

	STM32L1	STM32L4
SPI	Data size is fixed, configurable to 8 or 16 bits Tx & Rx 16-bit buffers (single data frame)	Data size is programmable, from 4 to 16-bit 32-bit Tx & Rx FIFOs (up to 4 data frames) Rx buffer not empty (RXNE): The RXNE flag is set depending on the FRXTH bit value in the SPIx_CR2 register: (1) If FRXTH is set, RXNE goes high and stays high until the RXFIFO level is greater or equal to 1/4 (8-bit). (2) If FRXTH is cleared, RXNE goes high and stays high until the RXFIFO level is greater than or equal to 1/2 (16-bit). SPIx->CR2 = SPI_CR2_FRXTH;
	No data packing (16-bit access only) SPIx->DR = byte_data;	Data packing (8-bit, 16-bit or 32-bit data access, programmable FIFOs data thresholds) *((volatile uint8_t*)&SPIx->DR) = byte_data; byte_data = (uint8_t)(SPIx->DR);
		The data size and Tx/Rx flow handling are different in STM32L1 and STM32L4 series hence requiring different SW sequences
	typedef struct{ __IO uint16_t CR1; __IO uint16_t CR2; __IO uint16_t SR; __IO uint16_t DR; __IO uint16_t CRCPR; __IO uint16_t RXCRCR; __IO uint16_t TXCRCR; } SPI_TypeDef;	typedef struct{ __IO uint32_t CR1; __IO uint32_t CR2; __IO uint32_t SR; __IO uint32_t DR; __IO uint32_t CRCPR; __IO uint32_t RXCRCR; __IO uint32_t TXCRCR; } SPI_TypeDef;