

## Assembly Code Example<sup>(1)</sup>

```

SPI_MasterInit:
    ; Set MOSI and SCK output, all others input
    ldi    r17, (1<<DD_MOSI) | (1<<DD_SCK)
    out    DDR_SPI, r17
    ; Enable SPI, Master, set clock rate fck/16
    ldi    r17, (1<<SPE) | (1<<MSTR) | (1<<SPR0)
    out    SPCR, r17
    ret

SPI_MasterTransmit:
    ; Start transmission of data (r16)
    out    SPDR, r16
Wait_Transmit:
    ; Wait for transmission complete
    in     r16, SPSR
    sbrsr r16, SPIF
    rjmp   Wait_Transmit
    ret

```

## C Code Example<sup>(1)</sup>

```

void SPI_MasterInit(void)
{
    /* Set MOSI and SCK output, all others input */
    DDR_SPI = (1<<DD_MOSI) | (1<<DD_SCK);
    /* Enable SPI, Master, set clock rate fck/16 */
    SPCR = (1<<SPE) | (1<<MSTR) | (1<<SPR0);
}

void SPI_MasterTransmit(char cData)
{
    /* Start transmission */
    SPDR = cData;
    /* Wait for transmission complete */
    while (!(SPSR & (1<<SPIF)))
        ;
}

```

Note: 1. See "Code Examples" on page 7.