



# ST16-19RFRDCS010

## CONTACTLESS READER CHIP SET

DATA BRIEFING

### FUNCTION: ANALOG FRONT END FOR CONTACTLESS SMARTCARD READER

#### ■ GENERAL DESCRIPTION

- This is an analog front end dedicated to contactless Smartcards reader chip set.
- This interface complies with ISO 14443-2 Type B: powering, data transfer from reader to card with amplitude modulation, data transfer from card to reader with load modulation.

#### ■ MAIN FEATURES

- Supply voltage: 12 V
- Modulation: 10% ASK
- Data transfer to card: up to 424 KBit/second
- Data transfer to reader: up to 424 KBit/second
- Quartz oscillator 13.56 MHz  $\pm$  100 ppm

### FUNCTION: DECODER AND FRAME FORMATING FOR CONTACTLESS SMARTCARD READERS

#### ■ GENERAL DESCRIPTION

- This is an FPGA dedicated to contactless Smartcards reader chip set. This interface complies with ISO 14443-3 Type B

#### ■ MAIN FEATURES

- Supply voltage: 3.3 V
- Programmable data transfer from reader to card
- 106 KBit/second, 212 KBit/second and 424 KBit/second
- Programmable data transfer from card to reader
- 106 KBit/second, 212 KBit/second and 424 KBit/second
- 8 bit parallel interface for MCU

Figure 1 Contactless Reader Architecture with MCU

