NFC Adapter - Programmable

The NFC reader & writer

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The NFC Adapter is a development dongle especially designed for contactless general purpose Near-Field-Communications (NFC) applications. This adapter is based on the contactless RFID 13.56MHz technology and supports NFCIP-1 mode (ISO/IEC 18092), ISO 14443A/Mifare as well as ISO 14443B reader/writer standards. Supported contactless smart cards are MIFARE and FeliCa.

The plug and play capability of this USB-device and the support of several operating systems and applications turn this smart adapter into a general purpose NFC development platform for your individual needs. The applications are wide spread and include access control, verification and authentication of time attendance, e-payment and other NFC related scenarios.

NFC Adapter Programmable

Applications

- Access control
- Authentication
- Micro-payment
- NFC mobile tag
- Customer loyalty
- Time and attendance
- e-payment

Contents

- NFC Adapter - Programmable
- Schematics
- ARM JTAG adapter
- LPCDemoProject(MSD) for IAR
- Housing

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Feature Overview

CPU	LPC1765 (Cortex M3)
TRANSCEIVER IC	PN512
HOST INTERFACE	USB 2.0
TRANSMISSION SPEED	USB 2.0 full speed
POWER SUPPLY	BUS powered
STANDARDS	ISO/IEC 14443A/B and ISO/IEC 18092
RFID INTERFACE SPEED	Up to 424kbit/s
OPERATING FREQUENCY	13.56MHz
STATUS INDICATOR	1 Duo LED
POWER CONSUMPTION [MAX]	1.8W
TEMPERATURE RANGE	Commercial (0° to 70°)
ROHS COMPLIANT	Yes
DIMENSIONS	81mm x 23mm x 6 mm

Software Overview

The LPCDemoproject is intended as a guideline on how to read data from a NFC Tag.
Once the NFC Adapter is connected to a PC, the adapter will register as a Mass Storage Device (named “RFID2USB”) in Windows Explorer. Once a NFC Tag is brought into the RF field of the NFC Adapter, the data from the NFC Tag (Mifare 1k or Mifare Ultra Light card) is being read. This data is then (in its raw form) presented as a file on the Mass Storage Device.

- **Full IAR Embedded Workbench for ARM Getting Started Project**
- **Full documentation**
- **Sample RFID cards included**
- **Schematics included**
- **Getting started documentation**

Supported Cards

- **Mifare Classic**
- **Mifare Ultralight**
- **Mifare Ultralight C**
- **Mifare Desfire**
- **Mifare Plus**
- **Sony FeliCa**

Ordering Information

Order No.	Info
100-3600-1	NFC Adapter - Programmable Kit

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