

# MIFARE® Online Training 2023 Q1

*20th, 21st, 22nd and 23rd of March 2023*



MIFARE® is NXP's well-known brand for a wide range of contactless IC products. With more than 12 billion contactless and dual interface IC's sold, MIFARE products are proven and reliable. This huge installed base of MIFARE products enables service providers to expand their offer while reducing the total costs and increasing users' convenience.

## Training summary

Our technical trainings cover a good mixture of theoretical basics and practical exercises for system and Application engineers who are dealing with MIFARE related products as well as marketing and technical management roles in the identification and transport businesses. The online training sessions are divided into a theoretical module (MOx) and a hands-on module (WOx) for each product. The sessions are delivered separately to ensure that the access to training content is flexible enough to accommodate all participants needs.

The theoretical module (MOx) is prerecorded, and participants will obtain access one week before the hands-on modules (WOx) are delivered live. Hands-on modules are based on exercises to explore the different MIFARE® product features presented in the theory using a contactless reader and a PC application to interact with the MIFARE® based cards. The hands-on modules (WOx) will also be used to clarify and answer questions linked to the theoretical module (MOx) that the participants have reviewed upfront.

## MIFARE online training sessions

### MIFARE® Ultralight® AES

#### MO1 - MIFARE Ultralight AES NEW

In this module we present the most relevant technical concepts for MIFARE Ultralight AES, the latest generation MIFARE Ultralight product, available since 2022. MIFARE Ultralight AES delivers a new level of trust for limited-use tickets and key cards by supporting AES cryptographic authentication and secure data access.

**Date:** Link with access to the pre-recorded module will be provided one week before the hands-on module

#### WO1 - MIFARE Ultralight AES workshop NEW

This module consolidates the theoretical concepts introduced in MO1. During this module we will review how MIFARE Ultralight AES can be configured to activate AES protection for user memory and authentication as well as how to use the AES keys to authenticate the MIFARE Ultralight AES using RFID Discover.

**Date:** 20<sup>th</sup> March 2023, from 14h to 16h CET

### MIFARE® Plus® EV2

#### MO2 - MIFARE Plus EV2

In this module we present the most relevant technical concepts for MIFARE PLUS EV2, the latest generation MIFARE PLUS product, available since 2021. MIFARE PLUS is designed to facilitate and accelerate the migration of systems based on MIFARE Classic while increasing the security of your system with state-of-the-art cryptography.

**Date:** Link with access to the pre-recorded module will be provided one week before the hands-on module

## WO2 - MIFARE Plus EV2 workshop

This module consolidates the theoretical concepts introduced in MO2. During this module we will review how MIFARE PLUS Ev2 can be configured in the different security levels and the features linked to each of them. The hands-on module includes exercises with read and write operations per sector, covering the typical use cases.

**Date:** 21<sup>st</sup> March 2023, from 14h to 17h CET

## MIFARE® DESFire® EV3

### MO3 - MIFARE DESFire EV3

In this module we present the most relevant technical concepts for MIFARE DESFire EV3, the latest generation MIFARE DESFire product, the perfect solution for scalable and multi-application solutions for transport, identification, access and loyalty solutions

**Date:** Link with access to the pre-recorded module will be provided one week before the hands-on module

### WO3 - MIFARE DESFire EV3 workshop

This module contains a set of hands-on exercises to review and consolidate the main concepts introduced in MO3. The exercises include the key injection required at card and application level as well as the application and file level management operations that are most commonly used in the field.

**Date:** 22<sup>nd</sup> March 2023, from 14h to 17h CET

## MIFARE® SAM AV3

### MO4 - MIFARE SAM AV3

This module reviews the features of the MIFARE SAM secure microcontroller, specifically designed for its use with MIFARE contactless products such as MIFARE DESFire, MIFARE PLUS and MIFARE Ultralight. The latest generation of this powerful product, MIFARE SAM AV3, is the perfect complement for contactless readers and offers secure key storage, secure communication with MIFARE based products as well setting up secure channels against other system components, supporting in this way a wide variety of use cases.

**Date:** Link with access to the pre-recorded module will be provided one week before the hands-on module

### WO4 - MIFARE SAM AV3 workshop

This module allows to consolidate the theoretical concepts introduced in MO4. You will learn through hands-on exercises how to inject and configure cryptographic keys in the MIFARE SAM AV3 memory as well as how to use them to authenticate and interact against MIFARE cards or other entities in the system.

**Date:** 23<sup>rd</sup> March 2023, from 14h to 17h CET

## Register

Obtain your early bird discount until 20<sup>th</sup> February 2023.

For more information and registration: <https://www.themobileknowledge.com/product/mifare-training-online-2023-q1/>

