

```

//-----
/*hotdisplay CO,.LTD.*/
// Module      : HTM12864
// Language    : C51 Code
// Create      :
// Version: 1.0
// Date       : OCT-21-2016
// LCM Drive IC : ST7565R
// INTERFACE   : 8080 interface
// MCU        : STC89C53RC
// VDD        : 3.3V
//*****
#include<reg51.h>
#define uchar unsigned char
#define uint unsigned int
#define Page 0xb0

sbit    R_S=    P3^5;
sbit    RES=    P3^4;
sbit    W_R=    P3^2;
sbit    R_D=    P3^3;
sbit    C_S=    P3^7;

//#####//
void Comwrite(unsigned char com); //D'??á?3ìDò//
void Datawrite(unsigned char dat);

void Delay(unsigned int time); //?óê±×ó3ìDò//
char code Hanzhi[]={
0xFF,0x01,0x01,0x09,0xF9,0x09,0x01,0x01,0x09,0xF9,0x09,0xE1,0x11,0x09,0x09,0x09,
0x11,0xE1,0x01,0x19,0x09,0x09,0xF9,0x09,0x09,0x19,0x01,0x01,0x01,0x01,0x01,0x01
,
0x01,0x01,0x01,0x09,0xF9,0x09,0x09,0x09,0x11,0xE1,0x01,0x01,0x09,0x09,0xF9,0x09
,
0x09,0x01,0x01,0x01,0x71,0x89,0x09,0x09,0x09,0x39,0x01,0x09,0xF9,0x09,0x09,0x09
,
0x09,0xF1,0x01,0x01,0x01,0xC1,0x39,0xE1,0x01,0x01,0x01,0x09,0xF9,0x09,0x01,0x01
,
0x01,0x01,0x01,0x09,0x39,0xC9,0x01,0xC9,0x39,0x09,0x01,0x01,0x01,0x01,0x01,0x0
1,
0x01,0x01,0x01,0x09,0xF9,0x09,0x01,0x01,0x01,0x01,0x01,0xC1,0x31,0x09,0x09,0x09
,

```


0xFF,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
,
0x08,0xF8,0x08,0x08,0x08,0x10,0xE0,0x00,0xE0,0x10,0x08,0x08,0x08,0x10,0xE0,0x00,
0x18,0x08,0x08,0xF8,0x08,0x08,0x18,0x00,0x00,0x70,0x88,0x08,0x08,0x08,0x38,0x00
,
0x00,0x00,0x00,0xC0,0xC0,0x00,0x00,0x00,0x00,0x10,0x10,0xF8,0x00,0x00,0x00,0x0
0,
0x00,0x70,0x08,0x08,0x08,0x88,0x70,0x00,0x00,0x70,0x88,0x08,0x08,0x88,0x70,0x00
,
0x00,0x80,0x80,0x00,0x80,0x80,0x80,0x00,0x00,0xE0,0x10,0x88,0x88,0x18,0x00,0x00
,
0x00,0x00,0xC0,0x20,0x10,0xF8,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00
,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0xFF
,
0xFF,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00
,
0x20,0x3F,0x20,0x20,0x20,0x10,0x0F,0x00,0x0F,0x10,0x20,0x20,0x20,0x10,0x0F,0x00,
0x00,0x00,0x20,0x3F,0x20,0x00,0x00,0x00,0x00,0x38,0x20,0x21,0x21,0x22,0x1C,0x00
,
0x00,0x00,0x00,0x30,0x30,0x00,0x00,0x00,0x00,0x20,0x20,0x3F,0x20,0x20,0x00,0x00
,
0x00,0x30,0x28,0x24,0x22,0x21,0x30,0x00,0x00,0x1C,0x22,0x21,0x21,0x22,0x1C,0x0
0,
0x00,0x20,0x31,0x2E,0x0E,0x31,0x20,0x00,0x00,0x0F,0x11,0x20,0x20,0x11,0x0E,0x00,
0x00,0x07,0x04,0x24,0x24,0x3F,0x24,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00
,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0xFF
,
0xFF,0xE0,0x10,0x08,0x08,0x10,0xE0,0x00,0x00,0x10,0x10,0xF8,0x00,0x00,0x00,0x00,
0x00,0x70,0x08,0x08,0x08,0x88,0x70,0x00,0x00,0x30,0x08,0x88,0x88,0x48,0x30,0x00
,
0x00,0x00,0xC0,0x20,0x10,0xF8,0x00,0x00,0x00,0xF8,0x08,0x88,0x88,0x08,0x08,0x00
,
0x00,0xE0,0x10,0x88,0x88,0x18,0x00,0x00,0x00,0x38,0x08,0x08,0xC8,0x38,0x08,0x00
,
0x00,0x70,0x88,0x08,0x08,0x88,0x70,0x00,0x00,0xE0,0x10,0x08,0x08,0x10,0xE0,0x00
,
0x00,0xE0,0x10,0x08,0x08,0x10,0xE0,0x00,0x00,0x10,0x10,0xF8,0x00,0x00,0x00,0x00
,
0x00,0x70,0x08,0x08,0x08,0x88,0x70,0x00,0x00,0x30,0x08,0x88,0x88,0x48,0x30,0x00
,
0x00,0x00,0xC0,0x20,0x10,0xF8,0x00,0x00,0x00,0xF8,0x08,0x88,0x88,0x08,0x08,0xFF
,

```

0xFF,0x8F,0x90,0xA0,0xA0,0x90,0x8F,0x80,0x80,0xA0,0xA0,0xBF,0xA0,0xA0,0x80,0x8
0,
0x80,0xB0,0xA8,0xA4,0xA2,0xA1,0xB0,0x80,0x80,0x98,0xA0,0xA0,0xA0,0x91,0x8E,0x
80,
0x80,0x87,0x84,0xA4,0xA4,0xBF,0xA4,0x80,0x80,0x99,0xA1,0xA0,0xA0,0x91,0x8E,0x8
0,
0x80,0x8F,0x91,0xA0,0xA0,0x91,0x8E,0x80,0x80,0x80,0x80,0xBF,0x80,0x80,0x80,0x8
0,
0x80,0x9C,0xA2,0xA1,0xA1,0xA2,0x9C,0x80,0x80,0x80,0xB1,0xA2,0xA2,0x91,0x8F,0x
80,
0x80,0x8F,0x90,0xA0,0xA0,0x90,0x8F,0x80,0x80,0xA0,0xA0,0xBF,0xA0,0xA0,0x80,0x8
0,
0x80,0xB0,0xA8,0xA4,0xA2,0xA1,0xB0,0x80,0x80,0x98,0xA0,0xA0,0xA0,0x91,0x8E,0x
80,
0x80,0x87,0x84,0xA4,0xA4,0xBF,0xA4,0x80,0x80,0x99,0xA1,0xA0,0xA0,0x91,0x8E,0xF
F
};

```

```

void Delay(unsigned int time)

```

```

{
    unsigned char j;
    while(time--)
    {
        for(j=0;j<=50;j++) //?é20us=0.02ms//
        {}
    }
}

```

```

/*****/

```

```

void Display(unsigned char sda,unsigned char sda1)

```

```

{
    unsigned char i,j,k=0;
    Comwrite(0x40);
    for(i=0;i<8;i++)
    {
        Comwrite(Page+k);
        Comwrite(0x10);
        Comwrite(0x00);
        for(j=0;j<66;j++)

```

```

        {Datawrite(sda);
        Datawrite(sda1);
        }
        k++;
    }

```

```

}

```

```

/*****/

```

```

void Hanzi_Disp(void)
{
    unsigned char i,j,k=0;
    Comwrite(0x40);
    for(i=0;i<8;i++)
    {
        Comwrite(Page+k);
        Comwrite(0x10);
        Comwrite(0x04);
        for(j=0;j<128;j++)
        {Datawrite(Hanzi[i*128+j]);}
        k++;
    }

```

```

        Delay(5000);

```

```

}

```

```

/#####/

```

```

void Intial(void)

```

```

{

```

```

    RES=0;
    Delay(50);//最少2um
    RES=1;
    Delay(20);

```

```

    Comwrite(0xe2);
    Comwrite(0xA2); //1010001/BS duty:1/65,BS-1:1/7,0:1/9
    Comwrite(0xA1); //Sets the display RAM address SEG output
correspondence 0: normal, 1: reverse
    Comwrite(0xc0); //com direction Normal direction

```

```

    Comwrite(0x2c);
    Comwrite(0x2e);
    Comwrite(0x2F); //power on :00101/Booster circuit/Voltage regulator
circuit/Voltage follower circuit
    Comwrite(0xf8); //Booster Ratio Select Mode Set
    Comwrite(0x00);
    Comwrite(0x81); //SET EV :10000001
    Comwrite(0x15); //Setting V0 Voltage:(0x00~0x3f) Contrast settings
    Comwrite(0x26); //regulation ration: (0x21~0x27) Contrast settings
    Comwrite(0xAF); //Display ON/OFF :1010111/D on:1
    Comwrite(0x40); //Set Start Line
    Delay(20);
}

```

```

void Comwrite(uchar cmd)
{
    R_S=0;
    C_S=0;
    W_R=0;
    R_D=1;
    P1=cmd;
    W_R=1;
    C_S=1;
}

```

```

void Datawrite(uchar dat)
{
    R_S=1;
    C_S=0;
    W_R=0;
    R_D=1;
    P1=dat;
    W_R=1;
    C_S=1;
}

```

```

/*
uchar RdData8080() //显示数据读取函数 8088时序
{
    uchar DData;
    R_S=1; //选择指令存储器
    C_S=0;
    W_R=1;
    P1=0xff;
}

```

```

        R_D=0;
        DData=P1;
        R_D=1;
    C_S=1;
        return(DData);
}

```

```

uchar RdData6800() //显示数据读取函数 6800时序
{
    uchar DData;
        R_S=1;//选择指令存储器
        C_S=0;
        W_R=1;
        P1=0xff;
        R_D=1;
        DData=P1;
        R_D=0;
    C_S=1;
        return(DData);
}
    */

```

```

/*****/

```

```

int main()
{
    /*PINSEL0=0x00000000; //è??òy??á??óGPIO

    IO0DIR=SPIOCON; //è??SPI????ú?aê?3?*/

    RES=0;
        Delay(20);
        RES=1;
        Delay(20);
while(1)
{
    Intial();
        Delay(20);

    Display(0xFF,0xFF);
        Delay(3000);
    Display(0x00,0x00);
        Delay(3000);
}
}

```

```
    Display(0xFF,0x00);
        Delay(3000);
    Display(0x00,0xff);
        Delay(3000);
    Display(0x55,0xAA);
        Delay(3000);
    Display(0xAA,0x55);
        Delay(3000);
        Hanzi_Disp();           Delay(3000);
//        Hanzi_Disp1();
        Delay(3000);
    }

}
```

```
#####
```