

PRIME Secure Encryption (PSE) CORPORATE Secure Encryption (CSE)

The ASIS Technologies PRIME Secure Encryption (PSE) card is a DESFire based contactless Smartcard secured with the 3DES and AES128 encryption algorithms. Protected secret keys are stored in a SAM (Secured Access Module) and used for electronically personalize each DESFire smartcard. Built-in multilayer encryption implementation ensures very high security including CMAC key diversification and AES128 data file encryption.

Since the PSE scheme is entirely managed and operated by the factory, PSE customers can enjoy the full benefits of a secure encryption system without the hustle to perform any card personalization or secret key management chores.

The CORPORATE Secure Encryption (CSE) card is equally secured scheme and utilizes the SAM to store secret keys unique to each corporate customer. Furthermore a dedicated set of SAM is deployed for every corporate customers. CSE scheme customers enjoy additional benefits of having the option to personalize their own DESFire cards in their own premise using SKeyMa Lite.



Key Features

- MIFARE DESFire EV2 highly secure microcontroller based IC
- Credit Card Size 5.4 x 8.57 x 0.084 cm
- Memory capacity of 2K, 4K or 8K bytes
- Multilayer AES128 and 3DES encryption algorithms for key diversification and data file encryption
- 13.56MHz Contactless interface compliant to ISO14443A Standard
- 10 years data retention, 500,000 write endurance
- 7 byte UID
- Highly secured SAM based secret key storage

Benefits

- Based on highly secured and field proven DESFire smartcard platform and ISO14443A standard to ensure cross compatibility
- Encryption with 3DES and AES128 algorithm
- Master secret is fully protected inside a SAM. The Factory takes care of all card and reader encryption and personalization process, making it hustle free to operate a fully secure card solution
- Prevents RFID frauds includes cloning & hacking
- CSE Scheme provides a dedicated set of SAM for each customer and an option to personalize your own DESFire cards using SKeyMa Lite software.

PRIME & CORPORATE Secure Encryption (SE) DESFire Smartcards

Technical Specifications

Specifications*	
Smartcard IC	DESFire EV2
Memory Capacity (bytes)	2K, 4K & 8K
Encryption Algorithm	3DES, AES128
Data Retention	10 years
Write Endurance	500,000
UID (bytes)	7
Material	PVC
Color	White/ Glossy
Interface	ISO14443A
Compatible Readers	R301, R303, R381 & R385
Dimensions (H x W x D)	54 x 85.7 x 0.84 mm
Weight	5.8 g
Operating Frequency	13.56 MHz
Operating Temperature	-20°C to 50°C

**Specifications are subject to change without prior notice*

Ordering Information

Model No.	Description
MFD22K	MIFARE DESFire EV2 2K Card (ISO)
MFD24K	MIFARE DESFire EV2 4K Card (ISO)
MFD28K	MIFARE DESFire EV2 8K Card (ISO)

Remarks:

1. The PSE & CSE scheme can support MIFARE DESFire EV1/2K, EV1/4K, EV1/8K, EV2/2K, EV2/4K, & EV2/8K.
2. Please contact Sales for availability.