



CR95HF

**13.56MHz Multi-protocol contactless
transceiver IC, with SPI and UART serial access**

Product introduction

March 2011



M24LR64 & CR95HF - 13.56MHz (CR95HF Multi-protocol contactless transceiver)

Enabling true passive RF communication between mobile phones and electronic devices



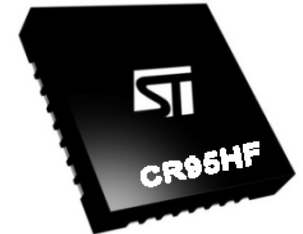
STMicroelectronics

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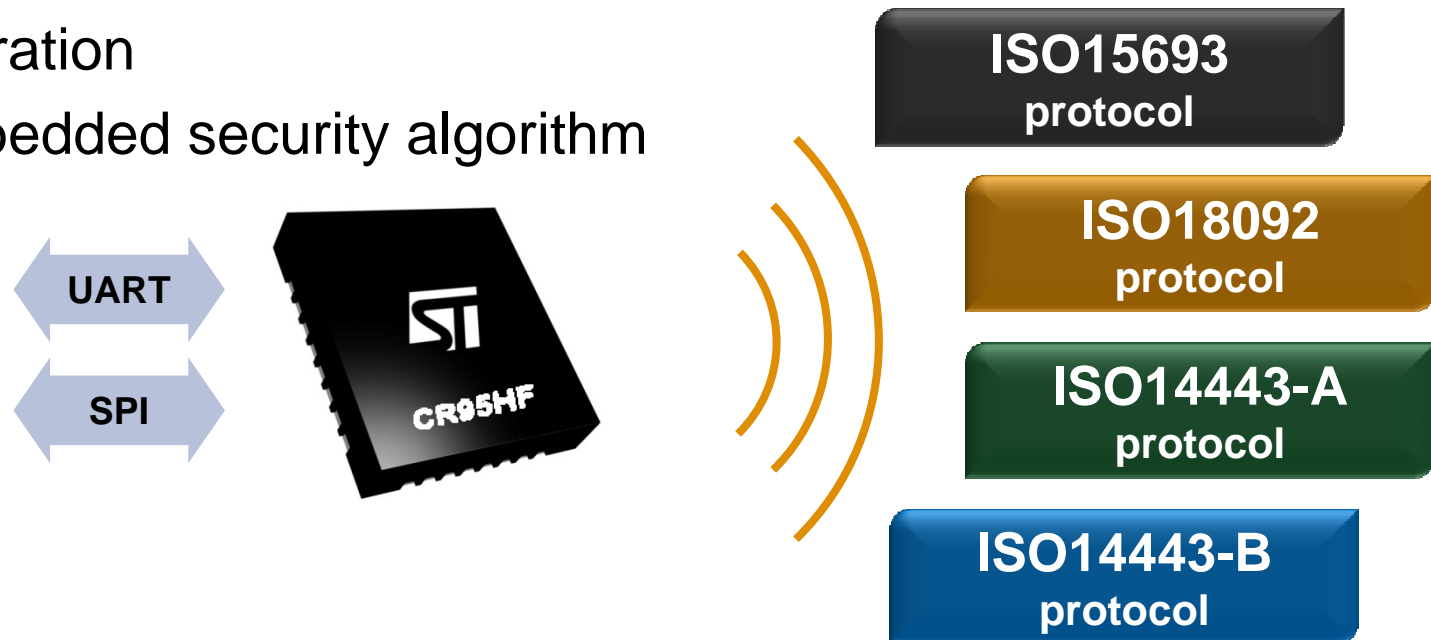


- Multi-protocol Contactless Transceiver IC operating in HF (13.56MHz), meant for a wide range of embedded RF applications
- Enables RF communications with Dual Interface EEPROM, RF Memory devices and RFID tags in a wide range of applications:
 - medical equipment
 - portable healthcare devices
 - industrial equipment
 - factory and building automation
 - computers and peripherals
 - consumer electronics
- Suitable for RF reader/writer designs of portable and stationary systems



CR95HF overview

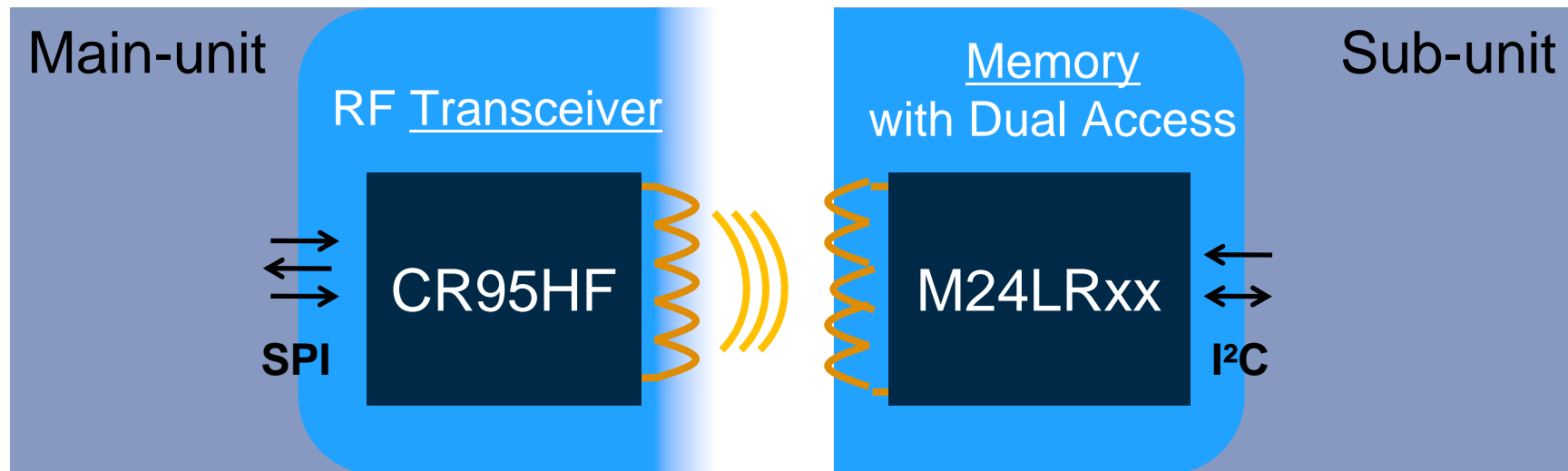
- Multi-protocol 13.56MHz Contactless Transceiver IC
- ISO15693, ISO14443 A-B and NFC ISO18092 compliant analog front-end
- UART and SPI interface
- No Card emulation nor peer-to-peer mode
- Standard QFN32 package, 5x5mm
- 3V operation
- No embedded security algorithm



CR95HF with Dual Interface EEPROM



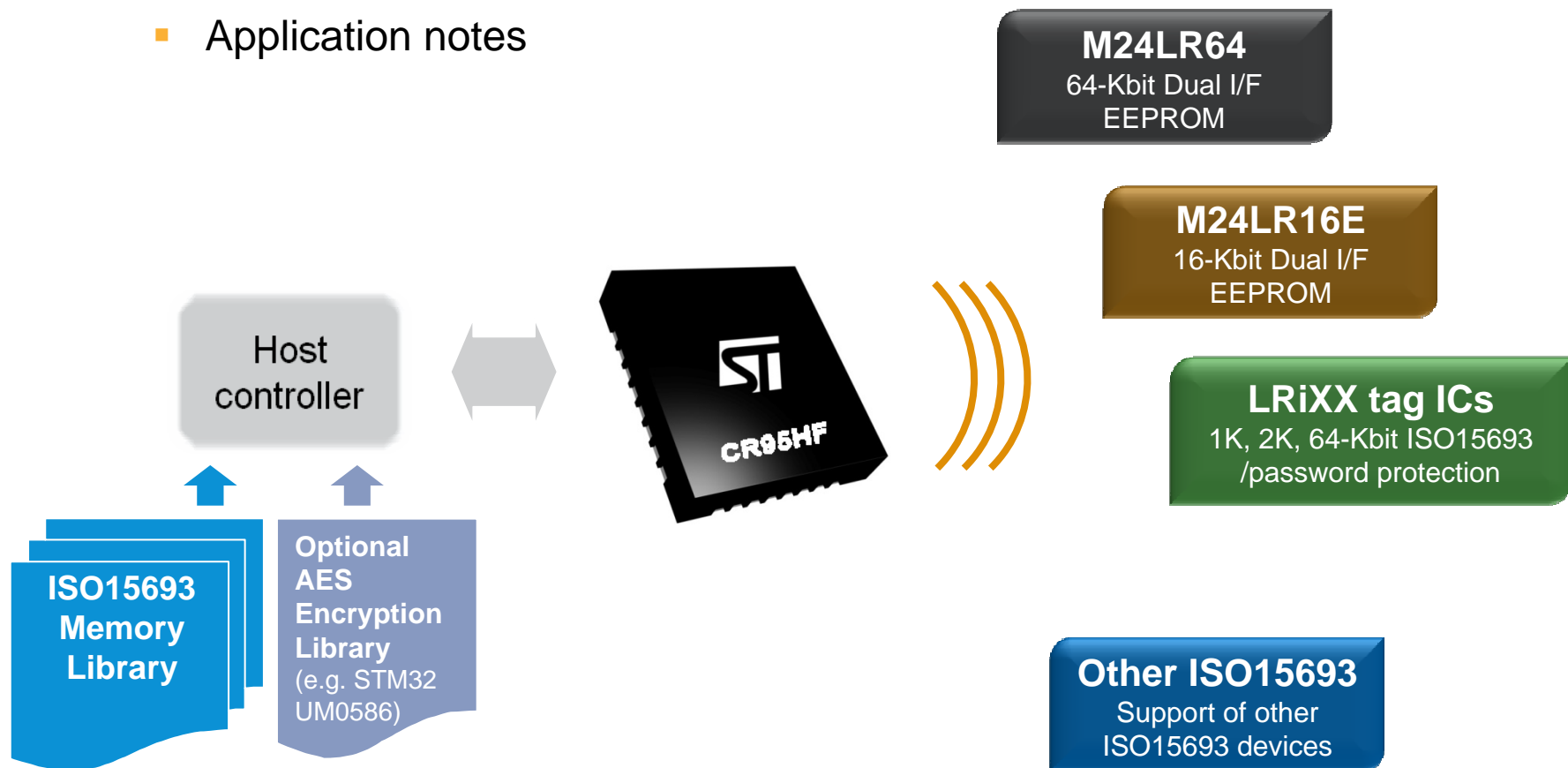
- The ideal solution for downloading and upgrading data wirelessly !



CR95HF with ST's ISO15693 Products



- ST ISO15693 products will be supported by the CR95HF with
 - Software libraries
 - Reference design
 - Application notes



CR95HF with ST's ISO14443 Products



- ST ISO14443 products will be supported by the CR95HF with
 - Software libraries
 - Reference design
 - Application notes

SRI512/SRT512

512-bit ISO14443-B
32-bit counter /& OTP

SRI2K SRI4K – SRI4K

2-Kbit, 4-Kbit ISO14443-B
32-bit counter & OTP

ST23YR18/ST23YR48

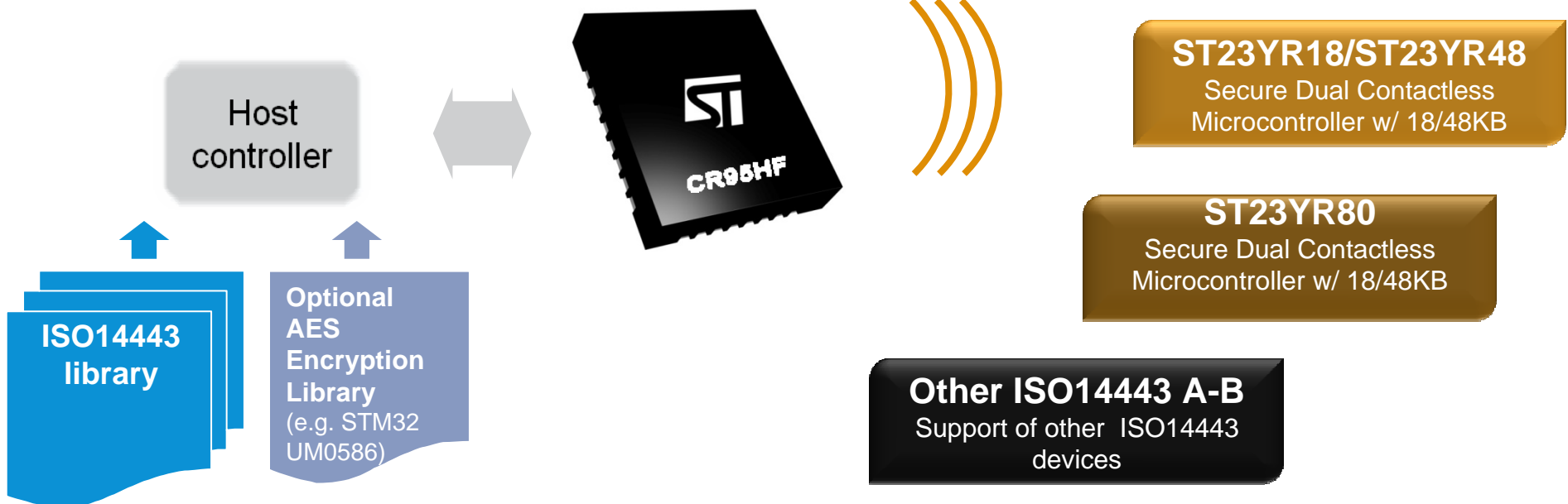
Secure Dual Contactless
Microcontroller w/ 18/48KB

ST23YR80

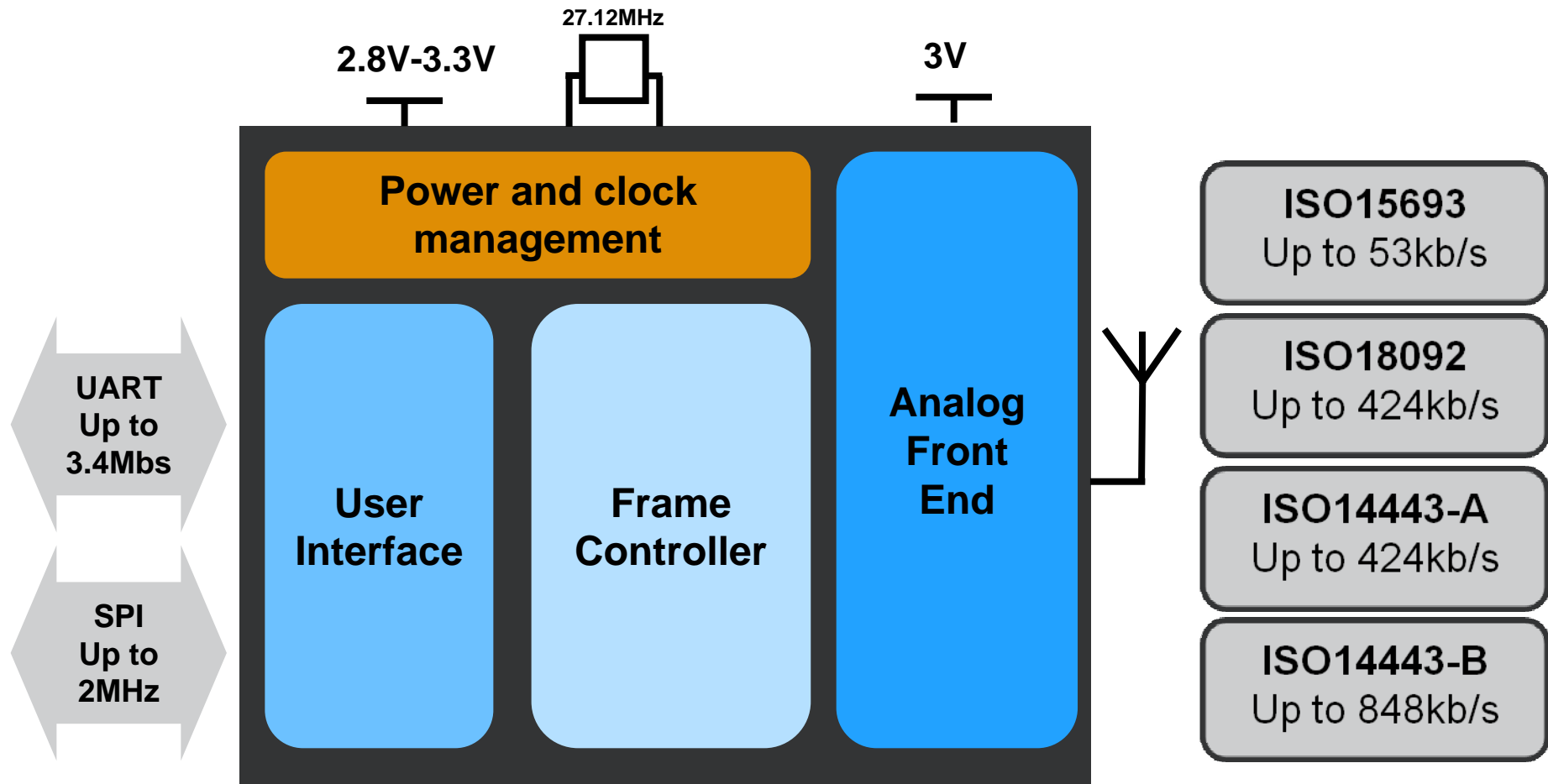
Secure Dual Contactless
Microcontroller w/ 18/48KB

Other ISO14443 A-B

Support of other ISO14443
devices



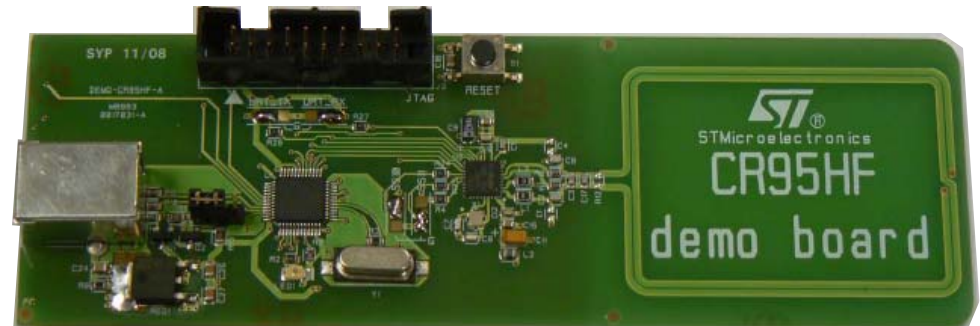
CR95HF block diagram



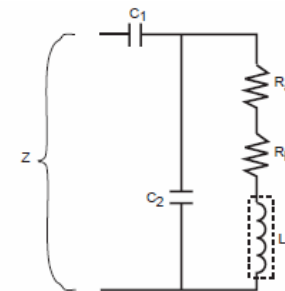
CR95HF designers support



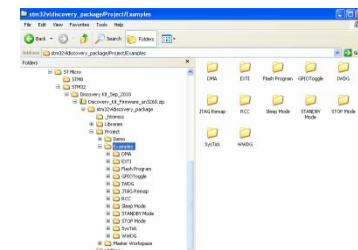
- DEMO-CR95HF-A
 - Gerber files, BOM
 - PC software



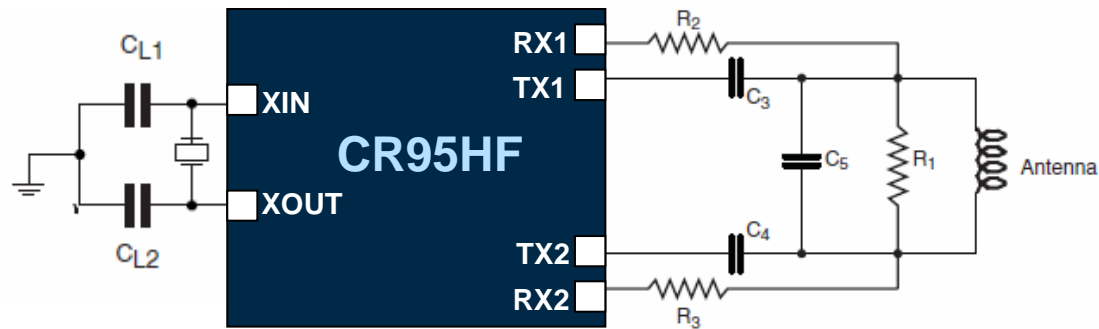
- Hardware design (RF) application note
 - Antenna, EMC Filters (FCC-ETSI tests)
 - For demokit antenna



- ISO15693 and ISO14443 drivers
 - « .c » and « .h » source files and App Note
 - Validated on STM32



CR95HF: reduced BOM



Note: Decoupling on Vpsmain et Vpstx also required

CR95HF ordering information

