

ST25TB SERIES

Ticketing and RFID tags



RFID tags with ISO14443-B RF interface, large and unique counting capability with anti-tearing feature and anti-collision mechanism

ST's ST25TB ICs provide RFID short range tags that enable transport passengers with fluid access to transportation. The embedded EEPROM memory density spans from 512 bits and 4 Kbits, covering a wide spectrum of applications including Brand protection and identification. The ST25TB series delivers state-of-the-art RF performance and offers a counter feature able to trig more than 4 billion of events.

KEY FEATURES

- ISO14443-2 Type B with Proprietary Protocol
- 13.56 MHz carrier frequency
- 512-bit, 2-Kbit and 4-Kbit EEPROM with write protect
- 64-bit unique identifier
- 2 * 32-bit counters
- Resettable OTP
- 68pF tuning capacitance
- 40 years data retention
- 1 million write erase cycles
- 120 µm and 75 µm sawn and bumped wafer

KEY BENEFITS

- Wide memory density options
- High-reliability EEPROM
- Large and unique counting capability with anti-tearing feature
- Anti-collision mechanism
- Read or Write operations counter
- Dedicated version for Mass transit
- Antenna Class 1 to Class 6 support

KEY APPLICATIONS

- Public transportation
- Event ticketing
- Asset Tracking
- Brand protection
- Identification
- Maintenance, repair and operations

Device Summary

Part number	RF interface	Memory size	Data protection	32 bit counter	Package	Comment
ST25TB512-AT	ISO 14443B proprietary	512 bits	Yes	Yes	SBN12 and SBN075 (*)	Dedicated for Transport
ST25TB512-AC	ISO 14443B proprietary	512 bits	Yes	Yes	SBN12(*)	
ST25TB02K-AC	ISO 14443B proprietary	2 Kbits	Yes	Yes	SBN12(*)	
ST25TB04K-AC	ISO 14443B proprietary	4 Kbits	Yes	Yes	SBN12(*)	

(*) SBN12: Sawn and Bumped inkless wafer (die form), 120 µm thickness

SBN075: Sawn and Bumped inkless wafer (die form), 75 µm thickness

ST25TB Series Eco-System



Support eco-system



e2e community



PC SW tools



Documentation



Antenna Design Suite

Technical support

The ST25TB 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/st25tb



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