



## NXP ICODE SLI-L / SLI-L HC HF RFID smart label IC

# Robust and lean addition to the market leading ICODE platform

Specifically targeting applications requiring ISO 15693 / ISO 18000-3 compliance and smaller memory sizes, the ICODE SLI-L is a lean smart label IC with benchmark RF performance. Part of our established ICODE family, this RFID smart label IC delivers excellent value for your solution.

### Key features

- ▶ Fully compliant with global standards and harmonized regulations
- ▶ Optimized memory size and a lean command set
- ▶ Robust and reliable performance in industrial environments
- ▶ Addresses demands for customer privacy

### Key features

- ▶ Interface according to ISO 15693 / ISO 18000-3
- ▶ 256-bit user memory
- ▶ Improved RF performance
- ▶ EAS functionality with optional password protection
- ▶ Password protected destroy and privacy functions

### Key applications

- ▶ Industrial and laundry
- ▶ Factory automation
- ▶ Libraries and rental
- ▶ Asset management

Capable of operating under difficult industrial conditions, ICODE SLI-L delivers high performance and reliability in electrically noisy environments. The IC is available with a standard capacitance of 23,5 pF and with a high capacitance of 97pF. The high capacitance (HC) version is particularly suited for small tags, making it ideal for implementation in robust packages such as rigid ID transponder buttons.

ICODE SLI-L / SLI-L HC answers market demands for ISO 15693-compliant RFID ICs with low user memory size and lean feature sets. They address the increasing need for customer privacy, password protected EAS, a standardized AFI functionality and a 256-bit user memory.

These features also make them ideal for library, rental and other asset tracking applications. The privacy feature allows labels to be switched between private mode (e.g. when an item is on loan) and public mode (e.g. when the item re-enters the library). In addition, the ICs support emerging library standards including NISO and the Danish data model.

| Product Features            | ICODE SLI-L<br>SL2 ICS50      | ICODE SLI-L HC<br>SL2 ICS51   |
|-----------------------------|-------------------------------|-------------------------------|
| <b>Memory</b>               |                               |                               |
| User Memory Size [bit]      | 256                           | 256                           |
| Data Retention [yrs]        | 10                            | 10                            |
| Write endurance [cycles]    | 100.000                       | 100.000                       |
| Organization                | 32 bit blocks                 | 32 bit blocks                 |
| <b>RF-Interface</b>         |                               |                               |
| Standards                   | ISO 15693, ISO 18000-3        | ISO 15693, ISO 18000-3        |
| Frequency                   | 13.56 MHz                     | 13.56 MHz                     |
| Baudrate [kbit/s]           | up to 53                      | up to 53                      |
| Anticollision               | Acc. ISO 15693-3, ISO 18000-3 | Acc. ISO 15693-3, ISO 18000-3 |
| Operating distance          | up to 2 m <sup>1</sup>        | up to 2 m <sup>1</sup>        |
| Resonance capacitance [pF]  | 23.5                          | 97                            |
| <b>Security</b>             |                               |                               |
| Unique Serial Number [byte] | 8                             | 8                             |
| <b>Special Features</b>     |                               |                               |
| Privacy mode                | Password (32-bit protected)   | Password (32-bit protected)   |
| Destroy command             | Password (32-bit protected)   | Password (32-bit protected)   |
| EAS functionality           | Password (32-bit protected)   | Password (32-bit protected)   |
| <b>Packaging</b>            |                               |                               |
| Sawn wafer (Au bumped)      | SL2 ICS50                     | SL2 ICS51                     |
| FCP module                  | SL2 FCS50                     | SL2 FCS51                     |
| MOA2 module                 | SL2 MOS50                     | SL2 MOS51                     |

<sup>1</sup>Based on ECC regulations