

# 您設計產品時的好朋友！



Forum: 32-bit SAM(ARM core)

Topic: ATSAME54P20A--定址

Subject: Re: ATSAME54P20A--定址

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2020年05月22日 10:51:39

假如我將定址改到其他位址。

```
uint8_t Can0MessageRAM[CANO_MESSAGE_RAM_CONFIG_SIZE] __attribute__((aligned(32), address(0x20010000)));
```

```
uint8_t Can1MessageRAM[CAN1_MESSAGE_RAM_CONFIG_SIZE] __attribute__((aligned(32), address(0x20010000 + CAN0_MESSAGE_RAM_CONFIG_SIZE)));
```

確認map檔內容無誤。

```
_0c5519485ec73812%1
0x20010060          0x60
_0c5519485ec73812
0x20010060          0x60sam54_xpro/production/_ext/1360937237/main_e54.o

0x20010060          Can1MessageRAM
_0c5518f05ec73812%2
0x20010000          0x60
_0c5518f05ec73812
0x20010000          0x60sam54_xpro/production/_ext/1360937237/main_e54.o

0x20010000          Can0MessageRAM
```

## RAM Data-Memory Usage

section	[bytes]	address	description	16
.bss	0x20000000	0x10		
.data.impure_data	0x20000010	0x418	1048	
.data.__malloc_av_	0x20000428	0x408	1032	
.data.__global_locale	0x20000830	0x16c	364	
.bss.message	0x2000099c	0x40	64	
.bss.rx_message	0x200009dc	0x40	64	
.bss.can1RxMsg	0x20000a1c	0x30	48	
.bss.can0RxMsg	0x20000a4c	0x30	48	
.bss.can1Obj	0x20000a7c	0x28	40	
.bss.can0Obj	0x20000aa4	0x28	40	
.bss.__malloc_current_m	0x20000acc	0x28	40	
.bss.can1CallbackObj	0x20000af4	0x20	32	
.bss.can0CallbackObj	0x20000b14	0x20	32	
.bss	0x20000b34	0x1c	28	

.bss.messageID	0x20000b50	0x4	4	
.bss.rx_messageID	0x20000b54	0x4	4	
.bss.xferContext	0x20000b58	0x4	4	
.data._impure_ptr	0x20000b5c	0x4	4	
.bss.__malloc_max_sbrke	0x20000b60	0x4	4	
.bss.__malloc_max_total	0x20000b64	0x4	4	
.bss.__malloc_top_pad	0x20000b68	0x4	4	
.data.__malloc_sbrk_bas	0x20000b6c	0x4	4	
.data.__malloc_trim_thr	0x20000b70	0x4	4	
.bss	0x20000b74		0x4	4
.bss.timestamp	0x20000b78	0x2		2
.bss.messageMarker.8529	0x20000b7a	0x1	1	
.bss.loop_count	0x20000b7b	0x1		1
.bss.messageLength	0x20000b7c	0x1		1
.bss.rx_messageLength	0x20000b7d	0x1	1	
.data.state	0x20000b7e		0x1	1
_0c63b8f05ec7381b	0x20010000	0x60		96
_0c63b9485ec7381b	0x20010060	0x60		96
Total RAM used 0xc3f		3%35f	0x40000	
-----				
Total Data Memory used :		0xc3f	3%35f	0x40000
-----				

但是通訊會有問題，data傳送內容為0x00，ID也是為0x00，當然不定址就不會有這樣的狀況。因為有特殊規劃，所以需要定址。有無方式可以排除此狀況。