

Evaluation kit for RX95HF NFC transceiver

Data brief

Features

- Ready-to-use printed circuit board:
 - RX95HF-VMD5 13.56 MHz RF transceiver for NFC A type 4 or ISO18092 tag emulation
 - STM32F103RFT6 64LQFP 32-bit microcontroller, with 768 Kbytes of Flash memory
 - 47 x 34 mm 13.56 MHz inductive antenna etched on PCB and associated circuitry
 - USB miniB connector for board powering
- LED indicating the presence of an RF field
- Joystick for menu selection
- JTAG connector for microcontroller firmware upgrade and debug
- LCD screen (board MB895)
- USB cable: Type A / mini B
- Associated Firmware and Android application
 - On-board firmware for NFC 14443A Tag emulator (NDEF, URL)
 - Android application for smartphone used as an NFC PCD (firmware uploader)

Figure 1. EVAL-RX95HF RF transceiver board alone



Figure 2. EVAL-RX95HF RF transceiver board with LCD screen plugged

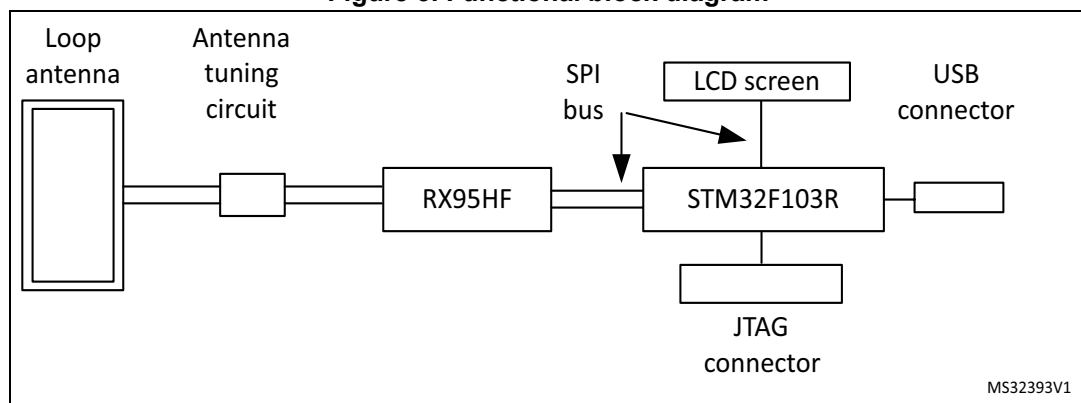


Description

The EVAL-RX95HF is an evaluation kit for RX95HF NFC transceiver. This component is a 13.56 MHz near field communication transceiver for tag emulation and could be used with an NFC Reader (NFC smartphone, CR95HF) to exchange NDEF messages (URI, VCARD, URL) or establish a Proprietary Data exchange protocol communication. The communication protocol is based on ISO/IEC 14443 Type A.

The EVAL-RX95HF is powered through the USB bus. It includes an RX95HF transceiver for tag emulation, a 47 x 34 mm 13.56 MHz inductive etched antenna and its associated tuning components. The RX95HF communicates with the STM32F103RF 32-bit MCU via the SPI bus.

Figure 3. Functional block diagram



The EVAL-RX95HF is delivered with the following firmware and software which can be downloaded from <http://www.st.com> and Google Play:

- STM32 EVAL-RX95HF-application-firmware: on-board demonstration firmware
- Android application RX95HF_application for firmware upgrade

A complete description of the firmware and Android application can be found in application notes posted on ST web site.

Revision history

Table 1. Document revision history

Date	Revision	Changes
31-Oct-2013	1	Initial release.

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