

3. Configure TX and RX data pointers using the TXD, RXD and RXTXD registers

```
NRF_I2S->TXD.PTR = my_tx_buf;
NRF_I2S->RXD.PTR = my_rx_buf;
NRF_I2S->TXD.MAXCNT = sizeof(my_rx_buf);
```

4. Enable the I²S module using the ENABLE register

```
NRF_I2S->ENABLE = 1;
```

5. Start audio streaming using the START task

```
NRF_I2S->TASKS_START = 1;
```

6. Handle received and transmitted data when receiving the TXPTRUPD and RXPTRUPD events

```
if(NRF_I2S->EVENTS_TXPTRUPD != 0)
{
    NRF_I2S->TXD.PTR = my_next_tx_buf;
    NRF_I2S->EVENTS_TXPTRUPD = 0;
}

if(NRF_I2S->EVENTS_RXPTRUPD != 0)
{
    NRF_I2S->RXD.PTR = my_next_rx_buf;
    NRF_I2S->EVENTS_RXPTRUPD = 0;
}
```

8.11.9 Pin configuration

The MCK, SCK, LRCK, SDIN and SDOUT signals associated with the I²S module are mapped to physical pins according to the pin numbers specified in the PSEL.x registers.

These pins are acquired whenever the I²S module is enabled through the register [ENABLE](#) on page 341.

When a pin is acquired by the I²S module, the direction of the pin (input or output) will be configured automatically, and any pin direction setting done in the GPIO module will be overridden. The directions for the various I²S pins are shown below in [GPIO configuration before enabling peripheral \(Master mode\)](#) on page 334 and [GPIO configuration before enabling peripheral \(Slave mode\)](#) on page 335.

To secure correct signal levels on the pins in System OFF mode, and when the I²S module is disabled, these pins must be configured in the GPIO peripheral directly.

I ² S signal	I ² S pin	Direction	Output value	Comment
MCK	As specified in PSEL.MCK	Output	0	
LRCK	As specified in PSEL.LRCK	Output	0	
SCK	As specified in PSEL.SCK	Output	0	
SDIN	As specified in PSEL.SDIN	Input		Not applicable
SDOUT	As specified in PSEL.SDOUT	Output	0	

Table 43: *GPIO configuration before enabling peripheral (Master mode)*