

# advant

advanced contactless smart card system

# LEGIC®

advant innovation in ID technology



RFID solutions on the fast track



All you need for your RFID smart card solution - the DK-2000

## Development Kit DK-2000

The LEGIC advant® Development Kit DK-2000 puts you on the fast track to market your new 13.56 MHz contactless smart card solution.

The easy-to-use LEGIC advant® Development Kit DK-2000 enables fast and efficient evaluation, exploration and experimentation of the benefits the contactless 13.56 MHz smart card RFID technology LEGIC advant offers. The kit provides developers with a complete development solution to get quickly off the ground, accelerate their application development and rapid prototyping. The Development Kit DK-2000 supports the ISO 14443 A, ISO 15693 and the LEGIC RF standard.

Thanks to its plug-in SC-2560/SM-2570 reference readers, pre-configured examples and advanced software development environment the kit gets you easily started with your own application design, development of prototypes or the testing of the various included transponder forms, resulting in a short time to market and low development costs.

### Key features

- Modular plug-in reference reader boards with SC-2560 and SM-2570
- Development board for plug-in reference reader boards with on-board antenna, external antenna connector, various host and peripherals interfaces, digital I/Os, LEDs and buzzer
- Advanced software development environment with modern command shell, set up and sequence verification utilities
- LEGIC transponders of different RF standards and forms
- Engineering samples with reference layouts and design files
- Pre-configured getting started examples
- Easy-to-use plug & play concept
- Prepared for emulator of the custom-programmable Application Processor for SM-2570 and external peripherals (e.g. keyboard, display)

### Standards



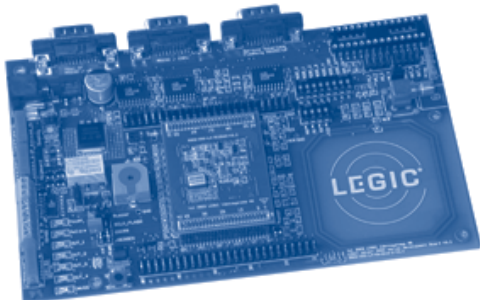
ISO



LEGIC RF  
standard



13.56  
MHz  
contactless  
technology



Powerful development board with plug-in SC-2560 reference reader

### With the Development Kit developers can ...

- get started easily by using the pre-configured examples
- evaluate the LEGIC advant RFID technology, system concept & features and the use of the supported RF standards
- experiment with data formats and transponder forms; test system characteristics such as mixed RF standard operation, secure read/write capabilities, encryption algorithms, interfaces, etc.
- verify basic command sequences, high-level commands and application standards
- develop application software by using the reference reader
- develop custom-design application readers by using the engineering samples and reference design information
- realise rapid prototypes for own pilot or target applications by using the plug-in reference reader
- produce initial pilot series with engineering samples

### Contents overview

- Development Board, plug-in SC-2560 / SM-2570 reference reader boards
- Development Kit Software
- Power supply and various connectors for international use
- RS232 cable
- LEGIC transponder variety set including credential of each RF standard such as ISO 15693, ISO 14443 A, LEGIC RF Standard; pre-configured subset with example
- User manual with getting started examples
- CD with user manual and documentation reference layout files for SC-2560 application design (Gerber files)
- 1 pc SM-2570, 3 pcs SC-2560 engineering samples
- Equipment to connect the emulator of the programmable Application Processor for SM-2570\*\*

\* Max. reading range depends on used RF standard, the requirements of national spectrum management authorities, antenna, transponder and surroundings.

Note: Content is subject to change without prior notice.

### Technical data

Power supply (adapter)	AC 100 to 240 V, output DC 12 V
Carrier frequency	13.56 MHz
Antenna impedance	50 Ohm
Range*	up to 10 cm with on-board antenna; up to 25 cm with external antenna
Interface connectors	Host interface: RS232 Host interface: RS485 Host interface: SPI, serial asynchronous Service interface: RS232 Application Processor interface: RS232
Application protocols (Host interface)	OMRON (Clock & Data), Wiegand, BPA/L
Other connectors	external peripherals connector, universal test pin bar

### PC requirements

Processor	min. Pentium 166 MHz
Memory requirements	min. 128 MB RAM
Hard disk space	min. 1 MB
Operating system	Windows 9X, Windows NT 4.0 / 2000 / XP

### SM-2570 Application Processor development environment requirements

\*\*For the development and programming on the Application Processor built in the SM-2570, a separate development kit of the Application Processor manufacturer (Cypress<sup>®</sup> MicroSystems, Inc.) is additionally required.