NXP ICODE SLI-SY
HF RFID smart label IC

When long-term data integrity and tailored security counts

National archives, university libraries and museums need an identification solution that will last for decades. Offering a guaranteed 40 years data retention, NXPs' ICODE SLI-SY answers this need. Building on the proven and reliable ICODE product family, this solution also offers many additional benefits including benchmark read range and optional password security.

Key features

- 40 years data retention
- Interface according to ISO 15693 / ISO 18000-3
- EAS functionality with optional password protection
- Optional and flexible password security concept for managing user memory access
- Password protected destroy and privacy functions
- 100% compatible with ICODE SLI-S

Key benefits

- 40 years data integrity guarantee
- Fully compliant with global standards and harmonized regulations
- Benchmark RF performance and reliability
- Addresses demands for customer privacy

Key applications

- Academic libraries
- Government, medical, military and legal archives
- Long-term asset management applications such as museum collections

Long-term benefits

With 40 years guaranteed data retention, ICODE SLI-SY is the ideal choice for libraries, archives, long term asset management and other item-level tagging applications where items need to be stored for long periods of time. The long data retention brings significant added value for customers as label costs can be depreciated over a much longer time, giving a much better return on investment.

Tailored security

ICODE SLI-SY features a range of security options which you can tailor to meet your application's requirements. You can use the IC without any password protection for example or you can leverage password protection to enable enhanced memory administration rights to prevent unauthorized writing and reading of classified data on the IC. It also features password-protected EAS functionality up to 32-bit passwords – letting you address the need for advanced theft protection.

NXP founded by Philips

Proven performance and compliance

Building on the proven and reliable performance of our ICODE family, ICODE SLI-SY supports ISO 15693 as well as ISO 18000-3. It operates up to a distance of 2 meters, making it well suited for long-range applications, delivering a robust solution and quality of service.

Packaging options for your design freedom

Ensuring that tags and labels built using ICODE SLI-SY will last for 40 years can be a challenge for inlet providers and label manufacturers. Our flip chip packaging option makes it easy to achieve high yield and a long guaranteed lifetime without requiring sophisticated semiconductor assembly processes.

Used in thousands of libraries, archives and industrial applications worldwide, NXP Semiconductors' ICODE platform is the industry standard for high frequency (HF) smart label solutions. With more than 700 million ICs sold, ICODE is a proven and reliable technology platform.

Product features	ICODE SLI-SY
Memory	
Size [bit]	2048
Data Retention [yrs]	40
Write endurance [cycles]	100,000
Organization	Pages of 4 blocks á 32 bit
RF interface	
Standard	ISO 15693, ISO 18000-3, EPC
Frequency	13.56 MHz
Baud rate [kbit/s]	up to 53
Anticollision	Acc. ISO 15693, ISO 18000-3, EPC
Operating Distance [m]	up to 2[1]
Resonance Capacitance [pF]	23.5
Security	
Unique Serial Number [byte]	8
Write protection	Blockwise
Access keys	32 or 64 bit
Access conditions	Plain or Password
Configurable password protection read/write	Pagewise
Special features	
EAS	Yes (optional 32-bit password protection)
AFI	Yes
EPC	Yes
Destroy command	Yes (32-bit password protected)
Privacy command	Yes (32-bit password protected)
Packaging	
Sawn wafer (Au bumped)	SL2 ICS5311
FCP module	SL2 FCS5311

[1]Based on ECC regulations

www.nxp.com

founded by PHILIPS

Date of release: April 2008
Document order number: 9397 750 16514
Printed in the Netherlands