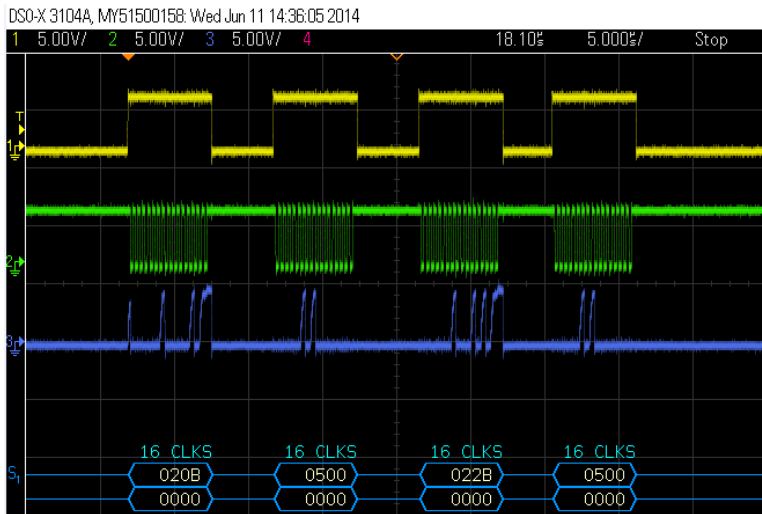


Code snippet.

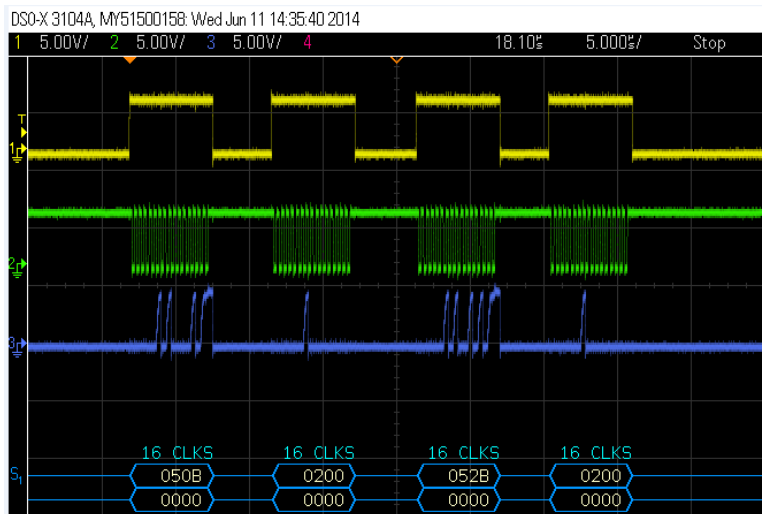
```
SPIM_2_ClearTxBuffer();
SPIM_2_ClearRxBuffer();
CyDelayUs(1u);
SPIM_2_TxEnable(); // also do this in ldriver routine
CyDelayUs(1u);
ldriver (0x020b, 0x0500); // CR2 to pg0, 0-05 W1HL write high order bits land
ldriver (0x022b, 0x0500); // CR2 to pg2, 2-05 W1LL write low order 2bits land don't really need right now

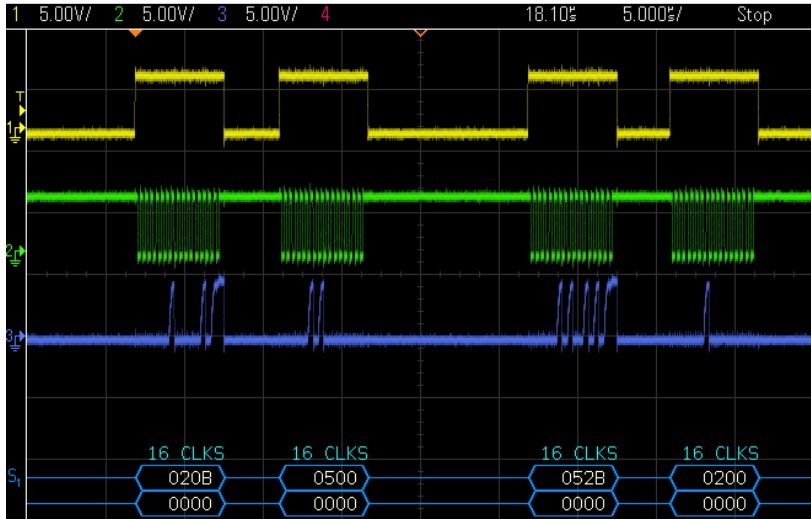
int ldriver (uint16 fword, uint16 sword)
{
    SPIM_2_WriteTxData(fword); // goto pg#
    CyDelayUs(6u); // need 2.7usec min
    SPIM_2_WriteTxData(sword); // set data
    CyDelayUs(6u); // need 2.7usec min
}
```

Correct zeroing of current.



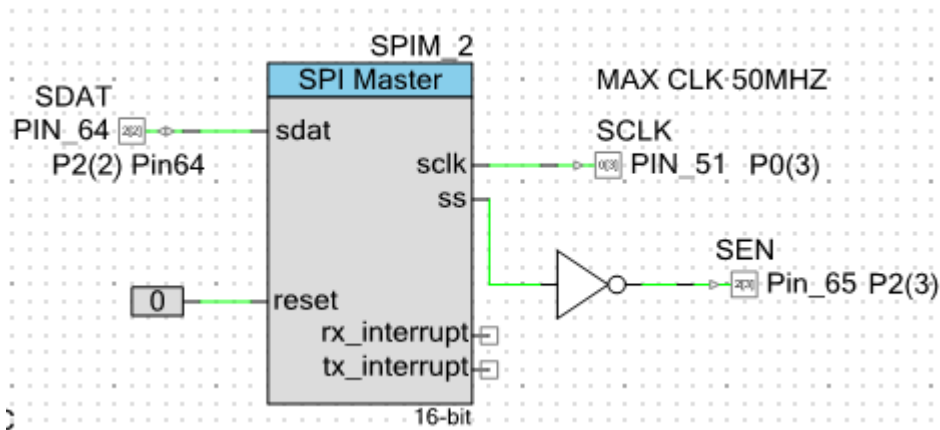
Bad display of zeroing current.





First case first nibble of 1st byte gets swapped with 1st nibble of 2nd byte, both sets.

Second case similar but in second set.



Top trace is SEN, followed by SCLK, then SDAT.

Thursday thought had fixed it by adding clear tx & rx buffer at end of txmt routine.

```
int ldriver (uint16 fword, uint16 sword)
{
    SPIM_2_WriteTxData(fword); // goto pg#
    CyDelayUs(7u); // need 2.7usec min
    SPIM_2_WriteTxData(sword); // set data
    CyDelayUs(7u); // need 2.7usec min
    SPIM_2_ClearTxBuffer(); SPIM_2_ClearRxBuffer();
}
```

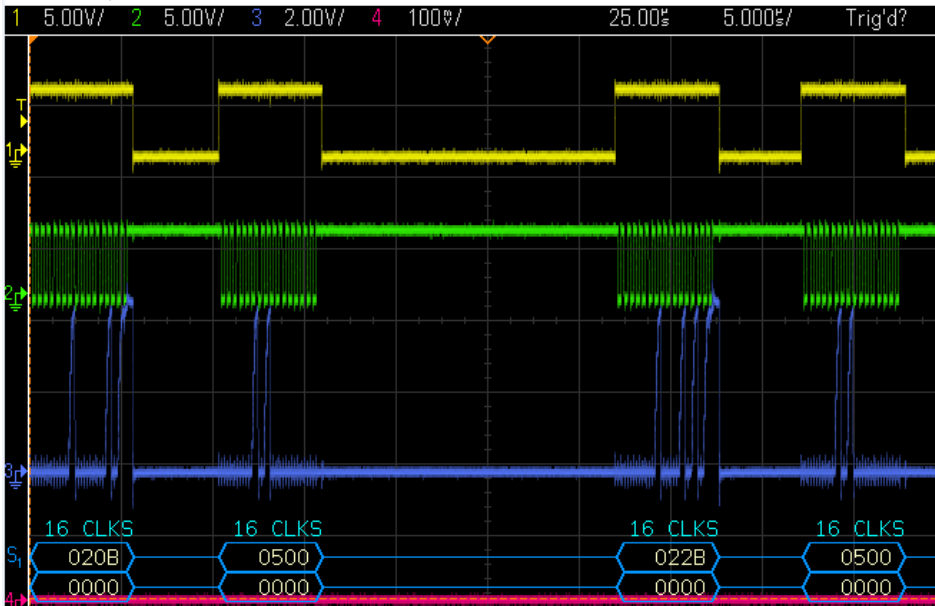
Worked fine all morning. Added more routines, then started happening again.

This time the command, instead of 020B, 0500, get 020B, 0200.

No longer swapping, but not updating a nibble.

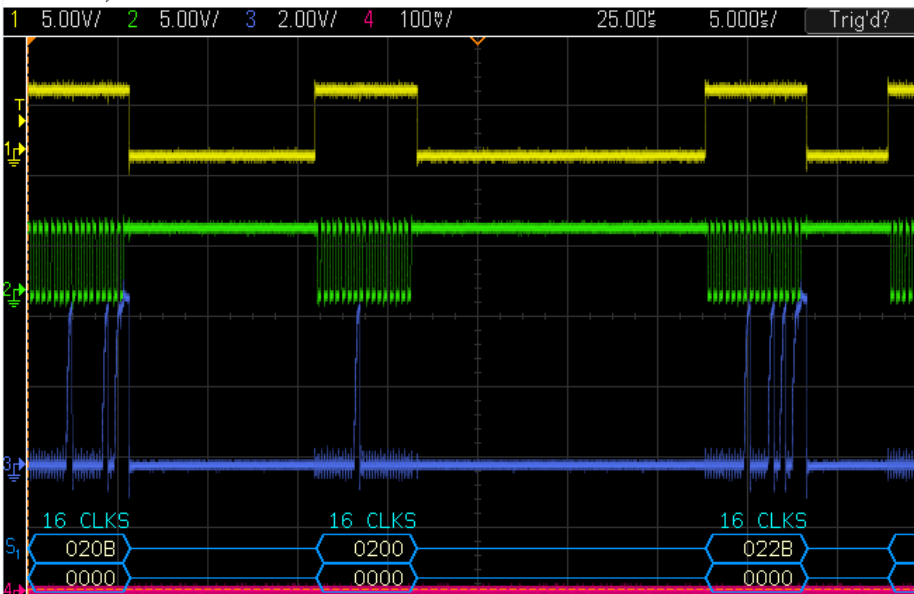
Below correct.

DSO-X 3104A, MY51500158: Thu Jun 12 15:24:54 2014



Then incorrect.

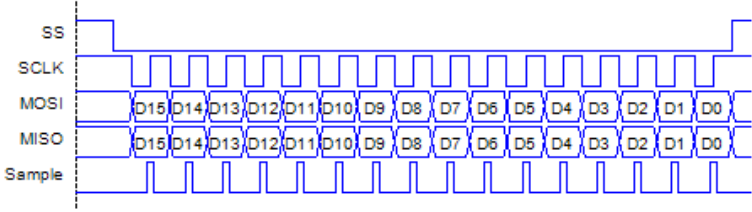
DSO-X 3104A, MY51500158: Thu Jun 12 15:25:45 2014



The bidirectional pin is set for resistive pull up.

Name: SPIM_4

Configure Advanced Built-in



Mode: CPHA = 1, CPOL = 1

Data Lines: Bidirectional

Data Bits: 16 Shift Direction: MSB First

Bit Rate: 3 Mbps

Name: SPIM_4

Configure Advanced Built-in

Clock Selection:

Internal Clock External Clock

High Speed Mode:

Enable High Speed Mode

Buffer Sizes:

Rx Buffer Size (16-bit words): 4

Tx Buffer Size (16-bit words): 4

Interrupts:

Enable Tx Internal Interrupt Enable Rx Internal Interrupt

Interrupt On SPI Done Interrupt On Rx FIFO Full

Interrupt On Tx FIFO Empty Interrupt On Rx FIFO Not Empty

Interrupt On Tx FIFO Not Full Interrupt On Rx FIFO Overrun

Interrupt On Byte/Word Transfer Complete

Interrupt On SPI Idle

Name: PIN_64

Pins Mapping Reset Built-in

Number of Pins: 1

[All Pins] PIN_64_SDAT_1

Type General Input Output

Drive Mode: Resistive Pull Up

Initial State: High (1)

Minimum Supply: []

