

advant

advanced contactless smart card system

LEGIC®

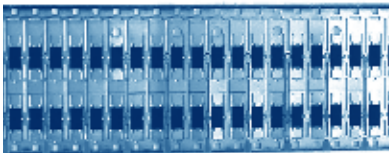
advant innovation in ID technology



■ ■ ✓ Wide choice of top security



Wafer delivery form



MCC2 module delivery form



MOA4 module delivery form

LEGIC advant® Crypto Transponder Chips

The LEGIC advant transponder series offers a wide selection of crypto memory transponder chips for contactless ISO14443 A and ISO15693 applications.

All transponder types provide powerful security and application management. A wide choice of memory sizes and ISO standards is available for basic single applications up to comprehensive all-in-one-card solutions. All transponders have a common application interface.

The transponder chips use LEGIC's unmatched Master Token System Control™ for easy multi-application, security system control and data protection.

LEGIC advant transponder chip	ATC128-MV	ATC256-MV	ATC1024-MV	ATC2048-MP	ATC4096-MP	CTC4096-MP
RF standard	ISO15693	ISO15693	ISO15693	ISO14443	ISO14443	ISO14443 A, LEGIC RF
Memory size	128 byte	256 byte	1024 byte	2048 byte	4096 byte	1002 Byte (LEGIC RF), 2984 Byte (ISO 14443 A)
Typical use	1-2 applications: basic access, leisure/re-creation, ticketing	multi- application	multi-application incl. biometrics	full-scale multi-application incl. biometrics	full-scale multi-application incl. biometrics	migration from LEGIC prime to LEGIC advant, full-scale multi-application

Standards



ISO

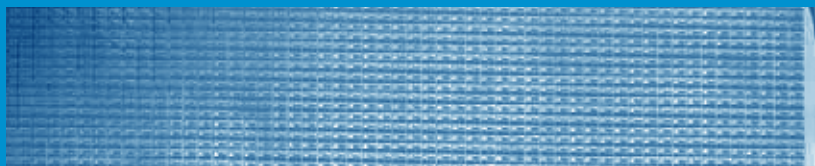


LEGIC RF
standard



13.56
MHz
contactless
technology

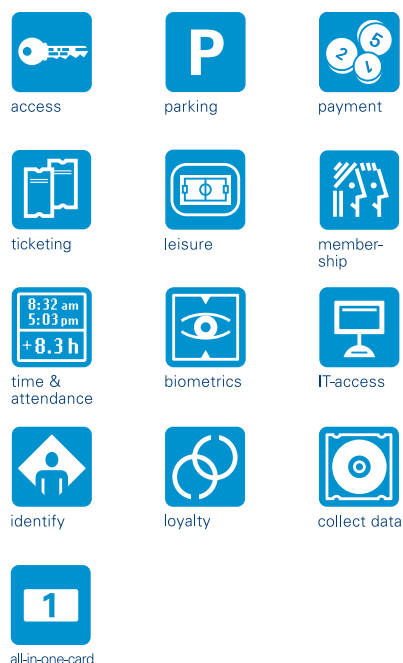
LEGIC advant · fully scalable – fully flexible



Features

- **Contactless Interfaces:** 13.56 MHz, ISO14443 A or ISO15693 compliant
- **Memory:** memory sizes from 128 bytes up to 4096 bytes. Segments and read/write privileges can be dynamically defined from 16 up to 4096 bytes per application
- **Multi-Application:** easy plug & play multi-application for up to 127 applications
- **Security:**
 - System security & control and key management based on physical tokens (LEGIC Master-Token System Control). Physical token based security avoids insecure passwords and directly translates into true system control for the system owner.
 - Encrypted data transfer and encrypted data storage can be defined per application (AES 128/256 bit, 3DES, DES, LEGIC encryption).
 - All LEGIC transponder chips contain a unique transponder ID (UID) and come with LEGIC SafeID feature (authenticated UID) for enhanced trust.
 - EAL4+ CC certified hardware (ATC4096)
- **Cross-type API:** a common API for all LEGIC advant transponder types is provided for easy and time efficient design-in

LEGIC advant – for single or multiapplications



Specifications

	ATC128-MV	ATC256-MV	ATC1024-MV	ATC2048-MP	ATC4096-MP	CTC4096-MP
RF standard		ISO15693		ISO14443 A		LEGIC RF ISO 14443 A
Memory size (byte)	128	256	1024	2048	4096	1002 / 2984
UID (byte) ****		8		4	7	4 / 7
SafeID			yes			
Range **		up to 70 cm		up to 10 cm		up to 25 cm
Key management (per app.)			MTSC			
Data transfer / storage encryption (per app.)		3DES, DES, LEGIC encryption			AES, 3DES, DES, LEGIC encryption	
Cryptographic authentication (per application) ****		96 bit		64 bit		112 bit
Max. number of applications*	8	16	59	123	127	
Memory segmentation			dynamic			
Application segment size			variable			
Data retention (min)			10 years			20 years
EEPROM cycles (min)			100,000		500,000	100,000
Baud rates (kpbs)		up to 26.48		106	up to 848 ***	up to 848 ****
Delivery form	wafer		MCC2 module		MOA4 module	wafer

* Memory size indications are nominal values. The effective max. number of applications is depending on the memory requirements of applied applications.
 ** Max. reading range depends on used RF standard, the requirements of national spectrum management authorities, reader application, RF standard, antenna, transponder and surroundings.
 *** Actual rate depending on used reader module.
 **** Depends on RF standard

Content is subject to change without prior notice.