

Figure 137: D/CX example

### 8.19.3 Chip select hardware control

To use CSN hardware control, set register [PSEL.CSN](#) on page 606 according to the [Pin configuration](#) on page 586.

When enabled, CSN is asserted automatically after [TASKS\\_START](#) on page 590 is triggered, and deasserted after [EVENTS\\_END](#) on page 594. The value in register [IFTIMING.CSNDUR](#) on page 604 sets the time between the falling edge of CSN and the first SCK edge. The same delay is used between the last SCK edge and the rising edge of CSN at the end of a transfer. It is also used between two transfers as the minimum CSN inactive time when the [END\\_START short](#) is enabled. The [IFTIMING.CSNDUR](#) is expressed in number of SPIM core clock periods.

The following figure shows a timing diagram with two SPI transmissions where the delay is controlled by [IFTIMING.CSNDUR](#) and is represented by  $t_{CSNDUR}$ .

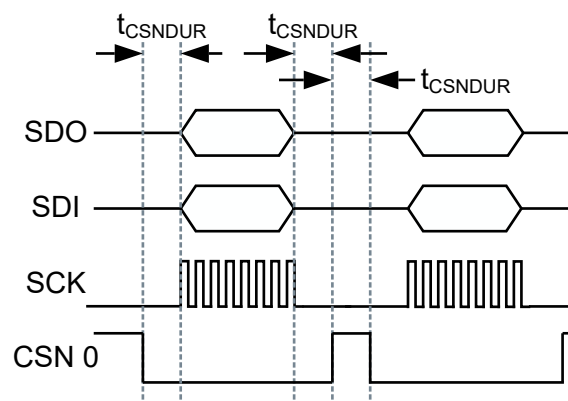


Figure 138: CSNDUR example

The following figure shows the timing delay for the combinations of polarity and phase settings. The register [CSNPOL](#) on page 604 determines the active polarity of the signal.