

Product number: 17105U

# NFC tag ABS - 40 x 32 mm - MIFARE DESFire EV3 4k - 4096 byte - black - printed | black | 4096 Byte



## coe-datasheet-sw6.pdf.productInformation

We print our plastic tags using modern digital UV direct printing process, which offers high resolution, color accuracy and durability. This custom printable NFC tag features the waterproof material and its distinct temperature resistance. For your desired design, simply download our matching [print template](#) and provide us with your desired print layout conveniently via our configurator.

## Short description

- ABS material, plastic, rigid
- format: 40 x 32 mm, oval
- printing on one or both sides of the tag
- 4-color printable
- NFC chip: NXP MIFARE DESFire chip EV3 4k - 4096 byte

## Product description

### NFC product

The NFC tag is made of a robust and waterproof ABS material and has a format of 40 x 32 mm with a material thickness of 4.3 mm. Compared to its predecessors, the integrated MIFARE DESFire EV3 chipset offers higher performance with greater reading range and improved transaction speed. Due to its high security features, it is particularly suitable for SmartCity applications, access control or customer card systems.

### Print

Our tags are printed using the advanced digital UV direct-to-garment printing process, which offers high resolution, color accuracy and durability. This makes it possible to display images in photo-realistic quality or print tiny font sizes in a legible manner. This environmentally friendly technology allows us to personalize your products on one or both sides, adding logos, images, text or other designs from a wide range of colors. The applied ink layer is abrasion resistant as well as resistant to water, sunlight and chemicals.

**Note:** Single-sided printing is included in the product price. A one-time setup fee will be charged additionally for setup of one-sided/two-sided printing.

You can add the printing of the tag via the configurator. You can find the suitable [print template](#) for printing a free motif here.

## NFC chip

The ABS tag is equipped with the original MIFARE DESFire EV3 4k (MF3D43). The chip offers full backward compatibility to the MIFARE DESFire EV1 and MIFARE DESFire EV2. The MIFARE DESFire series is intended for the realization of applications with high security requirements and offers corresponding security functions that enable the protected storage of data on the chip. The MIFARE DESFire EV3 series (MF3Dx3) reflects NXP's efforts to continuously improve the level of security. For example, the chip offers new features such as a timer for transactions to effectively prevent man-in-the-middle attacks. In addition, it inherits from the NTAG DNA series the ability to hash NDEF messages.

The MIFARE DESFire EV3 4k has a total capacity of 4096 bytes and has a 7-byte UID. The NFC chip can be written up to 1,000,000 times and has a data retention of 25 years. The chip is Common Criteria (EAL5+) certified and offers 3DES or AES128 compliant encryption, among other features. The MIFARE DESFire EV3 4K is compatible with all NFC-enabled terminals. Due to the special functions, special hardware (locking system) or software (app) is usually required for use. Feel free to contact us to clarify compatibility with your application.

- Total capacity: 4096 bytes
- Free memory: -
- Usable memory NDEF: -

## Product properties

Product number	17105U
Antenna format	22 mm
Functions	Write protection, UID ASCII Mirror, 32-bit Password, 24-bit Counter, ASCII Mirror, 7 Byte UID, ECC-based original signature, true anticollision
Dimensions	40 x 32 mm (W x H)
Frequency	13.56 MHz
Available colours	black, blue
Material thickness	4,3 mm (T)
Chip standards / ISO Norm	ISO/IEC 7816-4, ISO/IEC 14443A, ISO/IEC 18000-3
Ambient temperature	-25 to 70 degrees
Data transfer rates	106 kbit/s, 848 kbit/s
Storage temperature	Min -55°C - Max +125°C
Operating temperature	Min -25°C - Max +70°C
Detail colour	black
Number of write operations	1.000.000 Mal
Colour category	black
Data retention	25 years
Material	ABS
Compatibility	to NFC-enabled smartphones: 100%
Product form	oval
Weight	2,5 g

<b>Antenna</b>	Copper
<b>Chip</b>	MIFRAE DESFire EV3
<b>Type</b>	Keyfob
<b>Delivery options</b>	single
<b>Memory</b>	4096 Byte
<b>NFC Forum Type</b>	NFC Forum type 4
<b>Water resistance</b>	waterproof (IP67)

## More images

