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 bit to 4 Kbit, 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-K, and 4-K EEPROM with write protect
- 64-bit unique identifier
- 2 * 32-bit counters
- Resettable OTP
- 120um Bumped wafer
- 68pF tuning capacitance
- 40 years data retention
- 1 million write erase cycles

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
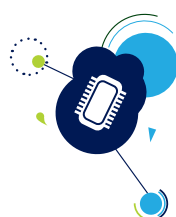
DEVICE SUMMARY

Part number	RF interface	Memory size	Data protection	32 bit counter	Package	Comment
ST25TB512-AT6G6	ISO 14443B proprietary	512 bit	Yes	Yes	SBN12(*)	Dedicated for ticketing
ST25TB512-AC6G6	ISO 14443B proprietary	512 bit	Yes	Yes	SBN12(*)	
ST25TB02K-AC6G6	ISO 14443B proprietary	2 Kbit	Yes	Yes	SBN12(*)	
ST25TB04K-AC6G6	ISO 14443B proprietary	4 Kbit	Yes	Yes	SBN12(*)	

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

ECO-SYSTEM

Datasheet, user manual
& application note

e2e community

Antenna Design Suite

Support eco-system

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