

## AdvanIDe® r-MOD and m-MOD NFC Reader Boards and Chip Sets

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

The AdvanIDe OEM and Plug & Play Boards are targeting manufacturers of terminals, design houses & system integrators of NFC applications. With the two models **r-MOD** and **m-MOD** provides AdvanIDe options of the widest range of NFC use cases.

### Options:

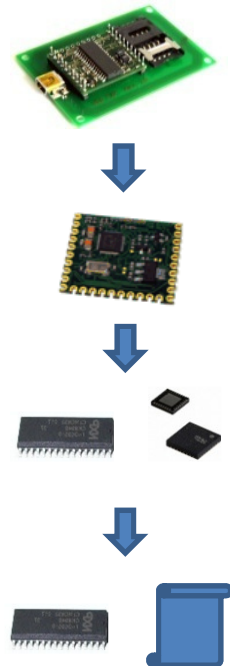
The new reader modules include an **OEM board** for customers who want broad customization options, and a **plug-and-play reader board** that adds the necessary functionality for a complete, immediate solution. AdvanIDe also offers **Chipsets** and a **Licensing option** for clients which require highly integrated PCBs and cost optimized BOMs for high volume NFC deployment.

### Components:

- Plug and Play Reader
- OEM Board
- Reader ICs:
  - o CLRC663
  - o PN512
- Microcontrollers
  - o STM32F100RCT6 – with firmware
  - o STM32F100R8T6B - with firmware

### Features:

- Drivers are available for the most common operating systems
- Services for design in customization & support
- Optional Antenna customization service
- SAM Socket



### P&P Board

*Design-In, PoC, pilot runs and small volume installations*

### OEM Board

*Medium- to high-volume projects and production where a customized antenna design is needed;*

### MCU/Chipset

*High-volume implementations and full customization by the OEM client*

### License/Chipset

*Lowest cost and highest-volume option*

### Applications:

- Access Control
- Security Applications
- Cashless Payment
- Vending
- Object Identification
- Automated Fare Collection
- e-Ticketing
- Office Automation
- eVouchers
- NFC based Loyalty
- Advertising Displays

	r-MOD OEM Board	m-MOD OEM Board	r-MOD P&P Board	m-MOD P&P Board
<b>Standards</b>				
ISO 14443 A part 1, 2, 3	✓	✓	✓	✓
ISO 14443 B	✓	✓	✓	✓
ISO 15693		✓		✓
NFC Card Emulation Mode, T=CL	✓		✓	
NFC Reader Mode	✓	✓	✓	✓
NFC Initiator Peer-Peer active mode	✓		✓	
NFC Target Peer-Peer active mode	✓		✓	
NFC Initiator Peer-Peer passive mode	✓	✓	✓	✓
NFC Target Peer-Peer passive mode	✓		✓	

	r-MOD OEM Board	m-MOD OEM Board	r-MOD P&P Board	m-MOD P&P Board
<b>Functionality</b>				
SN reading, Anticollision	✓	✓	✓	✓
Read Write Support	✓	✓	✓	✓
MIFARE™ Authentication	✓	✓	✓	✓
Boot loader for firmware update	✓	✓	✓	✓
APDU support	✓	✓	✓	✓
SAM support	✓	✓	✓	✓
<b>Supported technologies</b>				
MIFARE™ 1k, 4k, Mini (4Byte / 7 Byte UID)	✓	✓	✓	✓
MIFARE™ Ultralight, Ultralight C, NTAG203	✓	✓	✓	✓
MIFARE™ Plus and DESire EV1 2/4/8K	✓	✓	✓	✓
SLE66R35 (4Byte / 7 Byte UID)	✓	✓	✓	✓
T=CL / 14443 A and B	✓	✓	✓	✓
ICODE (SLI, S, L, UID, EPC)		✓		✓
my-d™ NFC (01PN, R16P, R32P)	✓	✓	✓	✓
Felica		✓		✓
<b>General</b>				
Interface	CMOS-TTL serial, 1200 Bit/s to 115200 Bit/s, 8N1, ASCII and binary protocol, C# library		USB 2.0, Mini-B connector, virtual com port driver	
Operating System	Windows 98, ME, 2000, XP, Vista, 7, Server 2003, Server 2008, CE 4.2, Mobile 5, Mac OS8/9, Mac OS-X, Linux 2.4			
Power Supply	5VDC ± 10% regulated, 50 - 150 mA depending on antenna	3.3 to 5VDC ± 10% regulated, 20 - 100 mA depending on antenna	Supplied over USB (5VDC)	
Reading Distance	Up to 150mm	Up to 100mm	Up to 85mm (depending on used tag)	
Antenna	Included			
Inputs and Outputs	2 LED-outputs, 8 I/O ports shared with SAM interface, enable pin for power down		3 onboard indicator LEDs	
Dimension / Weight	(LxWxH) 25.5x30.0x4.8mm ± 0.5mm / 5g ± 10%		70.0x45.0x8.0mm ± 1.0mm / 19,5 g ± 10%	
Temperature Range	-20°C to +80°C operational / -40°C to +85°C storage		-20°C to +80°C operational / -40°C to +85°C storage	
RoHS conformity	Yes	Yes	Yes	Yes

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