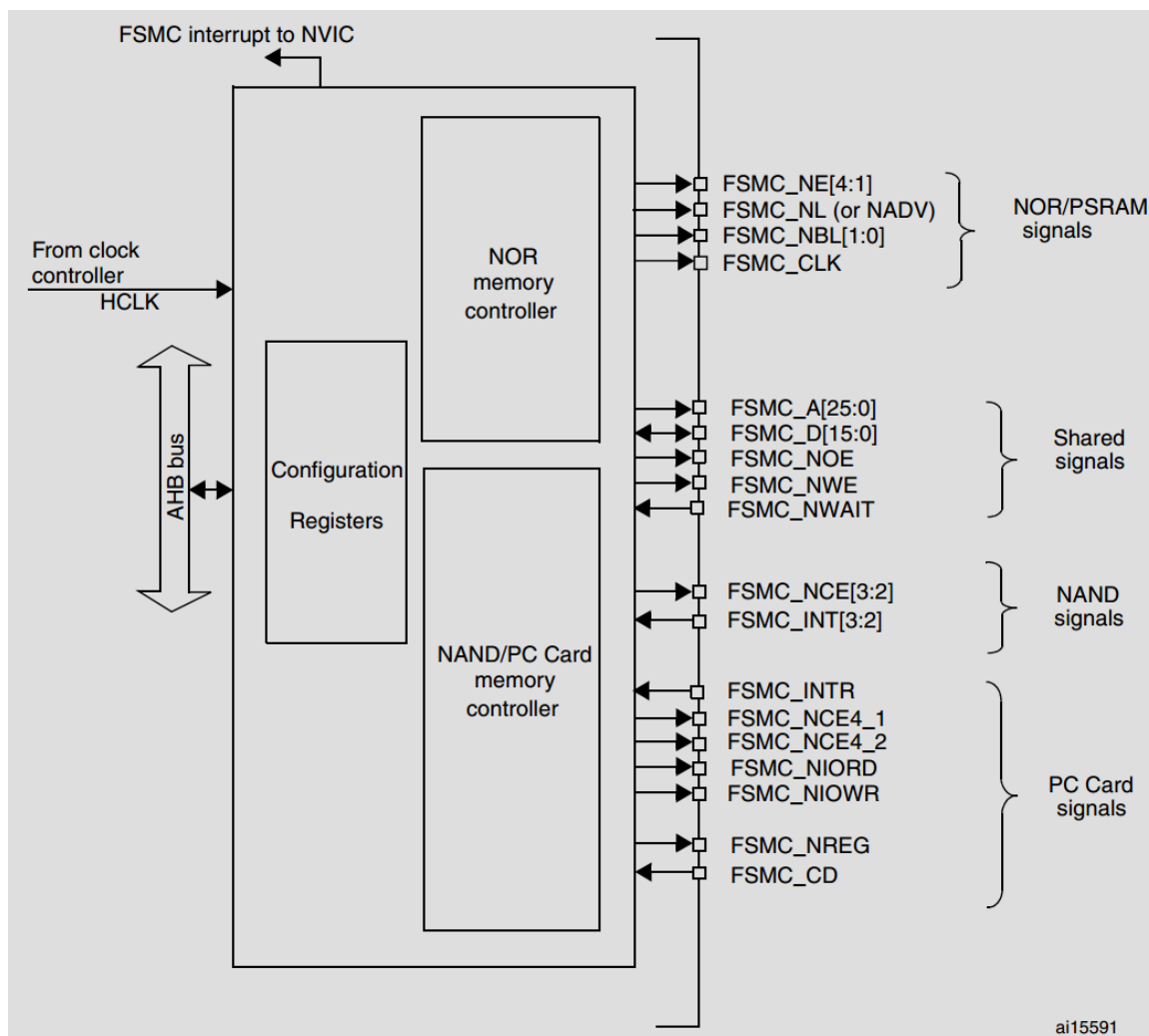




## STM32 FSMC 接口和 CANOpen 模块 netX COM100 接线

### 一、STM32 FSMC block diagram





## 二、COMX 模块引脚说明

### 3.1.2 COMX Pinning of the System Bus Connector X1 – Parallel Mode

X1	Pin	Signal	COMX 10 PAD Type	COMX 50 PAD Type	COMX 100 PAD Type	Symbol	Type
	1	Word Interface, active low	IOU6	IOU9	IO18C	DPM_SIRQn	LVTTTL Input
	2	Bus high enable, active low	IOU6	IOU9	IO18C	DPM_BHEn	LVTTTL Input
	3	Data line 15	IOD6	IOU9	IO18C	DPM_D15	LVTTTL Input / Output
	4	Data line 14	IOD6	IOU9	IO18C	DPM_D14	LVTTTL Input / Output
	5	Data line 13	IOD6	IOU9	IO18C	DPM_D13	LVTTTL Input / Output
	6	Data line 12	IOD6	IOU9	IO18C	DPM_D12	LVTTTL Input / Output
	7	Data line 11	IOD6	IOU9	IO18C	DPM_D11	LVTTTL Input / Output
	8	Data line 10	IOD6	IOU9	IO18C	DPM_D10	LVTTTL Input / Output
	9	Data line 9	IOD6	IOU9	IO18C	DPM_D9	LVTTTL Input / Output
	10	Data line 8	IOD6	IOU9	IO18C	DPM_D8	LVTTTL Input / Output
	11	Ground				GND	
	12	Power Supply				+3V3	
	13	Transmit Data, Serial line	IOUS6	IODS6	IOD6	UART1_TXD	LVTTTL Output
	14	Receive Data, Serial line	IOUS6	IODS6	IOD6	UART1_RXD	LVTTTL Input
	15	Request to Send, Serial line & SYNC0	IOUS6	IODS6	IOD6	UART1_RTSn / SYNC0	LVTTTL Output / SYNC Input / Output Signal XC3_IO0 (Note 1, 2)
	16	Clear to Send, Serial line & SYNC1	IOUS6	IODS6	IOD6	UART1_CTSn / SYNC1	LVTTTL Input / SYNC Input / Output Signal XC3_IO1 (Note 1, 2)
	17	USB positive, Diagnostic line	USB	USB	USB	USB+	USB
	18	USB negative, Diagnostic line	USB	USB	USB	USB-	USB
	19	Receive Data, Diagnostic line	IOUS6	IODS6	IOD6	UART0_RXD	LVTTTL Input
	20	Transmit Data, Diagnostic line	IOUS6	IODS6	IOD6	UART0_TXD	LVTTTL Output
	21	Reset, active low	IUS	IUS	IO18C	DPM_RESETn	LVTTTL Input; 10 kΩ pull up at COMX
	22	Busy, active low	IOU6	IOU9	IO18C	DPM_BUSYn	LVTTTL Output
	23	During operation: Interrupt, active low COMX 10 at start-up: Host mode selection	IOU6	IOU9	IO18C	DPM_DIRQn	During operation: LVTTTL Output At start-up: LVTTTL Input
	24	Read, active low	IOU6	IOU9	IO18C	DPM_RDn	LVTTTL Input
	25	Write, active low	IOU6	IOU9	IO18C	DPM_WRn	LVTTTL Input
	26	Chip select, active low	IOU6	IOU9	IO18C	DPM_CSn	LVTTTL Input

Table 18: COMX Pinning of the System Bus Connector X1- Parallel DPM Mode (Part 1)



## 三、两者时序图

### 1) STM32 读写时序图

Figure 409. Asynchronous wait during a read access

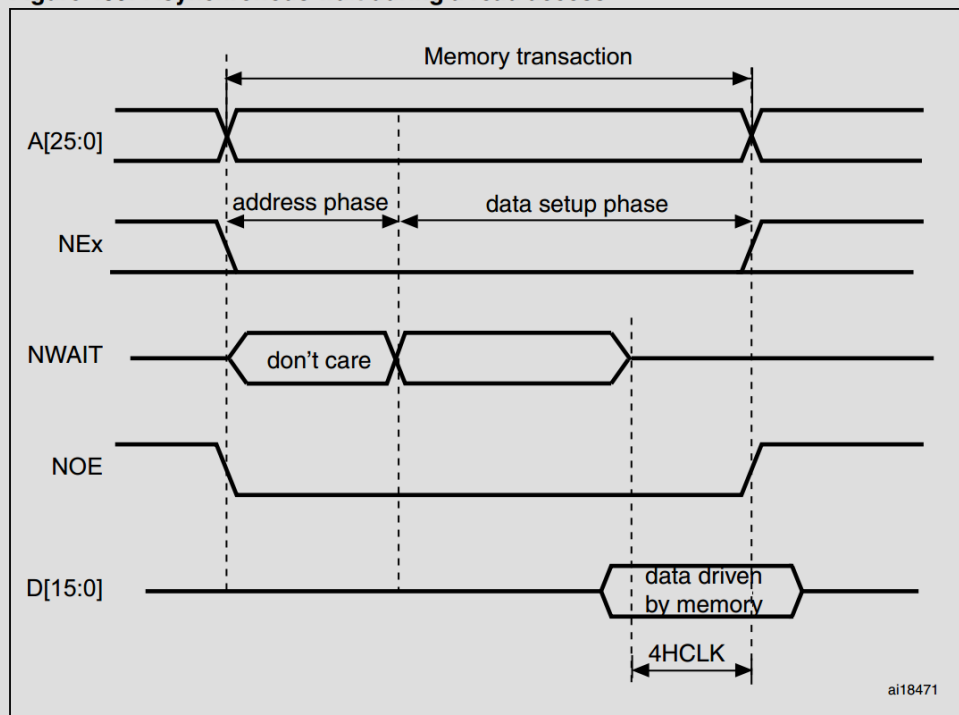
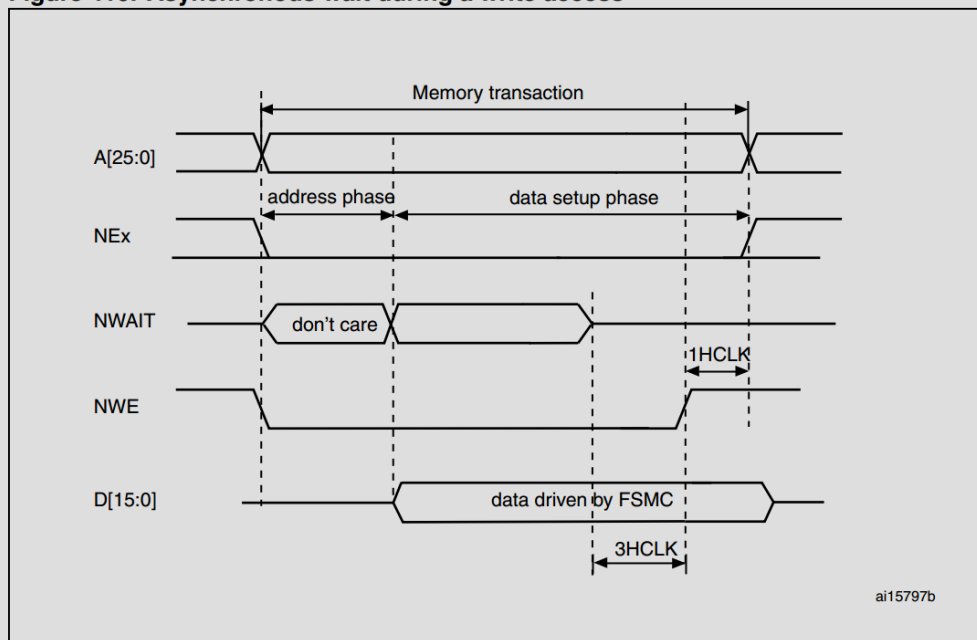


Figure 410. Asynchronous wait during a write access





## 2) COMX 读写时序图

The following diagram shows the timing for dual-port memory read access.

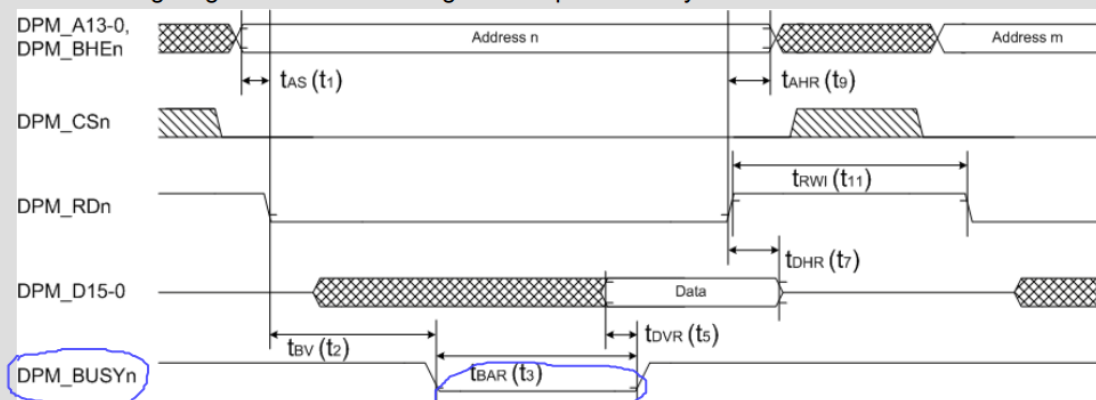


Figure 9: COMX Timing Diagram for Read Access

The following diagram shows the timing for dual-port memory write access.

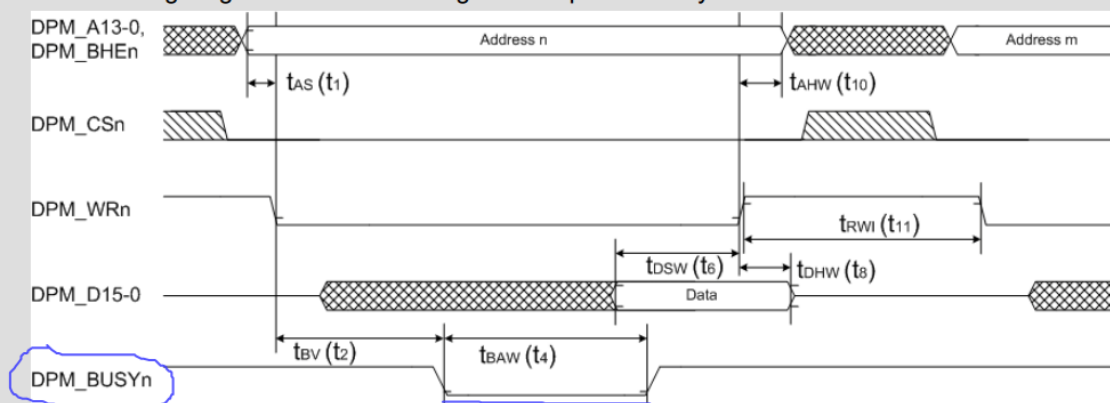
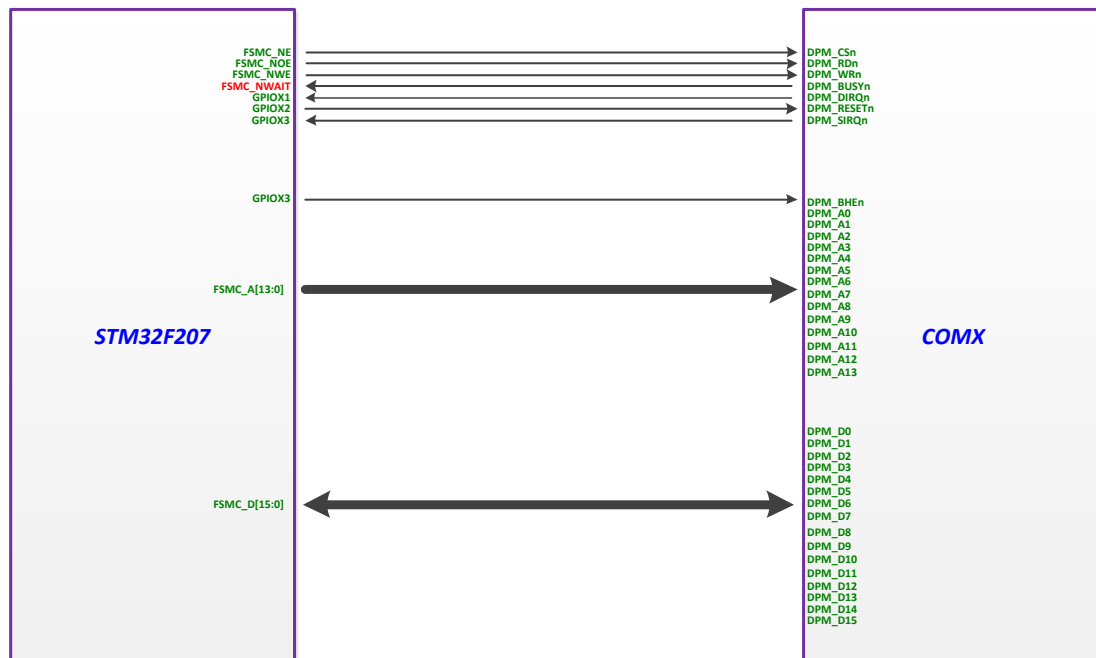


Figure 10: COMX Timing Diagram for Write Access



## 四、两者接线图



说明:

- 1) STM32 FSMC 中的 WAIT 信号是否能满足 COMX BUSYn 的信号要求?
- 2) COMX 模块介绍他使用的接口是同步 DPM, 但是引脚为什么没有提供 CLK 信号?