

Pack of 100 - NXP MIFARE Ultralight AES card



The MIFARE Ultralight AES chip from NXP in plain PVC card format has a 7-byte UID. Operates at 13.56 MHz wireless frequency, according to the ISO 14443A standard and contains 144 bytes of usable read/write memory.

The MIFARE Ultralight AES card supports the following security features:

- 3 independent one-way counters
- 128-bit AES protected password
- CC EAL3+security certification
- CMAC protection of message integrity following NIST standards
- Optional random ID for enhanced privacy
- Originality check feature

MIFARE Ultralight AES chips typically operate at a distance of up to 10cm, depending on the power provided by the reader. This card is ideal for various low-cost contactless ID/ticketing applications.

This is the next step up in security from the MIFARE Ultralight EV1 or MIFARE Ultralight C. Sharing a history with other cards in the MIFARE Ultralight family, it uses the same memory structure and commands sets.

This card can be configured to be NFC forum type 2 compliant.

Supplied as blank white printable PVC cards in packs of 100, 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.

Low-cost 144 byte contactless card with AES security features. Operates at 13.56 MHz. Pack of 100 cards.

To buy, visit:

<https://www.smartcardfocus.com/shop/ilp/id~1026/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 or call us on +44 (0)1428 685250.

MIFARE Ultralight AES

MIFARE RF Interface (ISO/IEC 14443 A)

Operating distance: Up to 100mm

Operating frequency: 13.56 MHz

Data transfer: 106 kbit/s

Data integrity: 16 Bit CRC, parity, bit coding, bit counting

EEPROM

240 byte, organised in 60 pages with 4 byte each

Field programmable read-only locking function per page for first 512bits; Read-only locking per block of 2 pages above 512bits

32 bit user definable One Time Programmable (OTP) area

144 bytes user read/write area (36 pages)

Data retention 10 years

Write endurance 100 000 cycles

Security

Common Criteria certification: EAL3+

3-pass mutual AES authentication based on a key length of 128-bit

Pre-programmed ECC-based originality signature, can be customised or permanently locked

locking; AES-based originality key

Unique 7 Byte serial number for each device

32 Bit user programmable OTP area

CMAC for message integrity protection according to NIST Special Publication 800-38B

Random ID (optional) for enhanced privacy. Compliant to ISO14443-3

Three independent 24-bit one-way counters with optional AES authentication protection of one counter

Field programmable read-only locking function per page

Country of origin: China

HSF code: 85235200

Manufacturer: NXP