

## MIFARE DESFire EV2 4K card



The MIFARE DESFire EV2 4K card from NXP operates at 13.56 MHz wireless frequency, according to the ISO 14443A standard with the transport protocol complying to the ISO 14443-4 standard.

This card is fully backward compatible with MIFARE DESFire EV1 cards and readers, but offers an extended command set and allows unlimited applications (subject to memory space), multiple keys per access right and additional proximity and originality checks to further enhance security of transactions. The MIFARE DESFire EV2 meets Common Criteria EAL5+ security requirements, and also has innovative new features to support shared and delegated application management.

Like the EV1 it features a 4Kbyte non volatile memory, a high speed triple-DES and AES encryption co-processor, a flexible memory organization structure, a mutual 3-pass authentication technique together with a true random number generator and an anti-tear mechanism to guarantee data integrity during contactless transactions. These cards typically operate at a distance of up to 10cm depending on the power provided by the reader.

This card is NFC forum type 4 compliant.

Supplied as blank white printable PVC cards to ISO standard size and thickness. Our cards contain only original NXP chips and use premium quality materials and production methods in order to ensure maximum performance, reliability and compatibility.

**Highly secure contactless card with non-proprietary encryption algorithm. Extended EV2 command set includes EV1 set for backwards compatibility. 4Kbyte memory. Operates at 13.56 MHz.**

To buy, visit:

<https://www.smartcardfocus.com/shop/ilp/id~882/mifare-desfire-ev2-4k-card/p/index.shtml>

This Product Briefing has been produced by [Dot Origin Ltd](#), the smart card experts behind [SmartcardFocus.com](#). If you have a query email [sales@smartcardfocus.com](mailto:sales@smartcardfocus.com) or call us on +44 (0)1428 685250.

## Technical Specifications

### Memory

EEPROM size [bytes]: 4096

Write-endurance [cycles]: 500 000

Data retention [years]: 25

Organisation: flexible file system

### RF-Interface

Acc. to ISO 14443A: yes - up to layer 4

Frequency [MHz]: 13.56

Baudrate [kbit/s]: 106 ...848

Anticollision: bit-wise

Operating distance [mm]: Up to 100

### Security

Unique Serial Number [byte]: 7, cascaded

Random Number Generator: Yes

Access keys: 14 keys per application

Multiple key sets: Up to 16 per application

Access conditions: per file

DES & DES3 security: MACing / Encipherment

AES security: MACing / Encipherment

Anti-tear supported by chip: yes

Proximity check: yes

### Special Features

Multi-application : Unlimited applications, MIsmartApp

Purse functionality: Value file

Transaction MAC: Per application

Virtual Card Architecture: PICC & application level

Chip manufacturer: NXP

Warranty: 1 year manufacturer's warranty