

MIFARE[®] Contactless Card Reader

MF RD700

1 GENERAL INFORMATION

1.1 Scope

This document describes the functionality of the MF RD700 'Pegoda' reader. It includes the functional and electrical specifications and gives details, how to use or design-in this device from a system and hardware viewpoint.

This reader is designed for an easy adaptation of a contactless reader to a PC and ready to design a new application.

1.2 General Description

The MIFARE[®] Pegoda reader, the MF RD700, is a new contactless reader based on the MF RC500 reader IC. The MF RC500 is member of a new family for highly integrated reader ICs for contactless communication at 13.56 MHz.

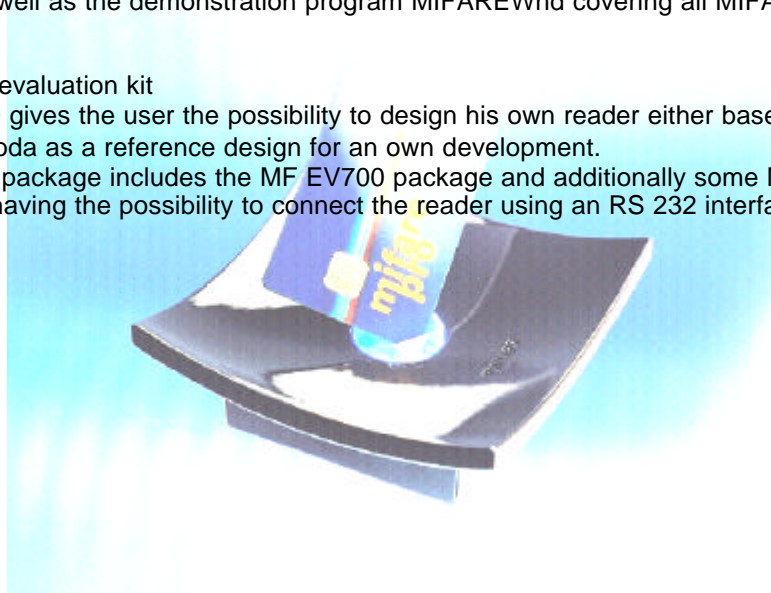
The MF RD700 supports all layers of ISO14443A in combination with MIFARE Dual Interface cards as well the MIFARE Classic protocol.

The Pegoda reader is designed to fulfil several requirements.

It covers all functionality of the MF RC500 to be able to use this reader as a reference design for a new MF RC500 based reader and is designed for easy PC adaptation and application development.

The Pegoda is the basic component for 2 evaluation kits:

- MF EV700 evaluation kit.
This kit is ready to use the Pegoda reader to develop an application based on that reader.
This package includes the Pegoda reader, a complete documentation including software libraries and description as well as the demonstration program MIFAREWnd covering all MIFARE and ISO 14443A commands
- MF EV800 full evaluation kit
The MF EV800 gives the user the possibility to design his own reader either based on the Pegoda or taking the Pegoda as a reference design for an own development.
The MFEV800 package includes the MF EV700 package and additionally some MF RC500 samples and a reader print having the possibility to connect the reader using an RS 232 interface.



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1.3 Features

- contactless smart card reader
- based on the MF RC500
- contactless operating frequency 13.56 MHz
- Supports MIFARE[®] Dual Interface Card ICs and ISO 14443A part 1- 4
- Supports MIFARE[®] Classic protocol
- typical operating distance: 75mm
- CE and FCC compliant
- USB host interface
- USB bus powered 5 VDC power supply
- Accessible via various serial protocols up to 115200 baud
- Unique serial number of each reader device

1.4 Ordering Information

The MF RD 700 'Pegoda' is available in 2 evaluation kits.

Type	12NC	Description
MF EV700	9352 699 27122	evaluation kit containing: MF RD700 Pegoda reader, documentation software CD
MF EV800	9352 699 28122	full evaluation kit containing: MF RD700 Pegoda reader documentation and software CD MF RM700 reader module PCB with RS232 connector 5 MF RC 500 samples Small directly matched antenna 50 Ohm matching circuit

Table 1-1: MF RD700 Ordering Information