

MIFARE Day 1

M1.1 MIFARE Introduction / M1.2 MIFARE Related Standards

M1.3 MIFARE Classic / M1.4 MIFARE Ultralight

The M1 MIFARE introduction training introduces the technical basics of the complete MIFARE product family with a focus on MIFARE Ultralight, MIFARE Ultralight C and MIFARE Classic. It introduces the basics of symmetrical crypto and a secure contactless system design. Basic technical knowledge is required.

Audience

- Technical managers
- Sales engineers
- Business Development managers
- MIFARE solution developers

Prerequisites

- Basic technical knowledge of smart card and its applications
- Laptop WIN 2000, XP or WIN7 for the workshop session (administration rights required!)
- Watching the MIFARE Introduction video from www.mifare.net
- Knowledge of basic cryptography e.g. TDES, AES, CMAC, CRC for M1.3 and M1.4

This course includes the MIFARE Workshop Package! (Details on page 15)

Duration:
 09:00 – 17:00

Dates:
<http://www.nxp.com/products/related/customer-training.html>

Course Contents

M-1.1 MIFARE Introduction

Introduction

Welcome to MIFARE World
 Introduction to MIFARE systems

MIFARE Product Portfolio and positioning

Positioning of all MIFARE products
 (including MIFARE implementations on SmartMX/SmartMX2)
 MIFARE from 3rd party manufactures (Licensees)

MIFARE Applications

Success stories and challenges
 MIFARE application architectures and requirements

M-1.2 MIFARE Standards / Specifications

List of Standards / Specifications in this field

In depth of ISO/IEC 14443

Designing an interoperable system
 MIFARE certification

M-1.3 MIFARE Classic

MIFARE Classic Functionalities

MIFARE Classic 1k/4k (EV1)

UID Handling

Different UID types (UID, RID, ONUID, FNUID) in MIFARE Classic

Workshop

MIFARE Classic workshop using MIFAREdiscover

MIFARE System Security

Security enhancement for MIFARE Classic system
 Migration to higher secure products

M-1.4 MIFARE Ultralight

MIFARE Ultralight Functionalities

MIFARE Ultralight, MIFARE Ultralight EV1, MIFARE Ultralight C

Workshop

Personalization of MIFARE Ultralight EV1, C and validation

Smart paper ticket design hints

design hints for coils and applications