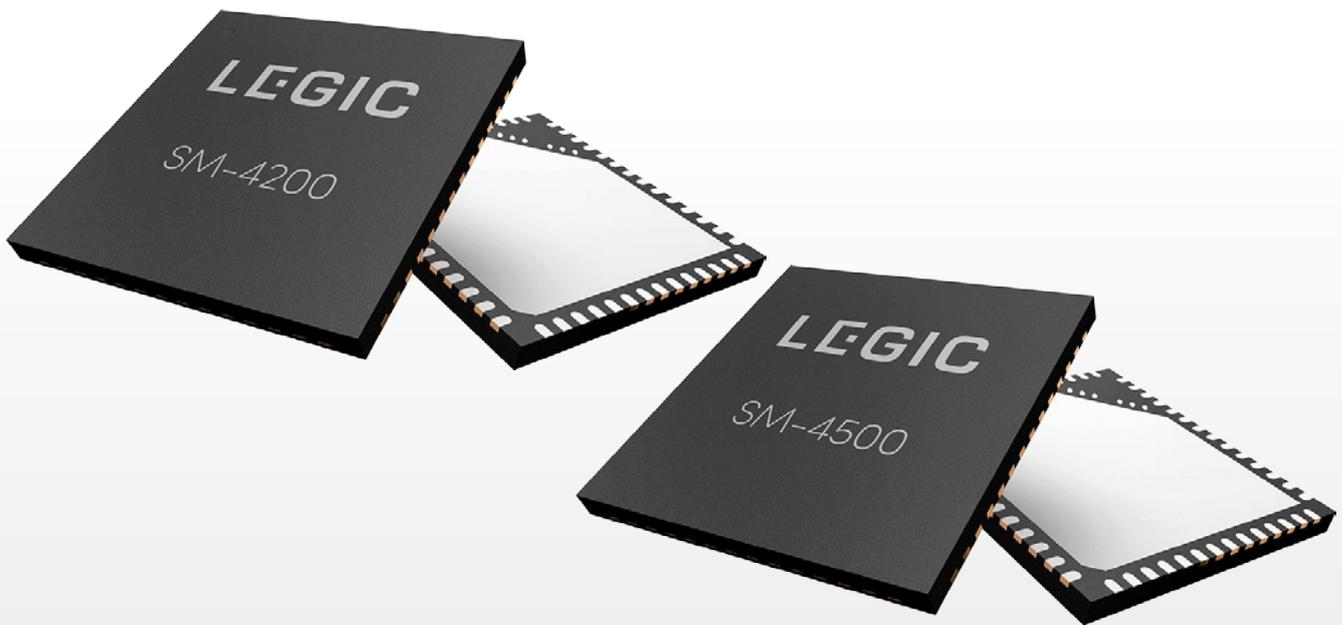


**LEGIC**

SM-4200 and SM-4500

# Compact reader ICs for secure contactless solutions



## The right choice for your RFID solutions

The SM-4200 and SM-4500 reader ICs support all common RFID standards. Their compact size and patented wake-up circuitry make them the right choice for all kind of applications.

### **Interoperability with many different smartcards**

In addition to LEGIC advant and prime, the SM-4200 and SM-4500 support many third-party transponders. With their integrated key storage and NXP key derivation, secure usage and full compatibility with existing MIFARE installations can be achieved.

## Endless range of applications

Combine and manage applications according to your needs with the LEGIC technology platform. Up to 127 applications can be stored securely on a smartcard or a credit card. The system is also expandable and can be customized to meet individual needs.

## Master-Token System-Control

The patented LEGIC Master-Token System-Control is a unique security concept. Instead of protecting administrative rights with volatile passwords, security is bound to a specific physical smartcard. The owner of this Master-Token thus has full control over an installation and is independent. The SM-4200 and SM-4500 fully support multi-application. Thanks to their high performance, their operation is simple and secure.



## Evaluation Kit EK-4000

The EK-4000 Evaluation Kit helps you with the quick and cost-efficient design-in of a LEGIC 4000 series reader IC into battery-operated and line-powered readers.

- Evaluation of the LEGIC 4000 series
- Introduction to the 4000 series instruction set
- Design examples of battery-operated and line-powered readers
- Access to the unique LEGIC Master-Token System-Control
- Use of LEGIC prime and advant smartcards
- Access to MIFARE smartcards



## Technical data

SM-4200 and SM-4500	
RFID	<ul style="list-style-type: none"> <li>▪ ISO 15693</li> <li>▪ ISO 14443 A + B</li> <li>▪ LEGIC RF standard</li> <li>▪ Inside Secure*</li> <li>▪ Sony Felica**</li> </ul>
RFID security elements	<ul style="list-style-type: none"> <li>▪ Master-Token System-Control</li> <li>▪ Mutual authentication</li> <li>▪ NXP key diversification</li> <li>▪ AES 128 / 256 bit, 3DES, DES, LEGIC encoding</li> </ul>
Energy saving options	<ul style="list-style-type: none"> <li>▪ Stop mode: typically 3µA</li> <li>▪ Watch mode with card-based wake-up: typically 20µA</li> </ul>
NFC peer-to-peer	ISO 18092***
Host interface	<ul style="list-style-type: none"> <li>▪ UART with 38,400 or 115,200 baud (RS232 timing)</li> <li>▪ SPI slave mode 1 or mode 3</li> <li>▪ Authentication and encryption (optional)</li> </ul>
Firmware download	Yes
SM-4500	
Advanced functions	<ul style="list-style-type: none"> <li>▪ LEGIC card initialization</li> <li>▪ Master-Token generation</li> <li>▪ LEGIC cash</li> </ul>

\* Reads the unique ID (UID/CSN) of Inside Secure based technology, such as HID iClass

\*\* Encoding is not integrated

\*\*\* ISO 18092 Passive Peer-to-Peer Mode - Initiator, NFC Tags 2, 3, 4