

Bytes_Transmitter HDL Module Documentation

Bytes_Transmitter module transmits a sequence of bytes via SPI.

To use this module, the top module reads the current byte index and outputs back the information about:

- the next byte value;
- the length of the sequence.

Parameters

Parameter	Default value	Type	Description
CLK_divider	50	Integer	Specifies the source CLK frequency division factor for SCLK signal. Can be in range of 1...65535

Signals

Signal	Direction	Width (bits)	Description
CLK	IN	1	Clock signal
NRST	IN	1	Synchronous reset. Active low
SCLK	OUT	1	SPI clock output
MOSI	OUT	1	SPI data output
ST	IN	1	Start transmission
TI	OUT	1	Transmission indication
TX_COUNTER_MAX	IN	16	How many bytes to transmit
TX_COUNTER	OUT	16	The index of the current byte being transmitted via SPI
NEXT_BYTE	IN	8	The next byte to transmit