

# LCD 在线

# 液晶显示模块技术手册

KM12232K



E-mail: [mylcd@163.com](mailto:mylcd@163.com)  
HomePage: <http://www.lcdinline.com>  
Hot line: 0755-83021546

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一般特性

1. 显示特性

- (1) STN 正视反射模式;
- (2) 显示颜色: 黄绿底兰字;
- (3) 显示角度: 6 点钟直视
- (4) 驱动方式: 1/32 Duty, 1/6 Bias
- (5) 可以附加 LED 或 EL 背光(注: EL 背光需另备逆变器);
- (6) LCD 可选宽温型;

2: 机械特性

- (1) 外观尺寸: 见外观图;  
 (2) 电阵: 122 X 32 点;  
 (3) 点尺寸: 0.36(W) X 0.41(H) (MM);  
 (4) 点间距: 0.40(W) X 0.45(H) (MM);

**3: 引脚特性:**

管脚号	管脚名称	LEVER	管脚功能描述
1	VSS	0V	电源地
2	VDD	+5V	电源电压
3	V0	-	LCD 外接驱动电压, V0=0~ -5V
4	RS	H/L	RS=“H”,表示 DB7~DB0 为显示数据 RS=“L”,表示 DB7~DB0 为显示指令数据
5	R/W	H/L	读写选择信号(H---write; L---read)
6	NC	H/L	
7	NC	H/L	
8	E1	H/L	左半屏读写使能信号
9	E2	H/L	右半屏读写使能信号
10	DB0	H/L	数据线
11	DB1	H/L	数据线
12	DB2	H/L	数据线
13	DB3	H/L	数据线
14	DB4	H/L	数据线
15	DB5	H/L	数据线
16	DB6	H/L	数据线
17	DB7	H/L	数据线
18	RET	H/L	复位信号, 翻转时有效
19	VLED-	-	LED (Vss)
20	VLED+	-	LED (DC4.2~5V)

**二. 限定参数:**

Item	Symbol	Standard Value	Unit	Condition
Power supply voltage	VDD	0 $\leq$ +7.0	V	
LCD driving voltage	VDD $\leq$ VLCD	0 $\leq$ +12.0		
Input voltage	VIN	GND $\leq$ VIN $\leq$ VDD		
Operating temperature range	Top	0 $\leq$ +40	° C	NO condition
Storage temperature range	Tst	-10 $\leq$ +60		

**三. 直流特性:**

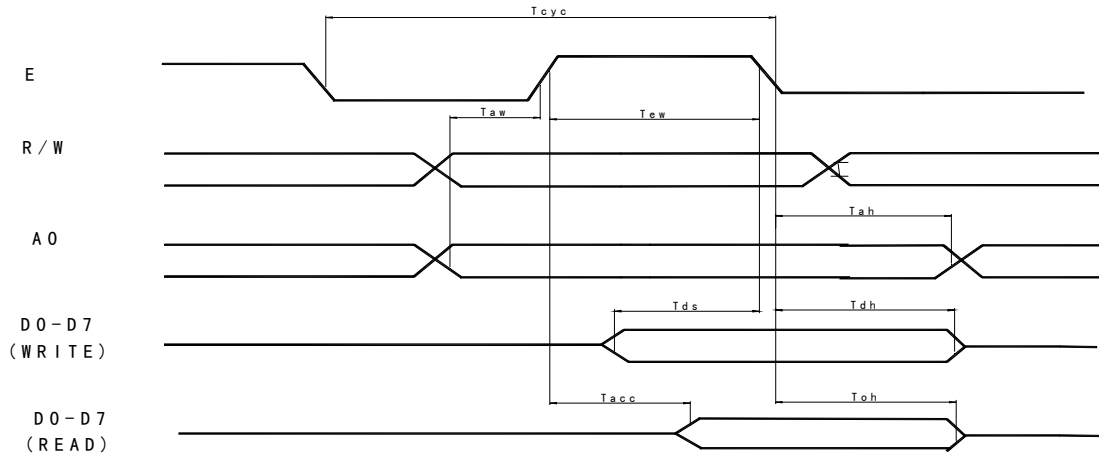
(Ta=0~+40 °C, VDD=2.7~6.0V)

Item	Symbol	Standard Value			Unit
		MIN	TYP	MAX	
Power Supply	VDD	2.4	5.0	6.0	V
LCD Driving Voltage	VLCD	-	0	-	V
Input High Voltage	VIH	0.8VDD		VDD	V
Output High Voltage	VoH	0.5VDD			V
Input Low Voltage	VIL	GND		0.2VDD	V
Output LoW Voltage	VoL			0.1VDD	V

Power Supply Current	IDD		-	240	uA
I/O Leak Current	IL	-3.0		3.0	uA
Stand-by Current	IDDQ		0.05	1.0	uA

**四.交流特性:**

Signal	Parameter	Symbol	MIN	MAX	Unit	Condition
A0, R/W	System cycle time	T <sub>cyc</sub>	2000	-	ns	
	Address setup time	T <sub>aw</sub>	40	-	ns	
	Address hold time	T <sub>ah</sub>	20	-	ns	
D0-D7	Data setup time	T <sub>ds</sub>	160	-	ns	CL=100pF
	Data hold time	T <sub>dh</sub>	20	-	ns	
	Output disable time	T <sub>oh</sub>	20	120	ns	
E	Access time	T <sub>acc</sub>	-	180	ns	
	Enable pulse width(Read)	T <sub>ew</sub>	200	-	ns	
	Enable pulse width(Write)		160	-	ns	

**读写时序图****五.机械尺寸图:**



页码号	地址代码	数据线对应位	点阵区间显示 (1—显示、0—不显示) 左右半屏各 61 列共 122 列
第 0 页	B8H	DB0	对应第 1 行内容
		DB1	对应第 2 行内容
		DB2	对应第 3 行内容
		DB3	对应第 4 行内容
		DB4	对应第 5 行内容
		DB5	对应第 6 行内容
		DB6	对应第 7 行内容
		DB7	对应第 8 行内容
⋮	⋮	⋮	⋮
第 3 页	BBH	DB0	对应第 25 行内容
		DB1	对应第 26 行内容
		DB2	对应第 27 行内容
		DB3	对应第 28 行内容
		DB4	对应第 29 行内容
		DB5	对应第 30 行内容
		DB6	对应第 31 行内容
		DB7	对应第 32 行内容

## 八. 指令表

INSTRUCTION	CODE											FUNCTION
	A0	/RD	/WR	D7	D6	D5	D4	D3	D2	D1	D0	
DISPLAY ON/OFF	0	1	0	1	0	1	0	1	1	1	1/0	Switch the entire display ON or OFF, regardless of the Display RAM's Data or the internal status. 1:ON 0:OFF
Display Start Line	0	1	0	1	1	0	Display start Line (0...31)				0	Determines the line of RAM data to be displayed at the display's top line. (Com0)
Page Address set	0	1	0	1	0	1	1	1	0	PAGE: (0~3)		Sets the page of the Display RAM in the page Address register. (X address)
Column (seg) Address set	0	1	0	0	Column address(0~79)						0	Sets the column of the Display in the column address register. (Y address)
Status Read	0	0	1	B U S Y	A D C	ON / OFF	R S T	0	0	0	0	Read status Busy 1:internal operation 0:Ready ADC 1:Rightward output 0:Leftward RST 1:Reseting 0:Normal ON/OFF 1:Display off 0:Display on
Write Display Data	1	1	0	Write data							0	Writes the data on the Data bus to RAM

Read Display data	1	0	1	Read data								Reads data from the Display RAM onto the Data BUS
ADC Select	0	1	0	1	0	1	0	0	0	0	0/1	Determine the clockwise or Counterclockwise reading Of the display Data RAM 0:Clockwise 1:Countclockwise
Static Drive ON/OFF	0	1	0	1	0	1	0	0	1	0	0/1	Select the dynamic or static Driving. 1:Static driving 0:Dynamic driving
Duty Ratio Select	0	1	0	1	0	1	0	1	0	0	0/1	Select the duty ratio 1:1/32 duty 0:1/16 duty
Read Modify Write	0	1	0	1	1	1	0	0	0	0	0	Increment the column Address register when writing But no-change when reading.
End	0	1	0	1	1	1	0	1	1	1	0	Release from the Read Modify Write Mode.
Reset	0	1	0	1	1	1	0	0	0	1	0	Set the Display Start Line Register to 1 <sup>st</sup> line, column Address count to 0 and Page Add. Resister to 0.
Power S-Ave(dual Command)	0	1	0	1	0	1	0	1	1	1	0	Set the power save mode by Selecting display off and Static driving on
	0	1	0	1	0	1	0	1	0	1	1	

九 ● 应用举例

12232E 与单片机 8031 的一种接口如图 5.所示: (VDD=+5V)

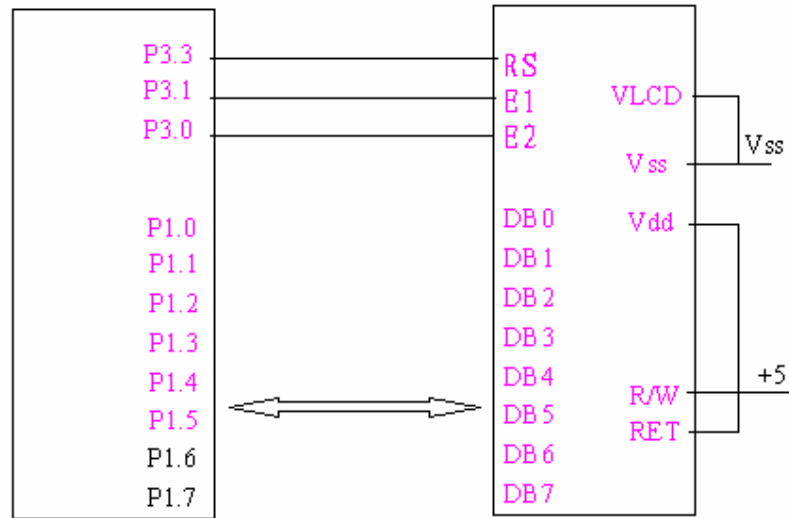


图 5

相应的源程序如下:

```
;THIS IS FOR 12232K TESTING
```

```

;   LCM-----8031
;   1---VDD
;   2---VSS
;   3---V0 (VSS)
;   4---RES (VDD)
;   5---E1-----P3. 1
;   6---E2-----P3. 0
;   7---R/W (VSS)
;   8---RS-----P3. 3
;   9---DB0-----P1. 0
;   .....
;  16--DB7-----P1. 7

```

接口定义

```

E1 EQU P3. 1
E2 EQU P3. 0
RS EQU P3. 3
CHARC EQU 40H
PAGE1 EQU 41H
COLUMN EQU 42H

```

```

ORG 0000H
LJMP START
ORG 0003H
LCALL QEAT ;KEY INTO

```

```

ORG 0100H
START: MOV IE, #81H ;EXT. INTO PERMIT
MOV IP, #01H ;INTO IS FIRST INT. LEVEL
MOV TCON, #00H ;TIMER/COUNTER CONTROLER INIT.
mov sp, #67h

```

```

lcall initm
lcall initm
LCALL MS200
LCALL TEST ;显示横条、竖条、点共 6 屏
LCALL MS200
LCALL BLACK1 ;WRITE 'FF' TO SCREEN(黑屏)
lcall ms200
LCALL MS200
LCALL WHITE1 ;CLEAR SCREEN
LCALL MS200
MOV PAGE1, #0B8H
MOV COLUMN, #13
MOV CHARC, #00H ;WRITE A CHINESE(16X16 DOTS) “液”

```

```

LCALL CHINAL
MOV PAGE1, #0B8H
MOV COLUMN, #29
MOV CHARC, #01H           ;WRITE A CHINESE(16X16 DOTS) “晶”
LCALL CHINAL
MOV PAGE1, #0B8H
MOV COLUMN, #45
MOV CHARC, #02H           ;WRITE A CHINESE(16X16 DOTS) “显”
LCALL CHINAL
MOV PAGE1, #0B8H
MOV COLUMN, #00
MOV CHARC, #03H           ;WRITE A CHINESE(16X16 DOTS) “示”
LCALL CHINAR
MOV PAGE1, #0B8H
MOV COLUMN, #016
MOV CHARC, #04H           ;WRITE A CHINESE(16X16 DOTS) “模”
LCALL CHINAR
MOV PAGE1, #0B8H
MOV COLUMN, #32
MOV CHARC, #05H           ;WRITE A CHINESE(16X16 DOTS) “块”
LCALL CHINAR

MOV PAGE1, #0BAH
MOV COLUMN, #05H
MOV CHARC, #0BH
LCALL C8x8L           ;WRITE A CHAR(8X8 DOTS) 'T'
MOV PAGE1, #0BAH
MOV COLUMN, #013
MOV CHARC, #0CH
LCALL C8x8L           ;WRITE A CHAR(8X8 DOTS) 'e'
MOV PAGE1, #0BAH
MOV COLUMN, #021
MOV CHARC, #0DH
LCALL C8x8L           ;WRITE A CHAR(8X8 DOTS) 'l'
MOV PAGE1, #0BAH
MOV COLUMN, #029
MOV CHARC, #0EH
LCALL C8x8L           ;WRITE A CHAR(8X8 DOTS) ':'
MOV PAGE1, #0BBH
MOV COLUMN, #037
MOV CHARC, #07H
LCALL C8x8L           ;WRITE A CHAR(8X8 DOTS) '7'
MOV PAGE1, #0BBH
MOV COLUMN, #045

```

```
MOV CHARC, #05H
LCALL C8x8L      ;WRITE A CHAR(8X8 DOTS) '5'
MOV PAGE1, #0BBH
MOV COLUMN, #053
MOV CHARC, #05H
LCALL C8x8L      ;WRITE A CHAR(8X8 DOTS) '5'
MOV PAGE1, #0BBH
MOV COLUMN, #0
MOV CHARC, #08H
LCALL C8x8R      ;WRITE A CHAR(8X8 DOTS) '8'
MOV PAGE1, #0BBH
MOV COLUMN, #0
MOV CHARC, #03H
LCALL C8x8R      ;WRITE A CHAR(8X8 DOTS) '3'
MOV PAGE1, #0BBH
MOV COLUMN, #8
MOV CHARC, #00H
LCALL C8x8R      ;WRITE A CHAR(8X8 DOTS) '0'
MOV PAGE1, #0BBH
MOV COLUMN, #16
MOV CHARC, #02H
LCALL C8x8R      ;WRITE A CHAR(8X8 DOTS) '2'
MOV PAGE1, #0BBH
MOV COLUMN, #024
MOV CHARC, #01H
LCALL C8x8R      ;WRITE A CHAR(8X8 DOTS) '1'
MOV PAGE1, #0BBH
MOV COLUMN, #32
MOV CHARC, #05H
LCALL C8x8R      ;WRITE A CHAR(8X8 DOTS) '5'
MOV PAGE1, #0BBH
MOV COLUMN, #040
MOV CHARC, #04H
LCALL C8x8R      ;WRITE A CHAR(8X8 DOTS) '4'
MOV PAGE1, #0BBH
MOV COLUMN, #48
MOV CHARC, #06H
LCALL C8x8R      ;WRITE A CHAR(8X8 DOTS) '6'

LCALL MS200
lcall ms200
LCALL MS200
lcall ms200
```

```
ljmp start
```

```
C8x8L: ;写左屏 8X8DOTS
```

```
MOV A, CHARC
MOV DPTR, #TABLE
MOV B, #08H ;8X8DOTS
MUL AB
ADD A, DPL
MOV DPL, A
MOV A, B
ADDC A, DPH
MOV DPH, A ;确定字符的首地址
MOV A, PAGE1
LCALL WMI
MOV A, COLUMN
LCALL WMI
MOV R5, #08H
```

```
LL1:
```

```
MOV A, #00H
MOVC A, @A+DPTR
LCALL WMD
INC DPTR
DJNZ R5, LL1
RET
```

```
C8x8R: ;写右屏 8X8DOTS
```

```
MOV A, CHARC
MOV DPTR, #TABLE
MOV B, #08H
MUL AB
ADD A, DPL
MOV DPL, A
MOV A, B
ADDC A, DPH
MOV DPH, A
MOV A, PAGE1
LCALL WSI
MOV A, COLUMN
LCALL WSI
MOV R5, #08H
```

```
RR1:
```

```
MOV A, #00H
MOVC A, @A+DPTR
LCALL WSD
INC DPTR
```

```

    DJNZ R5, RR1
    RET
CHINAL:                ;写左屏 16X16DOTS 中文字
    MOV A, CHARC      ;CHAR CODE IN *.LIB
    MOV DPTR, #TABLE1
    MOV B, #032
    MUL AB
    ADD A, DPL
    MOV DPL, A
    MOV A, B
    ADDC A, DPH
    MOV DPH, A
    MOV R5, #32
    MOV A, PAGE1
    LCALL WMI
    MOV A, COLUMN
    LCALL WMI
CHL1:  MOV A, #00H
    MOVC A, @A+DPTR
    LCALL WMD
    INC DPTR
    DEC R5
    CJNE R5, #16, CHL1
    INC PAGE1
    MOV A, PAGE1
    LCALL WMI
    MOV A, COLUMN
    LCALL WMI
CHL2:
    MOV A, #00H
    MOVC A, @A+DPTR
    LCALL WMD
    INC DPTR
    DJNZ R5, CHL2
    RET
CHINAR:                ;写右屏 16X16DOTS 中文字
    MOV A, CHARC      ;CHAR CODE IN *.LIB
    MOV DPTR, #TABLE1
    MOV B, #032
    MUL AB
    ADD A, DPL
    MOV DPL, A
    MOV A, B
    ADDC A, DPH

```

```
MOV DPH, A

MOV R5, #32
MOV A, PAGE1
LCALL WSI
MOV A, COLUMN
LCALL WSI
CHR1:  MOV A, #00H
        MOVC A, @A+DPTR
        LCALL WSD
        INC DPTR
        DEC R5
        CJNE R5, #16, CHR1
        INC PAGE1
        MOV A, PAGE1
        LCALL WSI
        MOV A, COLUMN
        LCALL WSI
CHR2:  MOV A, #00H
        MOVC A, @A+DPTR
        LCALL WSD
        INC DPTR
        DJNZ R5, CHR2
        RET

TEST:
LINE1:
        MOV R2, #04H
        MOV R1, #0B8H
L12:   MOV R0, #61 ;左右半屏均为 61 列
        MOV A, R1
        LCALL WMI
        LCALL WSI
        MOV A, #00H
        LCALL WMI
        LCALL WSI
        LCALL MS100
L11:   MOV A, #055H
        LCALL WMD
        LCALL WSD
        LCALL MS100
        DJNZ R0, L11
        INC R1
        DJNZ R2, L12
```

```
;RET
LCALL MS200
lcall ms200
LCALL MS200
;lcall ms200
;LCALL MS200
LINE2:
MOV R2, #04H
MOV R1, #0B8H
L22:  MOV R0, #61
MOV A, R1
LCALL WMI
LCALL WSI
MOV A, #00H
LCALL WMI
LCALL WSI
LCALL MS100
L21:  MOV A, #0AAH
LCALL WMD
LCALL WSD
LCALL MS100
DJNZ R0, L21
INC R1
DJNZ R2, L22
;RET
LCALL MS200
lcall ms200
LCALL MS200
;lcall ms200
;LCALL MS200
COLUMN1:
MOV R2, #04H
MOV R1, #0B8H
C12:  MOV R0, #61
MOV A, R1 ;PAGE ADDRESS
LCALL WMI
LCALL WSI
MOV A, #00H ;COLUMN ADDRESS
LCALL WMI
LCALL WSI
LCALL MS100
C11:  MOV A, #0FFH
LCALL WMD
LCALL WSD
```

```
MOV A, #00H
LCALL WMD
LCALL WSD
DJNZ R0, C11
INC R1
DJNZ R2, C12
;RET
LCALL MS200
lcall ms200
LCALL MS200
; lcall ms200
; LCALL MS200

COLUMN2:
MOV R2, #04H
MOV R1, #0B8H
C22: MOV R0, #61
MOV A, R1
LCALL WMI
LCALL WSI
MOV A, #00H
LCALL WMI
LCALL WSI
LCALL MS100
C21: MOV A, #00H
LCALL WMD
LCALL WSD
LCALL MS100
MOV A, #0FFH
LCALL WMD
LCALL WSD
DJNZ R0, C21
INC R1
DJNZ R2, C22
;RET
LCALL MS200
lcall ms200
LCALL MS200
; lcall ms200
; LCALL MS200
DOT1:
MOV R2, #04H
MOV R1, #0B8H
D12: MOV R0, #61
```

```
MOV A, R1
LCALL WMI
LCALL WSI
MOV A, #00H
LCALL WMI
LCALL WSI
LCALL MS100
D11:  MOV A, #055H
      LCALL WMD
      LCALL WSD
      LCALL MS100
      MOV A, #0AAH
      LCALL WMD
      LCALL WSD
      DJNZ R0, D11
      INC R1
      DJNZ R2, D12
      ;RET
      LCALL MS200
      lcall ms200
      LCALL MS200
;   lcall ms200
;   LCALL MS200
DOT2:
      MOV R2, #04H
      MOV R1, #0B8H
D22:  MOV R0, #61
      MOV A, R1
      LCALL WMI
      LCALL WSI
      MOV A, #00H
      LCALL WMI
      LCALL WSI
      LCALL MS100
D21:  MOV A, #0AAH
      LCALL WMD
      LCALL WSD
      LCALL MS100
      MOV A, #055H
      LCALL WMD
      LCALL WSD
      DJNZ R0, D21
      INC R1
      DJNZ R2, D22
```

```

LCALL MS200
;lcall ms200
RET ;END TEST

```

```

BLACK1:
MOV R2, #04H
MOV R1, #0B8H
B12: MOV R0, #61
MOV A, R1
LCALL WMI
LCALL WSI
MOV A, #00H
LCALL WMI
LCALL WSI
B11: MOV A, #0FFH
LCALL WMD
LCALL WSD
DJNZ R0, B11
INC R1
DJNZ R2, B12
RET
WHITE1: ;CLEAR SCREEN
MOV R2, #04H
MOV R1, #0B8H
W2: MOV R0, #61
MOV A, R1 ;SET PAGE
LCALL WMI
LCALL WSI
MOV A, #00H ;SET COLUMN
LCALL WMI
LCALL WSI
W1: MOV A, #00H
LCALL WMD
LCALL WSD
DJNZ R0, W1
INC R1
DJNZ R2, W2
RET
INITM: ;初始化子程序
MOV A, #0E2H
LCALL WMI ;RESET MASTER
LCALL WSI ;RESET SLAVE
MOV A, #0AEH

```

```

LCALL WMI ;OFF MASTER DISPLAY
LCALL WSI ;OFF SLAVE DISPLAY
MOV A, #0A4H
LCALL WMI ;OFF MASTER STATIC DRIVE
LCALL WSI ;OFF SLAVE STATIC DRIVE
MOV A, #0A9H
LCALL WMI ;MASTER SELECT 1/32 DUTY(占空比设定)
LCALL WSI ;SLAVE SELECT 1/32 DUTY
MOV A, #0A0H
LCALL WMI ;MASTER ADC SELECT:RIGHTWARD OUTPUT
LCALL WSI ;SLAVE ADC SELECT:RIGHTWARD OUTPUT
MOV A, #0EEH
LCALL WMI ;MASTER READ MODIFY WRITE OFF
LCALL WSI ;SLAVE READ MODIFY WRITE OFF
MOV A, #0C0H
LCALL WMI ;MASTER DISPLAY START LINE:0
LCALL WSI ;SLAVE DISPLAY START LINE :0
MOV A, #00H
LCALL WMI ;MASTER COLUMN ADDRESS OF DISPLAY RAM SET
LCALL WSI ;SLAVE COLUMN ADDRESS OF DISPLAY RAM SET
MOV A, #0AFH
LCALL WMI ;ON DISPLAY MASTER
LCALL WSI ;ON DISPLAY SLAVE
RET

QEAT: SETB P3.2 ;外部中断 1 中断处理子程序---按键暂停
      SETB P3.2
      LCALL MS200
      MOV C, P3.2
      MOV C, P3.2
      JNC QEAT
QEA1: MOV C, P3.2
      MOV C, P3.2
      LCALL MS200
      JC QEA1
QEA2: SETB P3.2
      SETB P3.2
      LCALL MS200
      MOV C, P3.2
      MOV C, P3.2
      JNC QEA2
      RETI
MS200: MOV R7, #00H

```

```
MS0:  MOV R6, #0AAH
MS:   NOP
      NOP
      NOP
      NOP
      DJNZ R6, MS
      DJNZ R7, MS0
      RET
```

```
MS100:
      MOV R4, #02H
MS10:  MOV R3, #0A0H
MS1:   NOP
      NOP
      DJNZ R3, MS1
      DJNZ R4, MS10
      RET
```

```
WMI:
      CLR RS
      CLR RS
      CLR E2
      CLR E2
      SETB E1
      SETB E1
      MOV P1, A
      MOV P1, A
      CLR E1
      CLR E1
      RET
```

```
WSI: CLR RS
      CLR RS
      CLR E1
      CLR E1
      SETB E2
      SETB E2
      MOV P1, A
      MOV P1, A
      CLR E2
      CLR E2
      RET
```

```
WMD: SETB RS
      SETB RS
      CLR E2
```

```

CLR E2
SETB E1
SETB E1
MOV P1, A
MOV P1, A
CLR E1
CLR E1
RET
WSD:SETB RS
SETB RS
CLR E1
CLR E1
SETB E2
SETB E2
MOV P1, A
MOV P1, A
CLR E2
CLR E2
RET
ORG 0600H
TABLE1: ;16X16 点阵汉字表
;-- 文字: 液 --
DB
000H, 000H, 0E0H, 082H, 00CH, 088H, 0D8H, 0F6H, 03EH, 0FAH, 058H, 0E0H, 000H, 000H, 000H, 000H
DB
000H, 000H, 01FH, 00CH, 003H, 001H, 03FH, 002H, 007H, 007H, 00FH, 018H, 018H, 010H, 010H, 000H
DB
000H, 000H, 000H, 000H, 000H, 000H, 000H, 000H, 000H, 000H, 000H, 000H, 000H, 000H, 000H, 000H
;-- 文字: 晶 --
DB
000H, 000H, 000H, 000H, 000H, 000H, 07CH, 06AH, 02AH, 0FFH, 09EH, 080H, 080H, 000H, 000H, 000H
DB
000H, 000H, 000H, 01EH, 035H, 015H, 03FH, 000H, 01FH, 012H, 012H, 03FH, 00FH, 000H, 000H, 000H
;-- 文字: 显 --
DB
000H, 000H, 000H, 000H, 018H, 070H, 0E8H, 0FEH, 07AH, 0AAH, 0BAH, 01CH, 000H, 000H, 000H, 000H
DB
000H, 000H, 010H, 010H, 016H, 012H, 00FH, 00DH, 00FH, 00AH, 00BH, 009H, 018H, 000H, 000H, 000H
;-- 文字: 示 --
DB
000H, 000H, 000H, 0C0H, 0C0H, 0E0H, 060H, 05CH, 0FCH, 0ECH, 06CH, 060H, 060H, 040H, 000H, 000H

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DB

000H, 000H, 000H, 004H, 006H, 002H, 005H, 008H, 01FH, 003H, 000H, 002H, 006H, 000H, 000H, 000H

;-- 文字: 模 --

DB

000H, 040H, 0C0H, 0E0H, 0F0H, 0FCH, 050H, 0A0H, 0A8H, 0D8H, 070H, 05CH, 090H, 000H, 000H, 000H

DB

000H, 000H, 004H, 006H, 01FH, 001H, 008H, 028H, 017H, 00FH, 00FH, 01DH, 014H, 004H, 000H, 000H

;-- 文字: 块 --

DB

000H, 000H, 080H, 0C0H, 0F8H, 020H, 080H, 040H, 040H, 0E7H, 07EH, 0D0H, 060H, 000H, 000H, 000H

DB

000H, 000H, 00CH, 006H, 003H, 001H, 011H, 012H, 01AH, 007H, 005H, 009H, 019H, 011H, 001H, 000H

TABLE: ;8X8 点阵字符表

DB 000H, 03EH, 051H, 049H, 045H, 03EH, 000H, 000H ; “0”----00

DB 000H, 000H, 042H, 07FH, 040H, 000H, 000H, 000H ; “1”----01

DB 000H, 042H, 061H, 051H, 049H, 046H, 000H, 000H ; “2”----02

DB 000H, 021H, 041H, 045H, 04BH, 031H, 000H, 000H ; “3”----03

DB 000H, 018H, 014H, 012H, 07FH, 010H, 000H, 000H ; “4”----04

DB 000H, 027H, 045H, 045H, 045H, 039H, 000H, 000H ; “5”----05

DB 000H, 03CH, 04AH, 049H, 049H, 030H, 000H, 000H ; “6”----06

DB 000H, 001H, 001H, 079H, 005H, 003H, 000H, 000H ; “7”----07

DB 000H, 036H, 049H, 049H, 049H, 036H, 000H, 000H ; “8”----08

DB 000H, 006H, 049H, 049H, 029H, 01EH, 000H, 000H ; “9”----09

DB 000H, 020H, 010H, 008H, 004H, 002H, 000H, 000H ; “/”----0A

DB 000H, 001H, 001H, 07FH, 001H, 001H, 000H, 000H ; “T”----0B

DB 000H, 038H, 054H, 054H, 054H, 018H, 000H, 000H ; “e”----0C

DB 000H, 000H, 041H, 07FH, 040H, 000H, 000H, 000H ; “1”----0D

DB 000H, 000H, 036H, 036H, 000H, 000H, 000H, 000H ; “.”----0E

END