SPI Master Class

- SPI Master Class

Public Member Functions	
	SPI (PinName mosi, PinName miso, PinName sclk, PinName ssel=NC)
	Create a SPI master connected to the specified pins. More...
	SPI (PinName mosi, PinName miso, PinName sclk, PinName ssel, use_gpio_ssel_t)
	Create a SPI master connected to the specified pins. More...
	SPI (const spi_pinmap_t &static_pinmap)
	Create a SPI master connected to the specified pins. More...
	SPI (const spi_pinmap_t &static_pinmap, PinName ssel)
	Create a SPI master connected to the specified pins. More...
void	format (int bits, int mode=0)
	Configure the data transmission format. More...
void	frequency (int hz=1000000)
	Set the SPI bus clock frequency. More...
virtual int	write (int value)
	Write to the SPI Slave and return the response. More...
virtual int	write (const char *tx_buffer, int tx_length, char *rx_buffer, int rx_length)
	Write to the SPI Slave and obtain the response. More...
virtual void	lock (void)
	Acquire exclusive access to this SPI bus. More...
virtual void	unlock (void)
	Release exclusive access to this SPI bus. More...

Mode	Polarity	Phase
0	0	0
1	0	1
2	1	0
3	1	1

void	select (void)
	Assert the Slave Select line, acquiring exclusive access to this SPI bus. More...
void	deselect (void)
	Deassert the Slave Select line, releasing exclusive access to this SPI bus. More...
void	set_default_write_value (char data)
	Set default write data. More...
template<typename Type >	
int	transfer (const Type *tx_buffer, int tx_length, Type *rx_buffer, int rx_length, const event_callback_t &callback, int event=SPI_EVENT_COMPLETE)
	Start non-blocking SPI transfer using 8bit buffers. More...
void	abort_transfer ()
	Abort the on-going SPI transfer, and continue with transfers in the queue, if any. More...
void	clear_transfer_buffer ()
	Clear the queue of transfers. More...
void	abort_all_transfers ()
	Clear the queue of transfers and abort the on-going transfer. More...
int	set_dma_usage (DMAUsage usage)
	Configure DMA usage suggestion for non-blocking transfers. More...