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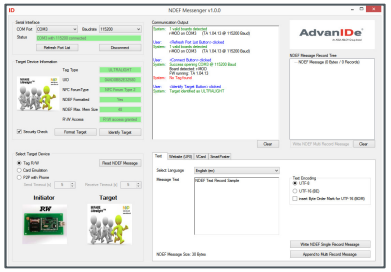
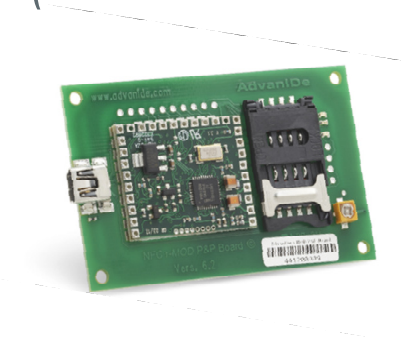
AdvanIDe

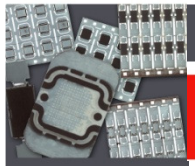
NFC NDEF – Messenger Software

(for the AdvanIDe NFC Dev Kit)





AdvanIDe – Advanced ID Electronics



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NFC and NDEF

NFC allows you to share payloads of data between an NFC tag and a powered device, or between two powered devices

The data stored in the tag can be written in a variety of formats, most are based around a NFC Forum standard called NDEF (NFC Data Exchange Format)

Devices with NFC can support three main modes of operation:

- **Reader/Writer mode**, allowing the NFC device to read and/or write passive NFC tags and stickers
- **P2P mode,** allowing the NFC device to exchange data with other NFC device
- **Card emulation mode**, allowing the NFC device itself to act as an NFC card. The emulated NFC card can then be accessed by an external NFC reader, such as an NFC point-of-sale terminal

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NFC Technology

Technology	• Evolved from13.56 MHz Near Field RFID protocols • Magnetic coupling for transmitting data and energy • 2-10 cm read-range
Standardization	NFC Forum: standards up to application level Based on: ECMA-340 Near Field Communication and Interface Protocol ISO IEC 18092 NFCIP-1 Near Field Communication
Usage	Touch and Connect
Benefits	1. „Simple“, no need for configuration, intuitive 2. Flexible: lowest cost using NFC Tags 3. Flexible: full functionality (P2P, Card Mode)

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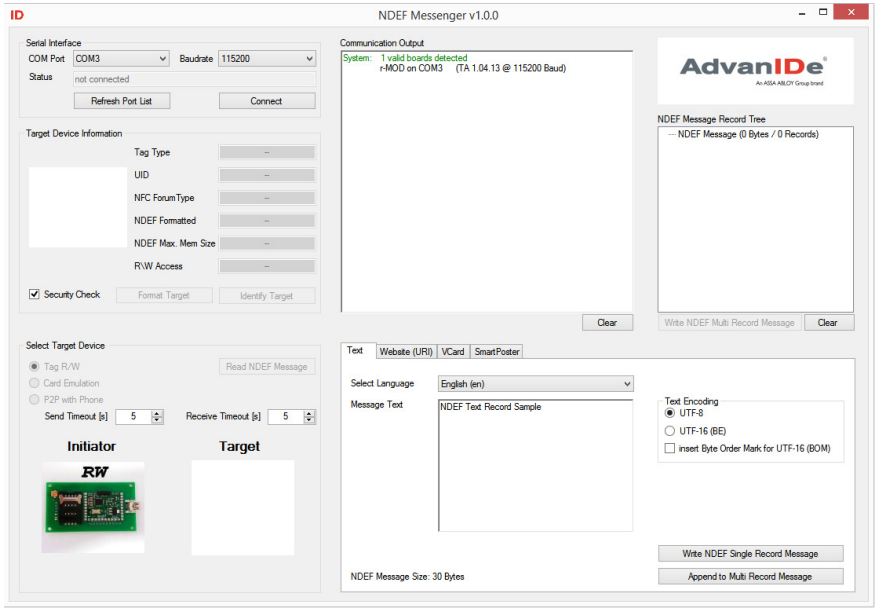
NFC NDEF Messenger

The NDEF Messenger allows to read and write information and data from and to NFC compliant devices (e.g. NFC Tags, Smartphones, Tablets,…)

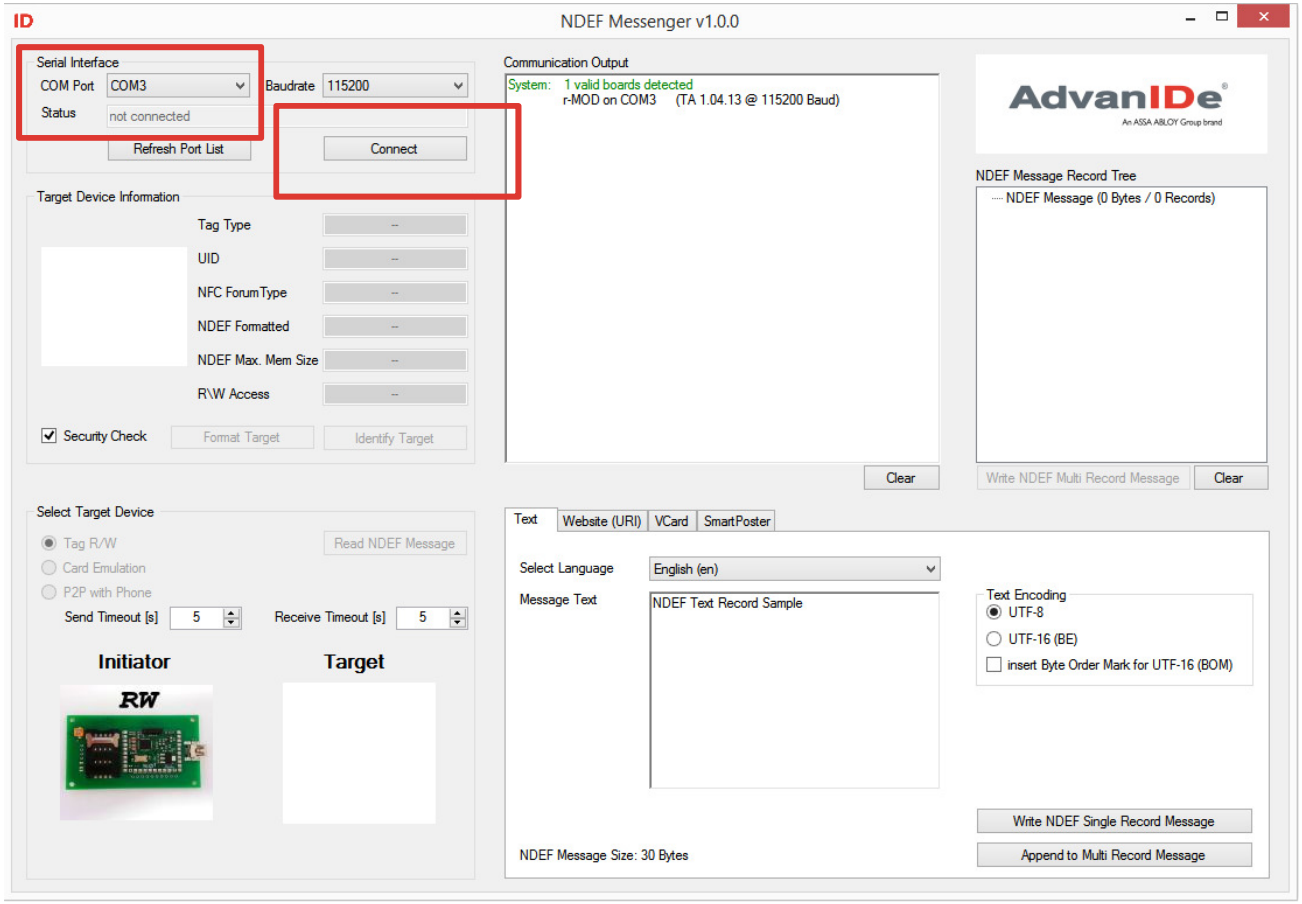
NFC NDEF Messenger

- Connect the AdvanIDe r-MOD Plug & Play Reader via USB to your PC
- Start the NDEF_Messenger.exe with double click

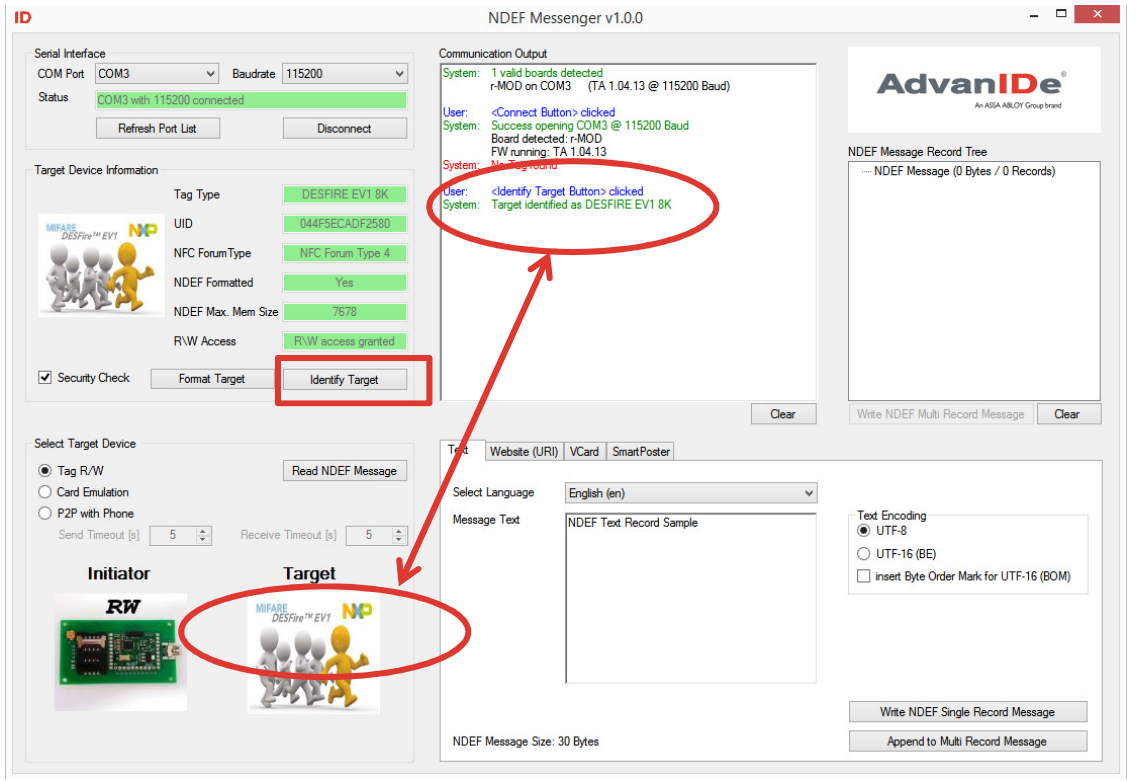
- NDEF Messenger starts on your screen

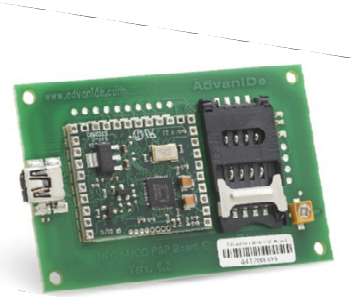


- Chose the COM-Port from the suggested list in the Communication Output Box
- Press the „Connect“ Button

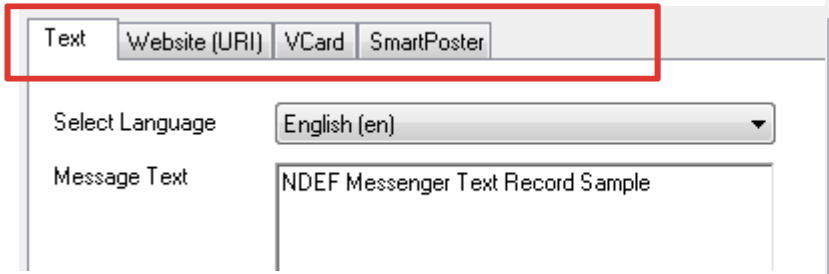


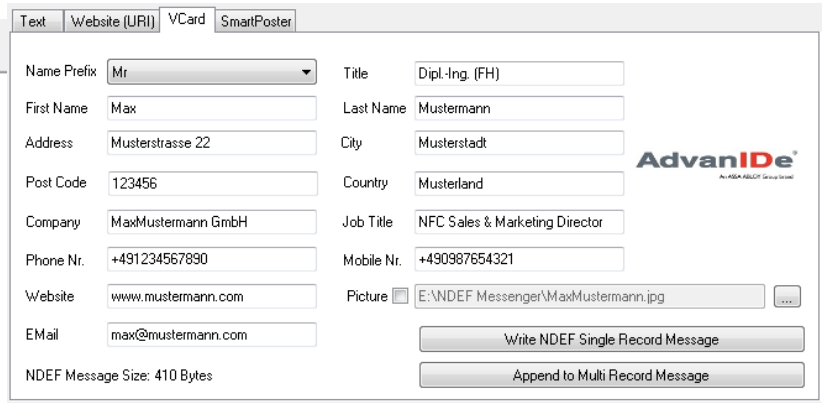
- Put a NFC compliant card / tag on the AdvanIDe r-MOD Plug & Play Reader
- Select a mode in the „Select Target Device“ box
- Identify the target





- Read a message:
  - Select Target device
  - Press „Read NDEF Message“ Button
  - Pop-Up Window with NDEF Message opens
- Write a message:
  - Select Target device
  - Select NDEF Message Type (Text, Website, VCard or Smartposter)
  - Put in the desired information/message
  - Press „Write NDEF Single Record Message“ to write to the target
  - Press „Append to Multi Record Message“ to write Message Record tree to bundle differend Message Records and press „Write NDEF Multi Record Message“ to write to the target





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NFC NDEF Messenger SPEC

Concept	NDEF Processing on Host Configurable OS Layer Portable User Interface Executable File to run
Programming Language	C/C++
Supported OS	Windows 7, Windows 8, Windows 8.1
NDEF Specifications	NFC Data Exchange Format NDEF 1.0 NFC Record Type Definition RTD 1.0 Text Record Type Definition RTD-Text 1.0 URI Record Type Definition RTD-URI 1.0 Smart Poster Record Type Definition SPR 1.1

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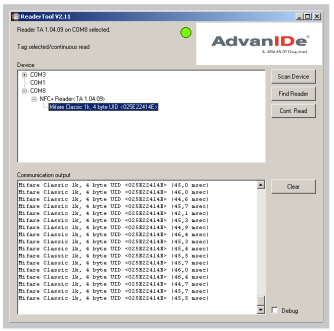
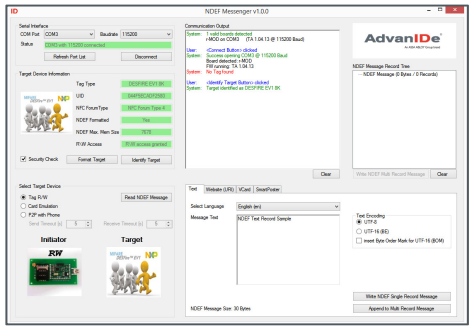
AdvanIDe® r-MOD and m-MOD NFC Developer's Kit

Enable new RFID applications with NFC readers and tags
Easy integration of NFC technology into OEM devices

Content:
1 AdvanIDe r-MOD NFC P&P reader board
1 AdvanIDe m-MOD NFC P&P reader board
documentation & reader tool SW, NFC Messenger
5 NXP NFC NTAG203 Keyfobs
5 NXP NFC NTAG203 Labels
5 NXP Mifare™ Classic 1K Cards
5 NXP Mifare™ DESFIRE EV1 Cards
5 Infineon my-d™ NFC SLE66R01PN Cards
5 Infineon my-d™ NFC SLE66R01PN Labels
5 Infineon my-d™ NFC SLE66R32P Labels
5 Infineon my-d™ NFC SLE66R01PN
NFC Keyrings





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