

# **ST16-19RFRDCS910**

## CONTACTLESS READER CHIP SET With ST92163MCU

**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 VModulation: 10% ASK

Data transfer to card: up to 424 KBit/secondData transfer to reader: up to 424 KBit/second

- Quartz oscillator 13.56 MHz ± 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

# FUNCTION: MCU FOR CONTACTLESS SMARTCARD READER

#### **■ GENERAL DESCRIPTION**

- the ST92163 is a 8/16 bit MCU

#### **■ MAIN FEATURES**

- Supply voltage: 4.3 V
- Internal memory 16 K bytes OTP
- 2 K Bytes of RAM
- 24 MHz CPU frequency
- Full speed USB
- SCI up to 315 KBit
- External memory up to 64 KBytes
- Rich instruction set with 14 addressing modes, versatile development tools, including assembler, linker, C compiler, hardware emulators and real time operating system.

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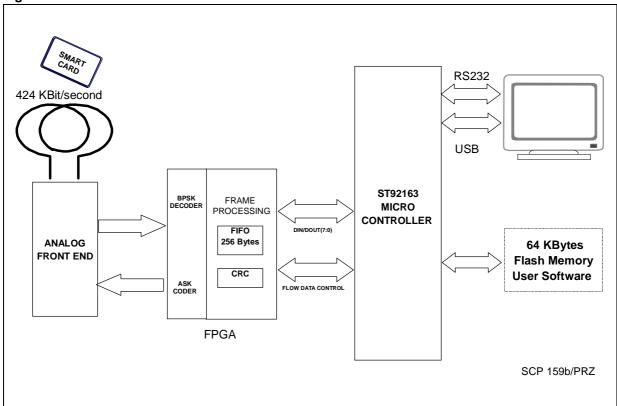


Figure 1 Contactless Reader Architecture with ST9