted passwords.

KEY FEATURES

- ISO/IEC 15693
- 512-bit, 2-Kbit, 4-Kbit, 16-Kbit and 64-Kbit EEPROM with write protect
- 64-bit unique identifier
- 16-bit counter with anti-tearing
- 23.5pF, 28.5pF or 99pF tuning capacitance
- Up to 60 years data retention
- Up to 1Mu erase cycles
- Kill / Untraceable mode
- TruST25 Digital signature
- Tamper detect

KEY BENEFITS

- Wide memory density options
- High-reliability EEPROM
- Anti-collision mechanism
- Read or Write operations
- Tamper detect indicator
- Privacy Protection
- Antenna Class 1 to Class 6 support

KEY APPLICATIONS

- Consumer engagement
- Brand protection
- Access control
- Asset Tracking
- Identification
- Gaming
- Parameter setting

Device Summary

Part number	RF interface	NFC Forum certification	Memory size	Data protection	Counter	Special Features	Package	RF Status output
ST25TV512	ISO15693 / NFC Forum Type 5	Yes	512 bits	32 / 64 bits encrypted password	16 bits	TruST25 Digital signature	UFDFPN5, SBN075 and SBN12 (*)	No
ST25TV02K	ISO15693 / NFC Forum Type 5	Yes	2 Kbits	32 / 64 bits encrypted password	16 bits	TruST25 Digital signature	UFDFPN5, SBN075 and SBN12 (*)	No
ST25TV02K-AD	ISO15693 / NFC Forum Type 5	Yes	2 Kbits	32 / 64 bits encrypted password	16 bits	Tamper detect pin / TruST25 Digital signature	UFDFPN5, SBN075 and SBN12 (*)	No
ST25TV04K	ISO15693 / NFC Forum Type 5	Yes	4 Kbits	64 bits password	No	Energy Harvesting	SBN12 (*)	Yes (CMOS positive GPO)
ST25TV16K	ISO15693 / NFC Forum Type 5	Yes	16 Kbits	64 bits password	No	No	SBN12 (*)	No
ST25TV64K	ISO15693 / NFC Forum Type 5	Yes	64 Kbits	64 bits password	No	No	SBN12 (*)	No

^(*) SBN075: Sawn and bumped wafer (die form), 75 μ m thickness; SBN12: Sawn and bumped wafer (die form), 120 µm thickness

Reference design kit



ST25TV Series Eco-System













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



