



SIC56NL



NFC FORUM TYPE 5 TAG IC

WITH ANTI-COLLISION AND REPROGRAMMABLE DIGITAL SIGNATURE

SIC56NL is a vicinity tag IC compatible with ISO/IEC 15693 and NFC forum type 5 tag, with reprogrammable digital signature.

This chip brings an easy-to-discover NFC experience for consumers, and supports multiple tags reading based on anti-collision standard from ISO/IEC 15693 and includes Electronic Article Surveillance (EAS) feature to deter shoplifting.

SIC56NL supports de facto standard for the read signature command, with 32-byte digital signature allowing item-level verification for consumer without internet access.



HIGHLIGHT FEATURES

- NFC forum type 5 tag compatible
- RF interface based on ISO/IEC 15693
- 320 bytes of user memory with 50 years data retention
- Multiple tag reading with fast inventory read
- On-chip capacitance 23.5 pF
- Electronic article surveillance (EAS)
- Reprogrammable 32-byte digital signature

APPLICATIONS

- Asset and document tracking
- Library management
- Laundry tag
- Pharmaceutical supply chain management
- Toys
- Smart packaging
- Product authentication



NFC FORUM TYPE 5 TAG IC FOR ASSET TRACKING



SPECIFICATION

SIC56NL

Standard	NFC Type 5 Tag ISO/IEC 15693 with AFI and DSFID Support ISO/IEC 18000-3 Mode 1
Memory	
User Memory Size [bytes]	320
Data Retention [years]	50
Write Cycle [times]	100,000
Access Protection	32-bit or 64-bit Password Protection
Security	
Signature	Reprogrammable
Signature Size [bytes]	32
Signature Technology	Elliptic Curve Digital Signature Algorithm (ECDSA)
Others	
On-Chip Capacitor [pF]	23.5
Packages	Sawn Wafer with Bump



DEVELOPMENT KITS SUPPORT MATERIALS

- Demo iOS, Android and Windows Application
- Reference Antenna Design and Antenna Design Tools

SIC56NL CONCEPT

Asset & Document Tracking



Long Read Range

Library

Multi-Tag Reading



Fast Anti-Collision

Jewelry Shop