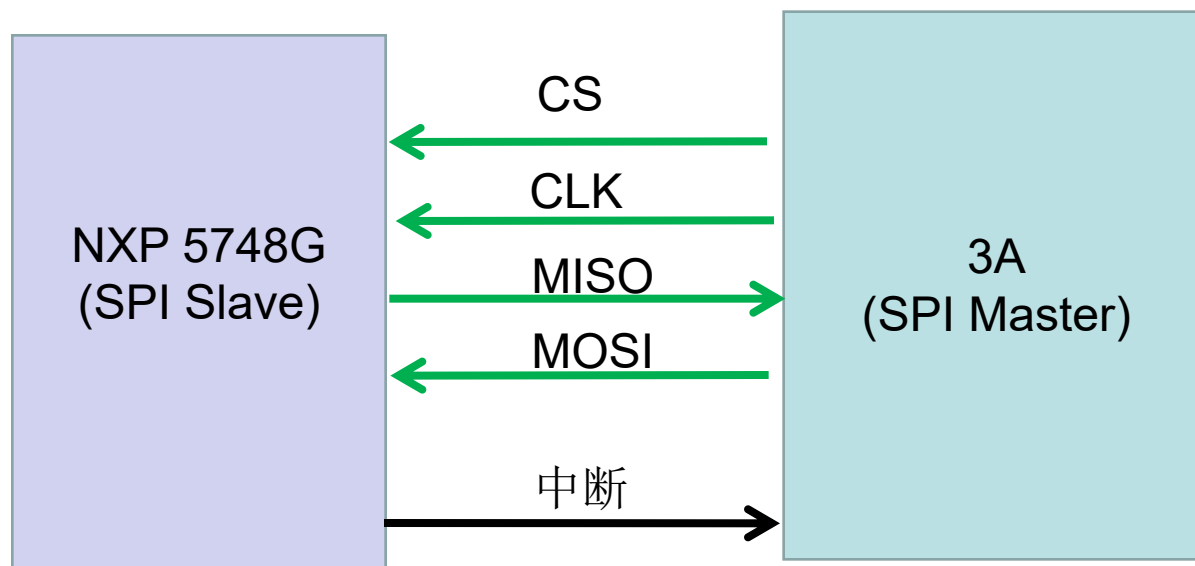


Problem description: We use the 5748G chip as a slave node to interact with 3A through SPI. When the communication rate is 1M, it can run stably. When the communication rate is 2M, unexpected bytes will be inserted into the SPI data sent by the MCU. Cause data analysis to fail.



Is this due to the wrong EB configuration mode? There is still a problem with the underlying MCAL driver. Looking forward to reply.

At 1M,
the result is
correct

```
cnt=10
RX | 00 01 00 01 00 01 06 07 08 09 0A 0B 0C 0D 0E 0F | .....
RX | 10 11 12 13 14 15 16 17 18 19 1A 1B 1C 1D 1E 1F | .....
RX | 20 21 22 23 24 25 26 27 28 29 2A 2B 2C 2D 2E 2F | .!"#$%&'()*+,-./
RX | 30 31 32 33 34 35 36 37 38 39 3A 3B 3C 3D 3E 3F | 0123456789:;<=>?
RX | 40 41 42 43 44 45 46 47 48 49 4A 4B 4C 4D 4E 4F | @ABCDEFGHIJKLMNO
RX | 50 51 52 53 54 55 56 57 58 59 5A 5B 5C 5D 5E 5F | PQRSTUVWXYZ[\]^_
cnt=11
RX | 00 01 00 01 00 01 06 07 08 09 0A 0B 0C 0D 0E 0F | .....
RX | 10 11 12 13 14 15 16 17 18 19 1A 1B 1C 1D 1E 1F | .....
RX | 20 21 22 23 24 25 26 27 28 29 2A 2B 2C 2D 2E 2F | .!"#$%&'()*+,-./
RX | 30 31 32 33 34 35 36 37 38 39 3A 3B 3C 3D 3E 3F | 0123456789:;<=>?
RX | 40 41 42 43 44 45 46 47 48 49 4A 4B 4C 4D 4E 4F | @ABCDEFGHIJKLMNO
RX | 50 51 52 53 54 55 56 57 58 59 5A 5B 5C 5D 5E 5F | PQRSTUVWXYZ[\]^_
^C
```

```
[root@DMD3A ~/bin]# ./spitest -D /dev/spidev0.0 -H -v -s 2000000
```

```
spi mode: 0x1
```

```
bits per word: 8
```

```
max speed: 2000000 Hz (2000 KHz)
```

```
cnt=0
```

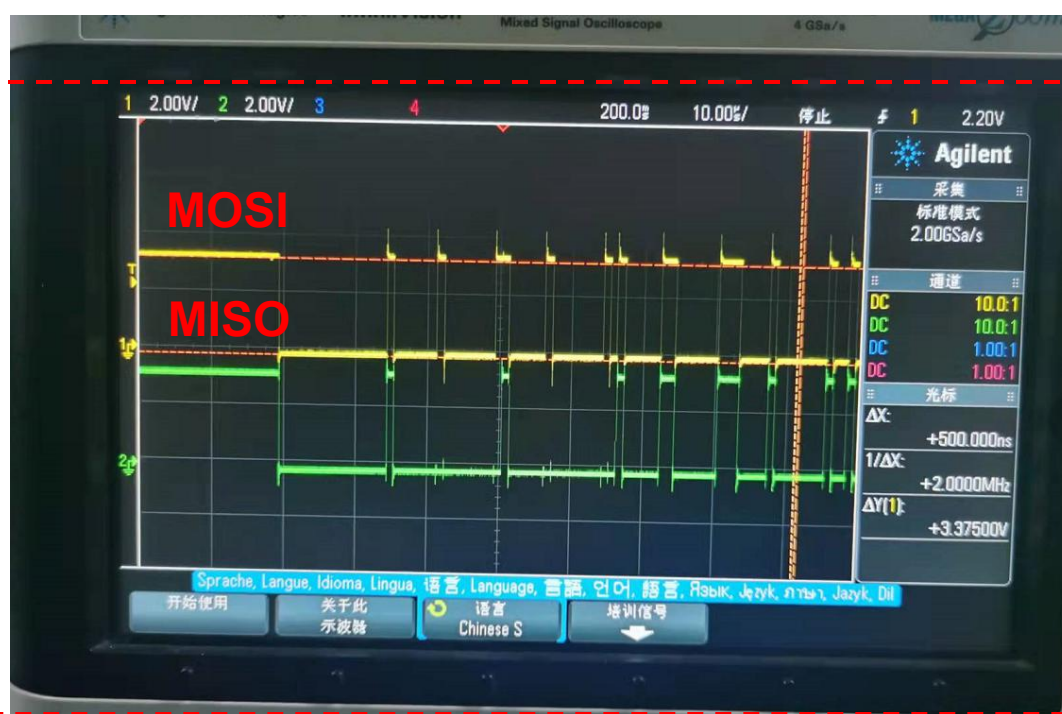
```
RX | 00 01 00 01 01 00 01 06 07 08 09 0A 0B 0C 0D 0E | .....
RX | 0F 10 11 12 13 14 15 16 17 18 19 1A 1B 1C 1D 1E | .....
RX | 1F 20 21 22 23 24 25 26 27 28 29 2A 2B 2C 2D 2E | .!"#$%&'()*+,-.
RX | 2F 30 31 32 33 34 35 36 37 38 39 3A 3B 3C 3D 3E | /0123456789:;<=>
RX | 3F 40 41 42 43 44 45 46 47 48 49 4A 4B 4C 4D 4E | ?@ABCDEFGHIJKLMN
RX | 4F 50 51 52 53 54 55 56 57 58 59 5A 5B 5C 5D 5E | OPQRSTUVWXYZ[\]^
```

```
cnt=1
```

```
RX | 00 01 00 01 01 00 01 06 07 08 09 0A 0B 0C 0D 0E | .....
RX | 0F 10 11 12 13 14 15 16 17 18 19 1A 1B 1C 1D 1E | .....
RX | 1F 20 21 22 23 24 25 26 27 28 29 2A 2B 2C 2D 2E | .!"#$%&'()*+,-.
RX | 2F 30 31 32 33 34 35 36 37 38 39 3A 3B 3C 3D 3E | /0123456789:;<=>
```

At 2M, 0x1
is inserted
into the data
sent by the
MCU

At 1M,
the result is
correct



At 2M, 0x1
is inserted
into the data
sent by the
MCU

5748g sent
data



Name SpiChannel_0

General

- SpiChannelId 0
- SpiChannelType IB
- SpiDataWidth (4 -> 32) 8
- SpiDefaultData (0 -> 4294967295) 255
- SpiEbMaxLength 1048
- SpiIbNBuffers 96
- SpiTransferStart MSB
- Swap_32BitEnable

EB configuration

Spi (Spi)

SpiPhyUnit

Name SpiPhyUnit_0

General

- SpiPhyUnitMapping SPI_1
- SpiPhyUnitMode SPI_SLAVE
- SpiPhyUnitSync
- SpiPhyUnitClockRef /Mcu/Mcu/McuModuleConfiguration/McuClockSettingConfig_0/ClkRefPnt_F80
- SpiPhyUnitAlternateClockRef
- SpiPhyUnitAsyncMethod PIO_FIFO
- SpiPhyTxDmaChannel /Mcl/Mcl/MclConfigSet_0/DMAChannel_2
- SpiPhyTxDmaChannelAux /Mcl/Mcl/MclConfigSet_0/DMAChannel_4
- SpiPhyRxDmaChannel /Mcl/Mcl/MclConfigSet_0/DMAChannel_3

S32 program

```
uint8  t_Buff[96],i;
t_Buff[0]=0;
t_Buff[1]=1;
t_Buff[2]=0;
t_Buff[3]=1;
t_Buff[4]=0;
t_Buff[5]=1;
for(i=6;i<96;i++)
    t_Buff[i]=i;
Spi_WriteIB(V2X_SPI_CHL, t_Buff);
Spi_AsyncTransmit(V2X_SPI_SEQ);
return;
```