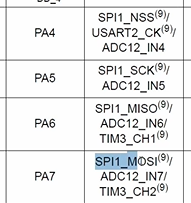
# SPI

## Clock:

SPI1 in APB2 in bit 12 , SPI2 in APB1 in bit 14, SPI3 in APB1 in bit 15.

## Pin:



## Clock activation:

* Enable AFIO in APB2 in bit 0.
* Enable Pin A in APB2 in bit 2
* Enable SPI1 in APB2 in bit 12

## Set up pin:

PA4 --> SS --> output GP-push-pull - 0011

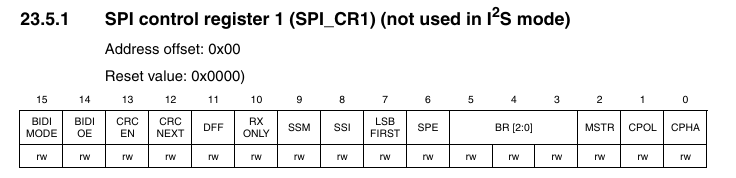
PA5 --> SCLK --> output AF-push-pull - 1011

PA6 --> MISO --> Input Floting-input - 0100

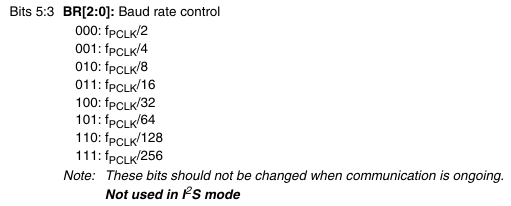
PA7 --> MOSI --> output AF-Push-pull 1011

## Setup SPI peripherals

### Control Register1 SPI\_CR1

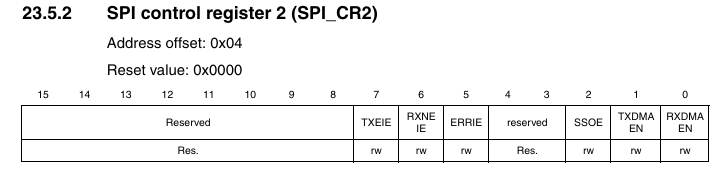


* Bit 2: MSTR: Set 1 for master device , 0 for slave device
* Bit [5:3] : BR[2:0]: Select the baud rate. Slower one is taken, 111



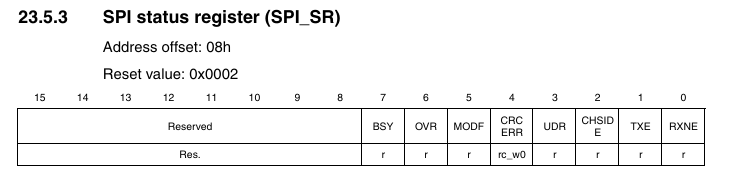
* Bit 6: SPE: enable SPI by setting this bit to 1.

### Control Register 2 SPI\_CR2

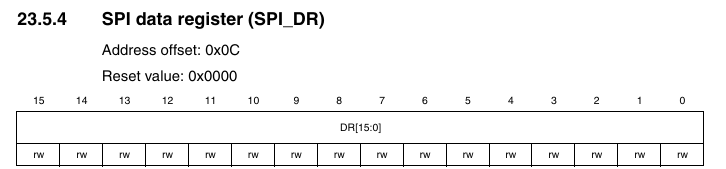


* Bit 2: SSOE: Set the SSOE to send data from master to slave (enable ss output)

### Status Register SPI\_SR



### Data Register SPI\_DR



## Working process

* Make the ss low, PA4 low,
* Put the data in SPI1->DR
* Make the ss high, PA5 High.