

# 微机第8章作业

8.4 占空比为  $\frac{3}{4}$  C口两端与地为输出 A,B随机初始化

方式控制字句为 1000 0000 B 或 80H

PC3 [1 1 1 0] [1 1 0] : C端口的置位控制字依次

PC1 [1 1 1 1 1 0 0] 为 88H, 80H, 88H, 08H, 00H

MOV DX, 63H ;假设控制端口为 63H

MOV AL, 80H ;方式控制字

OUT DX, AL ;送到控制端口

one: MOV AL, 88H

MOV DX, 62H ;C口端口地址

OUT DX, AL

CALL DELAY 3S

MOV AL, 80H

OUT DX, AL

CALL DELAY 1S

MOV AL, 88H

OUT DX, AL

CALL DELAY 1S

MOV AL, 08H

OUT DX, AL

CALL DELAY 1S

MOV AL, 00H

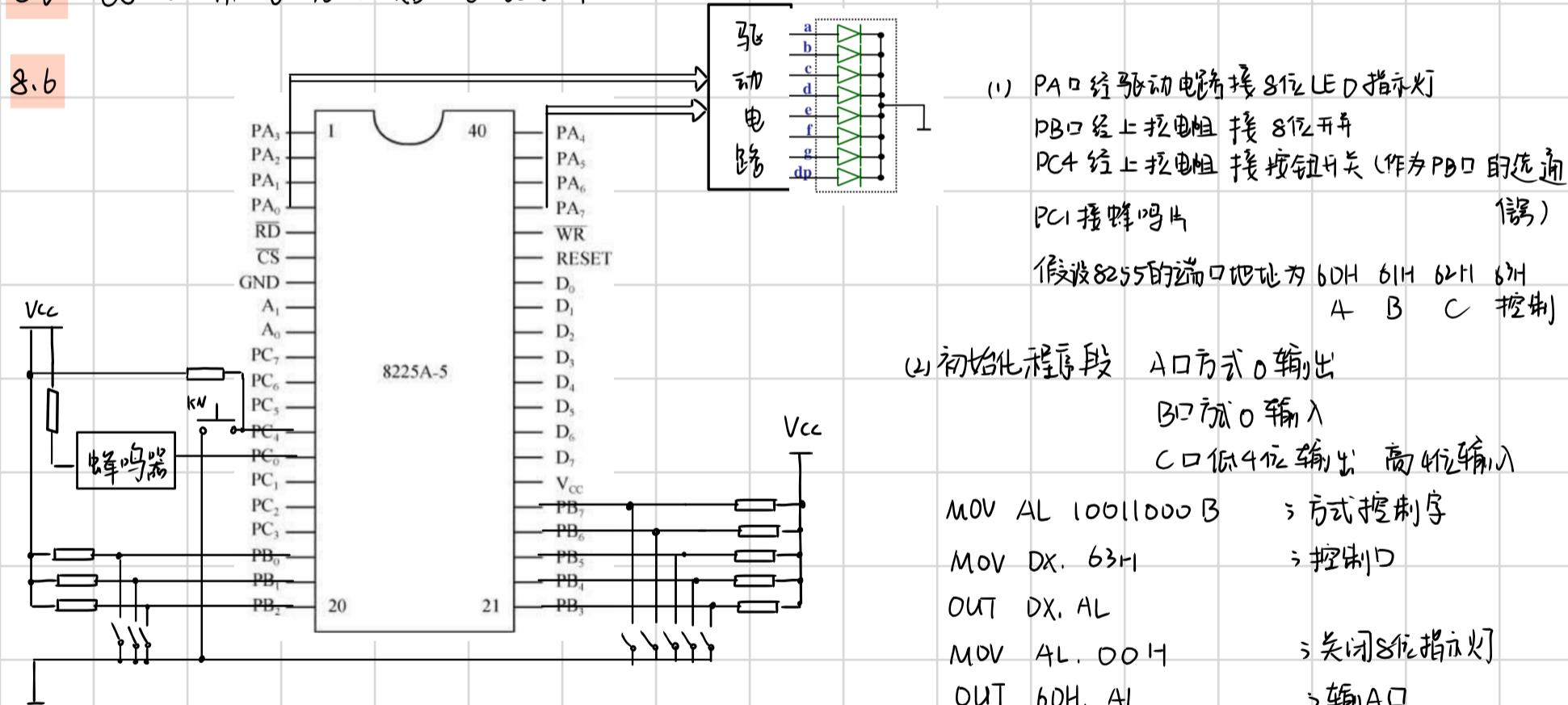
OUT DX, AL

CALL DELAY

JMP one

8.5 CS = 0 A<sub>1</sub> = 0 A<sub>0</sub> = 1 RD = 0 WR = 1

8.6



驱动程序1 8位开关控制8位LED

One:

IN AL, 61H ; 输入B口中8位开关状态

OUT 60H, AL ; 输出A口控制LED

JMP one

驱动程序2：按下按钮开关，使蜂鸣片发声

VOICE.

IN AL, 62 ; 输入C口的按钮开关状态

TEST AL, 10H ; 判断PC4是否为0

JNZ VOICE\_OFF ; 若PC4不为0，则此时正在蜂鸣，跳转去关闭

驱动程序3：

B口工作于方式0下，按按钮并释放后，由8个开关决定LED

LED0-OFF:

IN AL, 62H

TEST AL 10H

JNZ LED0-OFF

LED0-ON:

```

MOV AL, 00H
OUT 63H, AL
CALL DELAY
JMP VOICE
VOICE OFF
MOV AL, 01H
OUT 64, AL
JMP VOICE

```

; 置 PCO=0 使其发声

```

IN AL, 62H
TEST AL 10H
JZ LED0-DFF
IN AL, 61H
OUT 62H, AL
JMP LED0 OFF

```

8.7 A口用方式0输出 B口用方式0输入字符  
C口用输入状态信息

```

MOV AL, 8BH
MOV DX, 63H
OUT DX, AL
one:
MOV DX, 62H
IN AL, DX
TEST AL, 01H ; PCo=1 AL=0000 0001
JZ one
MOV DX, 61H
IN AL, DX
CMP AL, 0DH ; PG=0 AL=0 ...
JZ one
two:
MOV DX, 62H
IN AL, DX
CMP AL, 80H ; AL=80H JZF=0
JNZ two
MOV DX, 60H
OUT DX, AL
JMP one

```

8.8 A口方式0输出 C口高位输入 低位输出  
二字节字 1000 1000 B

```

DATA SEGMENT
Apore EQU 200H
Cport EQU 202H
Ctl EQU 203H
OFAD DB 30 DUP(?)
DATA ENDS
CODE SEGMENT
ASSUME CS:CODE, DS:DATA
MAIN PROC FAR
PUSH DS
XOR AX, AX
PUSH AX
MOV AL, 88H
OUT DX, AL
MOV AL, 03H
OUT DX, AL
MOV CX, 30
LEA SI, OFAD
AGAIN:
MOV DX, Cport
IN AL, DX
AND AL, 20H
JNZ AGAIN
MOV AL, [SI]
OUT DX, AL
MOV AL, 02H
OUT DX, AL
INC AL
OUT DX, AL
INC SI
DEC CX
JNZ AGAIN
RET
MAIN ENDP
CODE ENDS
END MAIN

```