

Parallel synchronous transmission using GPIO and DMA software expansion for STM32Cube

Data brief

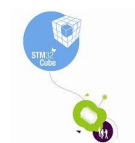
Features

- Timeout detection of end of transmission
- CRC check of transmitted data
- STM32L476G discovery board implementation features
 - Storage of transmitted data in STM32L476 internal SRAM
 - Up to 10MHz transmission clock
 - Data frame length limited by internal SRAM size and DMA 16bit counter (65530 data transmitted)
- STM32F429I discovery board implementation features
 - Storage of transmitted data in external SDRAM
 - Up to 7.82MHz transmission clock
 - Data frame length limited by external SDRAM size

Description

The STM32 microcontrollers are able to emulate parallel synchronous communication through GPIOs using the embedded DMA IP.

The X-CUBE-PARAL-COM software solution developed on STM32Cube offers an implementation of such parallel synchronous interface on STM32L476G and STM32F429I discovery boards. It can easily be ported on other platforms.



1 Ordering information

X-CUBE-PARAL-COM is available for free download from STMicroelectronics web site www.st.com.

2 Revision history

Table 1. Document revision history

Date	Revision	Changes
20-Jan-2016	1	Initial release.
02-Feb-2016	2	Document classification changed to public .

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