

Release Notes for Elektor RFID Reader

Version 2.2

Author: G. Schalk

Release Date 20.03.2007

Fixed problems in Version 2.1, Version 2.0 and Version V1.0

- (Door) Opener Output Pin P0.0 Voltage is ~1.8V instead ~3.3V
 - Change port output configuration settings from Quasi-bidirectional to Push-pull.

New feature

- Add the default PC9xx family boot program for IN-SYSTEM PROGRAMMING to the Project
 - Add LPC_ISP_16K_V04.a51 to the Project

Version 2.1

Author: G. Schalk

Release Date 18.03.2007

Fixed problems in Version 2.0

- **Communication Problems with Mifare Magic**
 - The problem occurs only in case no LC-Display is connected.
 - Mifare Magic: Terminal Window does not show any problem
 - Mifare Magic: Mifare Ultra Light / Show Cards / Access Control communication could be instable.

Following command sequence can be used to reproduce or verify the (Mifare Ultra Light Window) problem.

HF Reset - Activate Card - Read All.

Output Window:

RF RESET

```
Activate Card (REQA-AC-SEL)  <- Card with UID:  activated
```

```
Read Page 0 to 3      <- Error: 0x1 No Card present
Read Page 4 to 7      <- Error: 0xF00 Incorrect Serial Frame
Read Page 8 to 11     <- Error: 0x1 No Card present
Read Page 12 to 15    <- Error: 0xF00 Incorrect Serial Frame
```

The problem is caused by the `busy_lcd` sub function. In case no LC-Display is connected the `busy_lcd` runs in a timeout. This timeout is slightly too long and therefore the PC communication routine runs also in a timeout.

Update of LCD.c:

- init_lcd checks if a LC-Display is connected.
- During Reader operation no LCD timeout is used any more.

Following command sequence should show following output:

HF Reset - Activate Card - Read All.

Output Window:

RF RESET

```
Activate Card (REOA-AC-SEL)  <- Card with UID: 88 04 27 A8 61 EE 02 80  activated
```

```
Read Page 0 to 3   <- Data: 04 27 A8 03 61 EE 02 80 0D 48 00 00 00 00 00 00    .'''.af.e.H.....
Read Page 4 to 7   <- Data: 48 65 6C 6C 6F 20 57 6F 6C 64 00 00 00 00 00 00    Hello Wold.....
Read Page 8 to 11  <- Data: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    .....
Read Page 12 to 15 <- Data: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00    .....
```

Release Notes for Elektor RFID Reader

Version 2.0

Author: G. Schalk

Release Date 28.08.2006

New feature

- **Mifare Access Control**

The RFID-Reader supports a stand alone Access Control Demo. The RFID-Reader is able to store a list of 10 UID Card numbers within the Reader EEPROM. The Reader software simply compares the card UID of a current active card with the UID list. A card with a valid UID activates the open collector output. The configuration dialog supports user defined LC-display messages. For RFID-Reader stand-alone operation it is possible to activate the Access Control Mode permanently.

Initial Version - Version 1.0

Author: G. Schalk

Release Date 10.08.2006