

**EMDB408** 



# EM4094 RFID Demo Reader



### Description

The EM4094 RFID Demo Reader is a 13.56MHz proximity reader compliant with the ISO15693 and ISO14443 standards.

The reader supports the *mandatory, optional, custom* and *proprietary commands* of EM Microelectronic's ISO15693 compliant transponder ICs (EM4034, EM4035, EM4135) as well as the EM4006 Read Only IC.

Moreover, the *mandatory command set* of ISO14443 Type A, B and Sony Felica $^{\text{TM}}$  is implemented in the reader firmware.

A SIM slot on the reader and the corresponding SIM card featuring EM4035's crypto algorithm allows performing security relevant commands. The 4 secret keys and the transponder's memory segmentation can be set with a PC application shipped with the reader.

The EM4094 RFID Demo Reader hardware is based on the EM4094 reader IC, an analog front-end device which delivers a RF power of 200mW to the PCB's printed antenna.

The EM4094 reader is a reference design for beginners or experts. On the CD ROM, the user will find all necessary support material (hardware and software) to design and build a custom 13.56MHz RFID reader.

The reader firmware can be upgraded via the USB port. The latest documentation versions are published on EM Microelectronic's website: <a href="https://www.emmicroelectronic.com">www.emmicroelectronic.com</a>.

#### Reader items

- □ RFID Demo Reader
- □ 7.5V AC/DC power supply
- EM4034 & EM4035 tags in credit card format (2 parts)
- □ SIM card containing the EM4035 crypto algorithm
- USB cable
- □ CDROM

## **CDROM** content

- □ User's Guide
- Microcontroller source code files written in C language
- USB drivers
- □ Unified application software for ISO15693 and ISO14443 standards including source files in C++
- ☐ Hardware schematic and PCB Gerber Files (Layout)
- □ Product data sheet
- Application Notes

# Ordering Information

To order, please, use exact Part Number:

Description	Part Number
EM4094 RFID Reader	EMDB408

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