Dragon Source
龍源電子

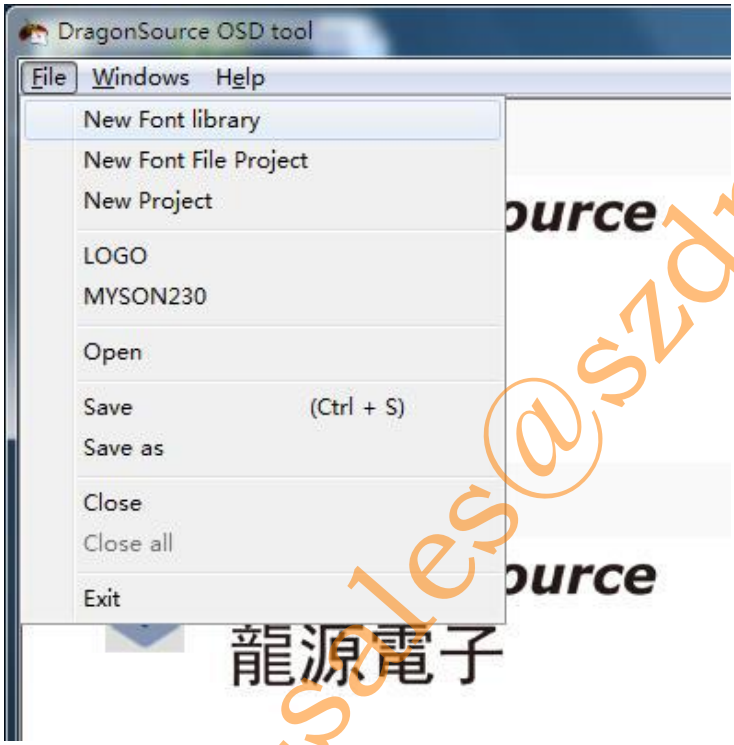
2556/2796 添加中文菜单 OSD

--2556/2796 为例

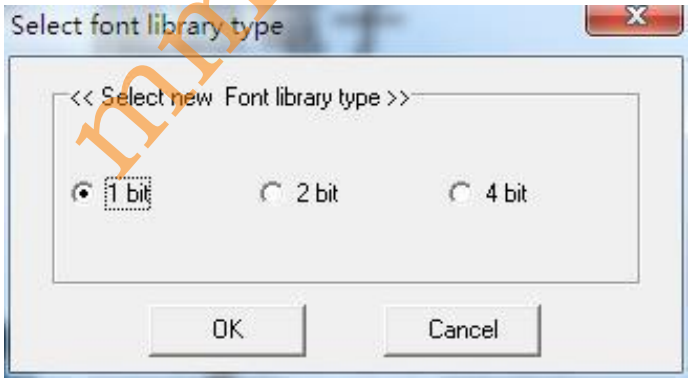
一. 使用软件工具 OSDEdit.exe 制作字库

1）打开软件 OsdEditor.exe

2）file->New Font library

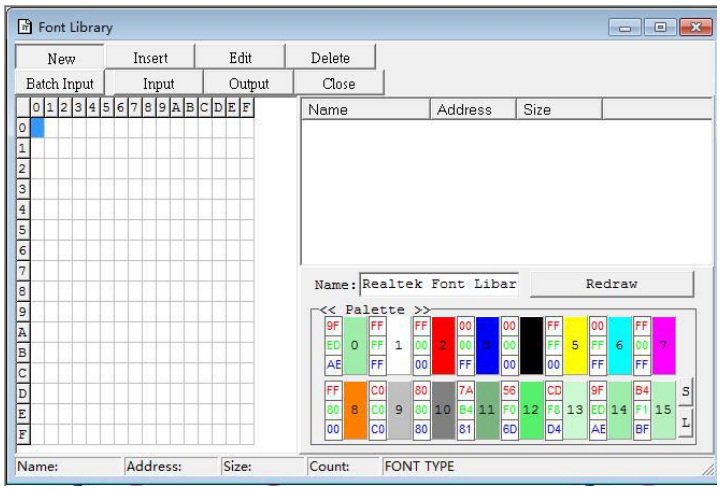


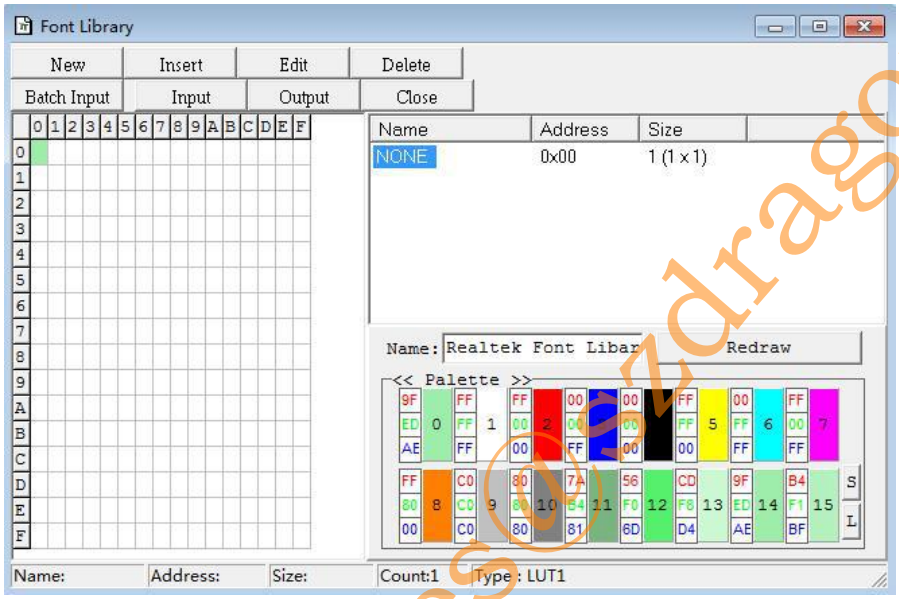
3)选择 1bit



4)选择 New，**一般要空一格，即（0,0）不写字，draw 一个空白字，宽 1 高 1 即可实现；从（1,0）**

开始写字。

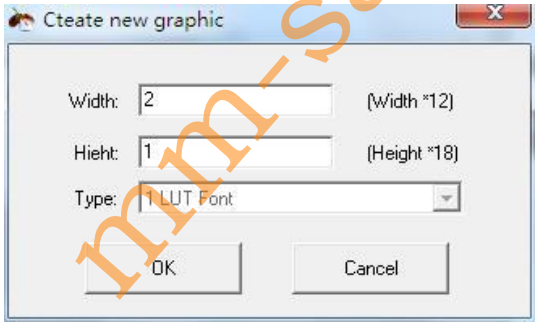




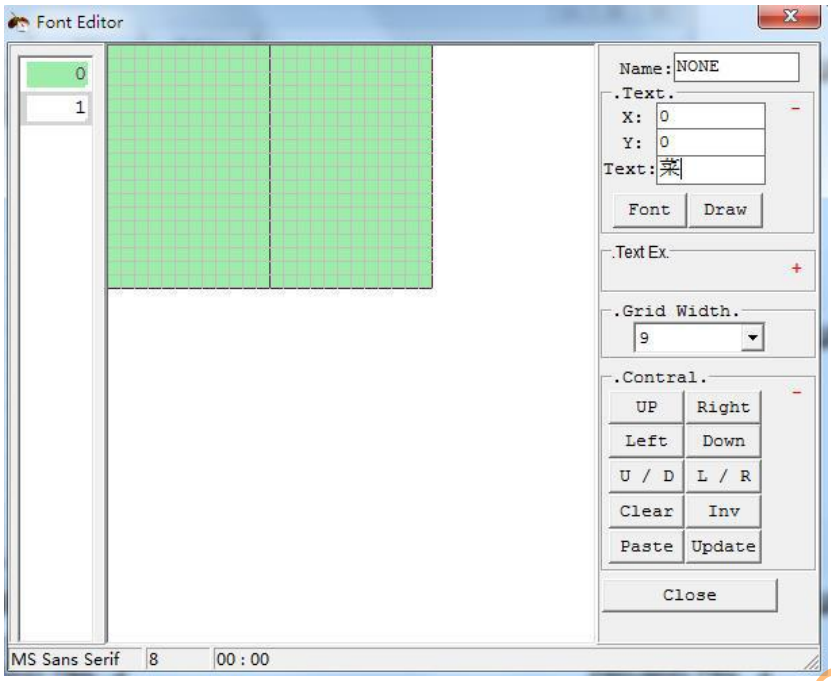
5）空了一个小白格后其他取模设置：

width：2

hight：1

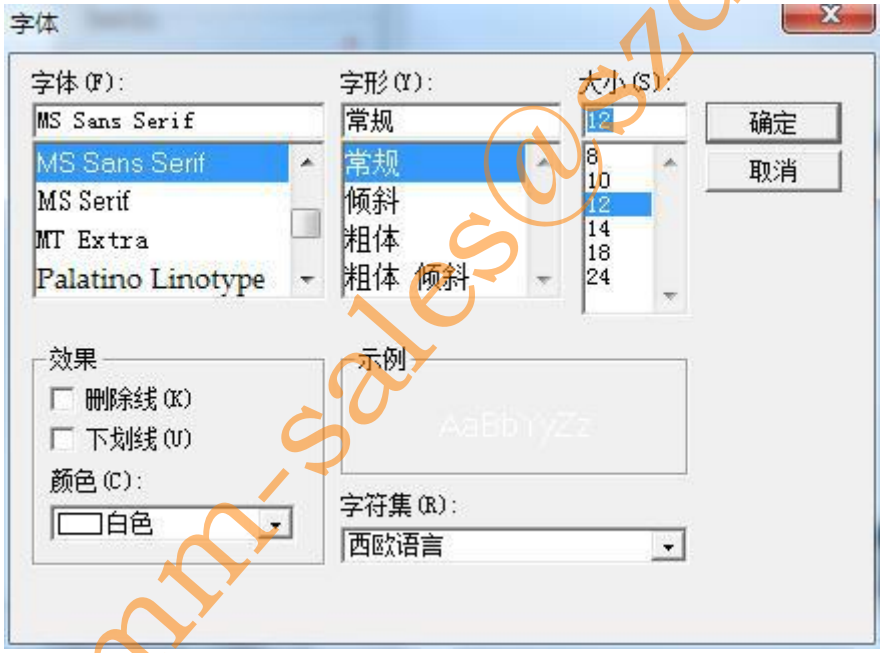


6）字体编辑 Font Editor

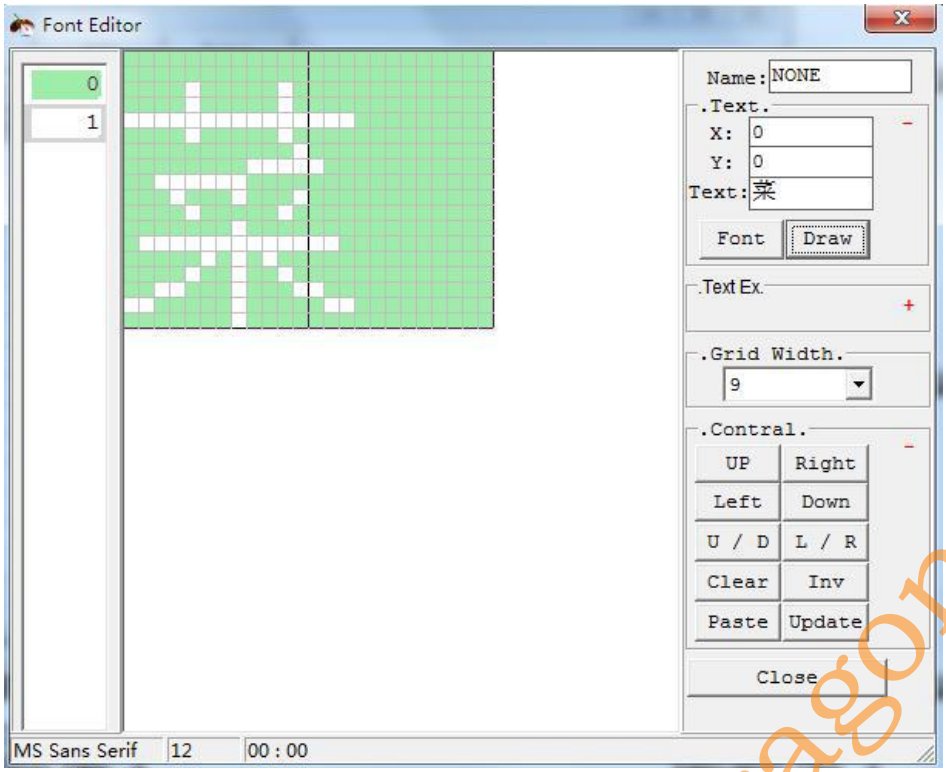


在 Text 处输入要增加的中文文字，如输入“菜”字；

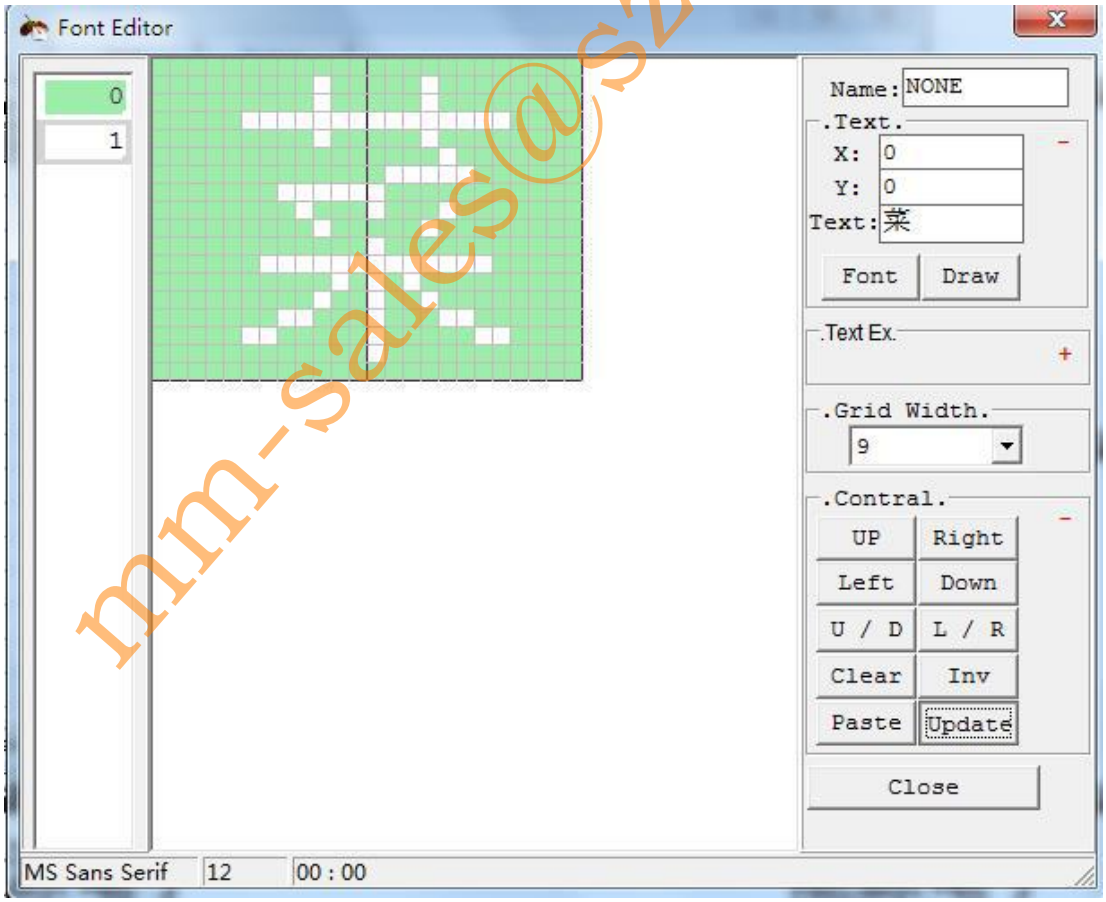
7）点击 Font 设置中文的字体大小：
字体一般默认，字号大小选择 12 号，点击确定。



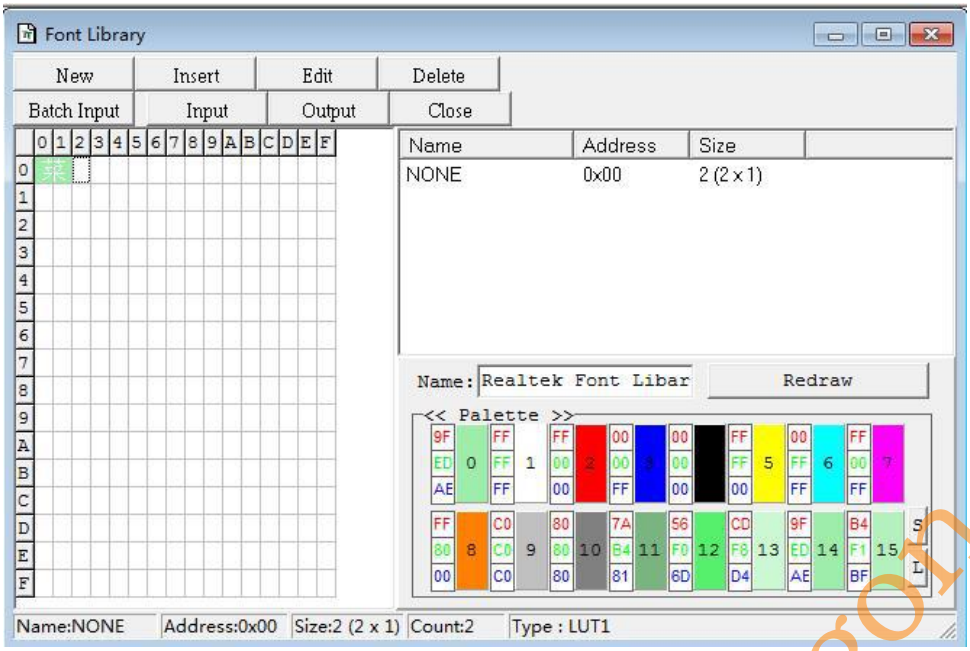
8）点击 draw，即可在左边绿色框看到写入的中文：



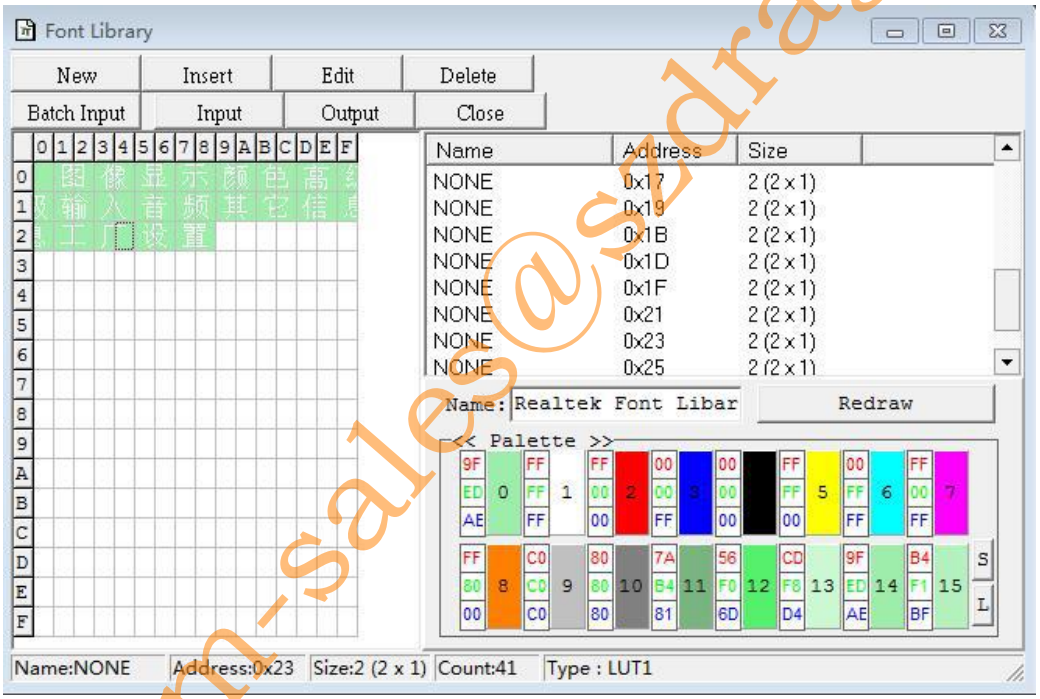
9）通过右下角的 Contral 里面的按钮对字体进行“(up,down,left,right)上下左右”等移动，字移动居中位置后点击“update”



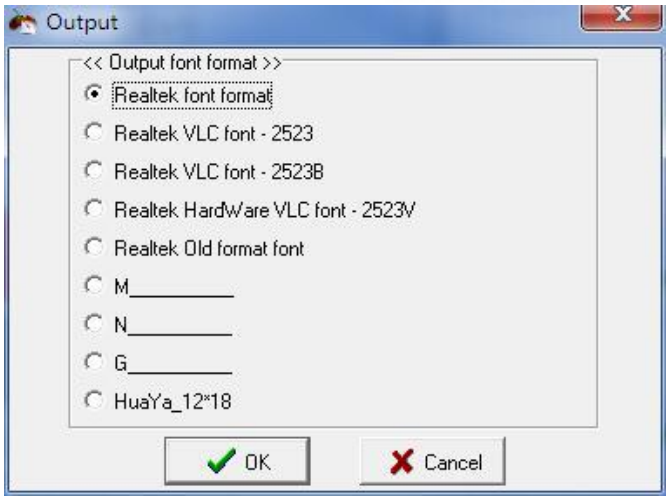
10）写完后点击“Close”



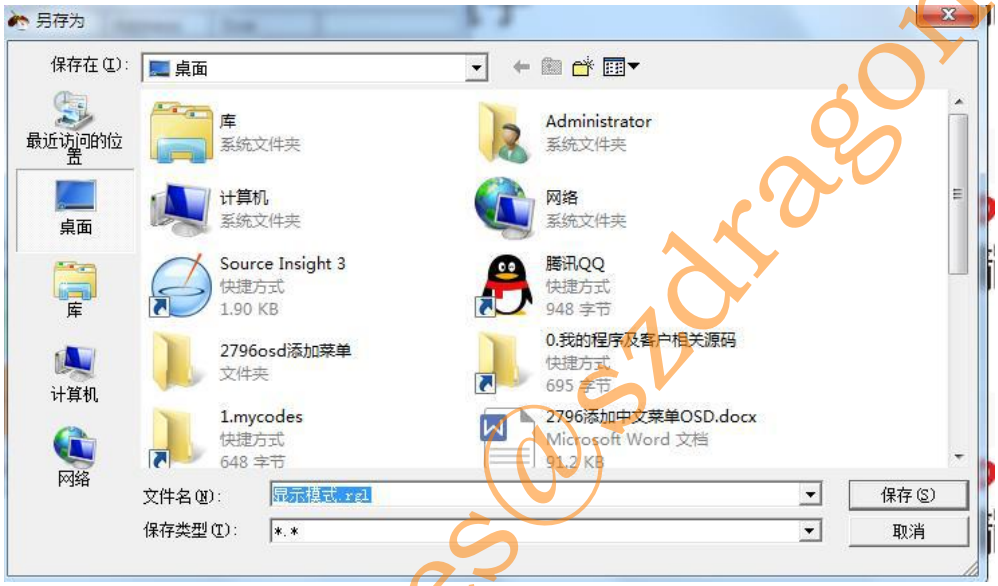
11）以此上述步骤继续添加文字



12)output->第一个 Realtek font format-》OK



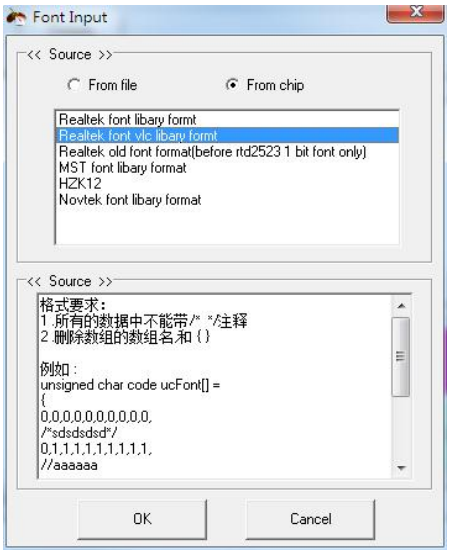
13）将中文字库保存为“显示模式.rgl”文件

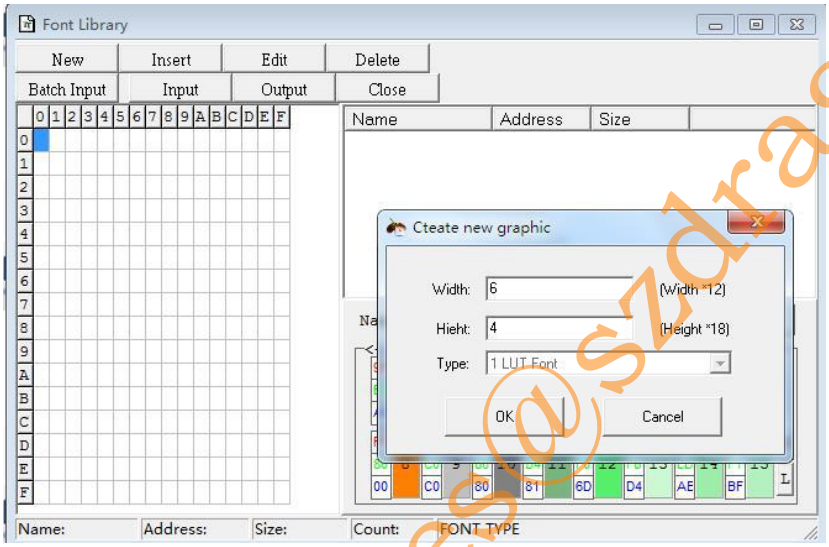


二．程序菜单部分

1）在菜单选项“Other”的 language 中添加中文选项

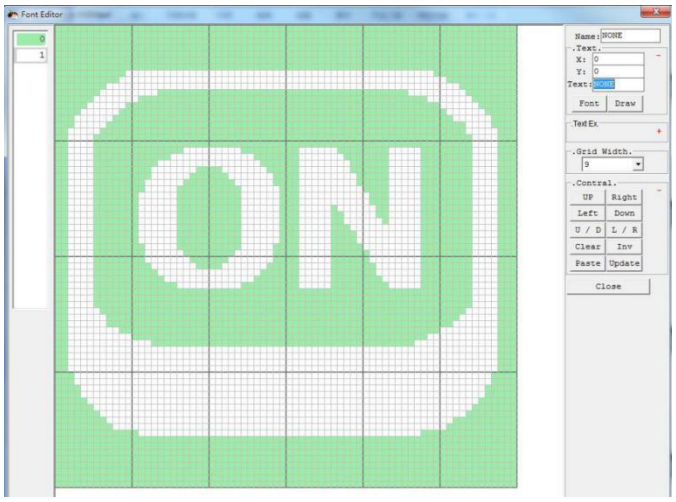
2）用 OsdEditor.exe 画出要中英文两个图标-将数据复制



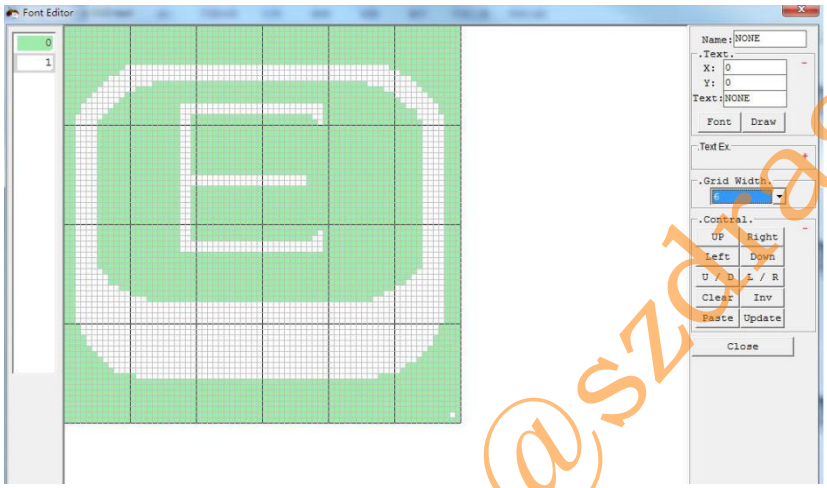


New -> 设置 width：6 ； Height：4

3）采用 **RTD20140sdFontDynamicIcon_2.c**–菜单下层图标数据
这里在 ON 图标的基础上进行修改。

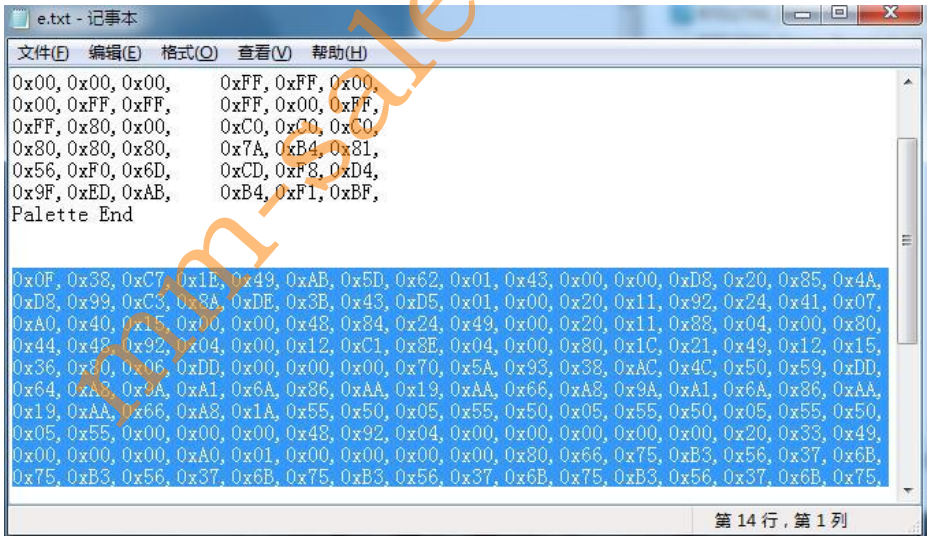


4）手动修改图标如下图：



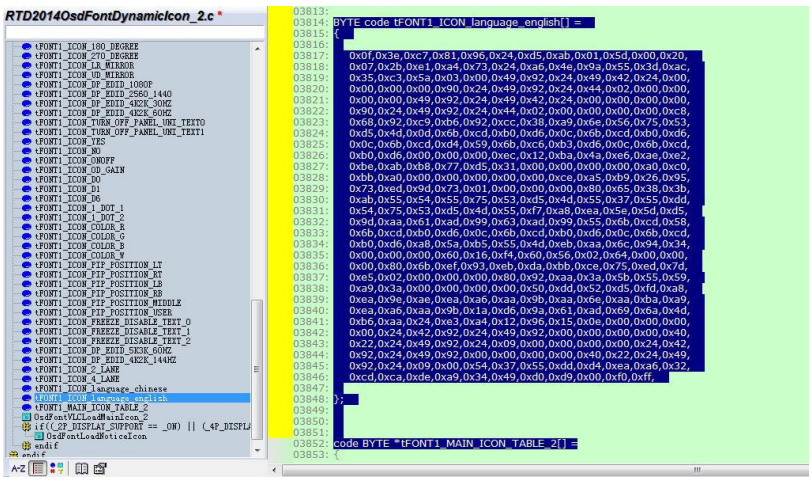
5）点击“output”，保存为“e.txt”

6）打开 e.txt 文件，复制蓝色部分数据：



7）在 **RTD20140sdFontDynamicIcon_2.c**-菜单下层图标数据

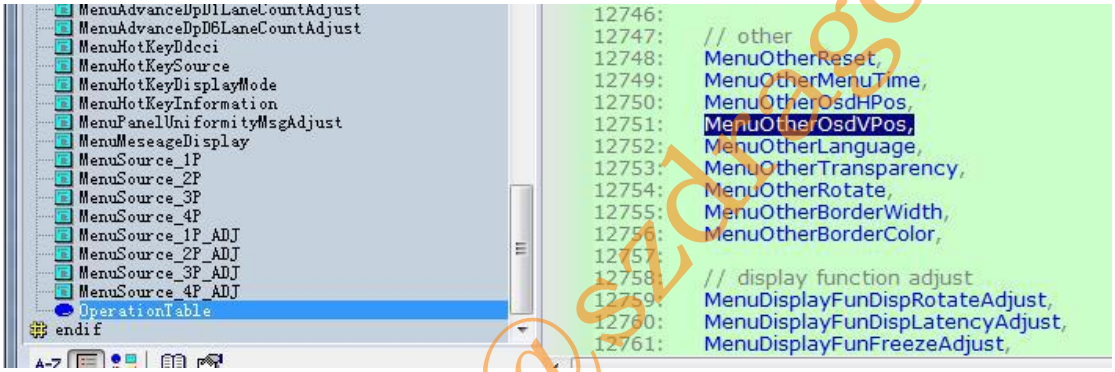
添加该新图标的数据-tFONT1_ICON_language_english[]



BYTE code FONT1_ICON_language_english[] =

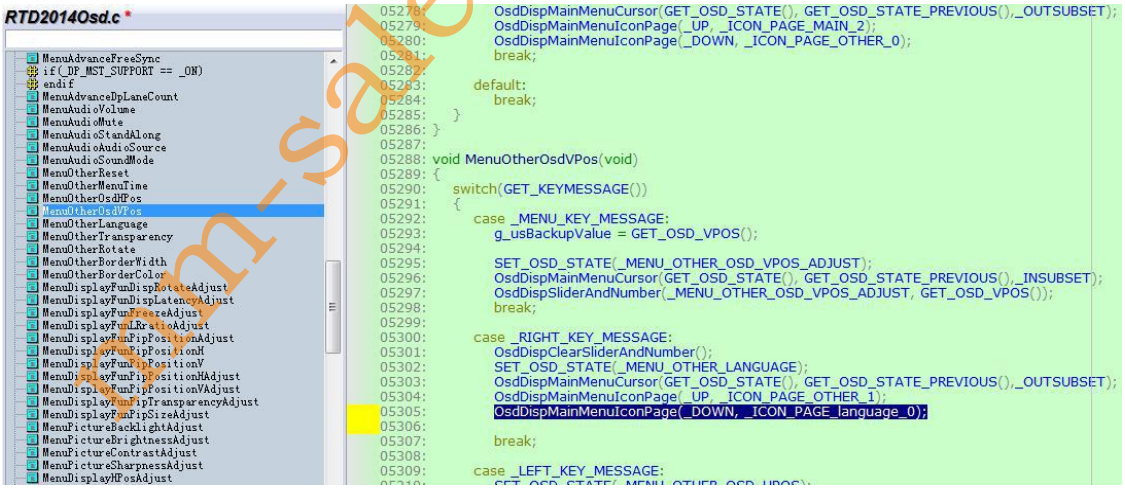
BYTE code FONT1_ICON_language_chinese[] =

8）在 code void (***OperationTable**[])(void) 中可以看到“language 图标”前一个是“**MenuOtherOsdVPos,**”



9）在 RTD2014Osd.c 中找到函数 void **MenuOtherOsdVPos**(void)；在**右键**选项中加入：

OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_language_0);

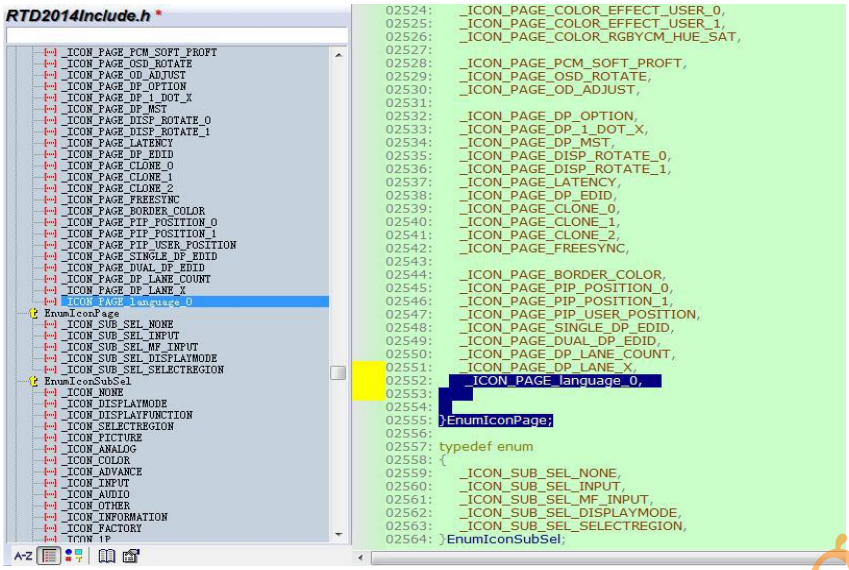


在 language 图标后一个函数 void **MenuOtherTransparency**(void)的**左键**也加入：

OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_language_0);

因为没有_ICON_PAGE_language_0，所以得到图标定义处去添加：

RTD2014Include.h->枚举 **EnumIconPageIndex(2556 板子）**或者 EnumIconPage（**2796 板子**）末尾添加 _ICON_PAGE_language_0

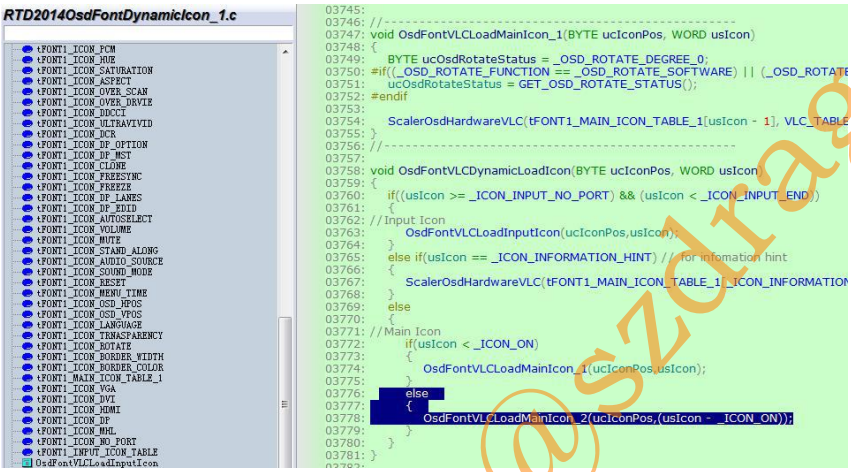


9）接着到画图标的地方添加：

RTD2014OsdDisplay.c->void OsdDispMainMenuIconPage(BYTE ucUpDown, BYTE ucState)中

```
        case _ICON_PAGE_language_0:
        OsdDispMainOptionIcon((ucUpDown + 0), _ICON_LANGUAGE_ENGLISH,pOsdItemColor[0]);
        OsdDispMainOptionIcon((ucUpDown + 1), _ICON_LANGUAGE_CHINESE,pOsdItemColor[1]);
        OsdDispMainOptionIcon((ucUpDown + 2), _ICON_NONE,pOsdItemColor[2]);
        OsdDispMainOptionIcon((ucUpDown + 3), _ICON_NONE, pOsdItemColor[3]);
            break;
/*
OsdDispMainMenuIconString((ucUpDown + 0), _ICON_LANGUAGE_english,pucOsdItemColor[0]);
OsdDispMainMenuIconString((ucUpDown + 1), _ICON_LANGUAGE_chinese,pucOsdItemColor[1]);
OsdDispMainMenuIconString((ucUpDown + 2), _ICON_NONE,pucOsdItemColor[2]);
OsdDispMainMenuIconString((ucUpDown + 3), _ICON_NONE, pucOsdItemColor[3]);
*/
            break;
```

10）接着：void OsdDispMainMenuIconString(BYTE ucIconPos, WORD usIcon, BYTE ucColor)函数中查看画图标的函数-》void OsdFontVLCDynamicLoadIcon(BYTE ucIconPos, WORD usIcon)；看函数的走向：



RTD2014Include.h->枚举 **EnumIconIndex** 在末尾加入：-放入两个语言图标：

typedef enum

{。。。。。。。。。。。。。。。。

_ICON_2_LANE,

_ICON_4_LANE,

//////////////

_ICON_LANGUAGE_english,

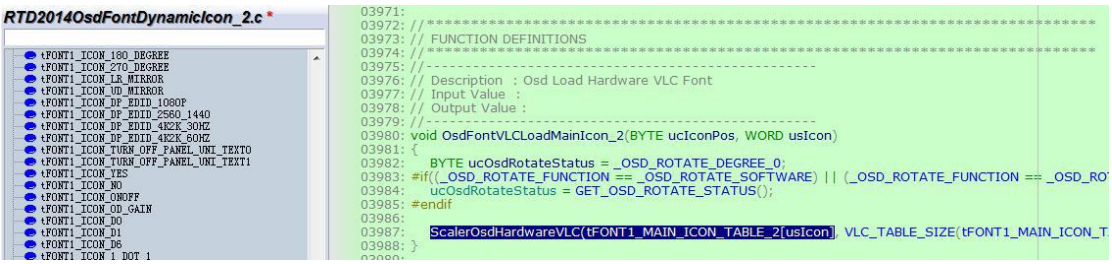
_ICON_LANGUAGE_chinese,

_OPTION_ICON_END,

} EnumIconIndex;

11）接着进一步寻找图标的存放数组：

void OsdFontVLCLoadMainIcon_2(BYTE ucIconPos, WORD usIcon)；



12）**RTD2014OsdFontDynamicIcon_2.c** 中发现字符数组名字存放在一个枚举中：-

code BYTE ***tFONT1_MAIN_ICON_TABLE_2[]** = //两个图标数组

//on_off page

tFONT1_ICON_ON,

tFONT1_ICON_OFF,

末尾添加：

tFONT1_ICON_2_LANE,

tFONT1_ICON_4_LANE

//C 图标在前

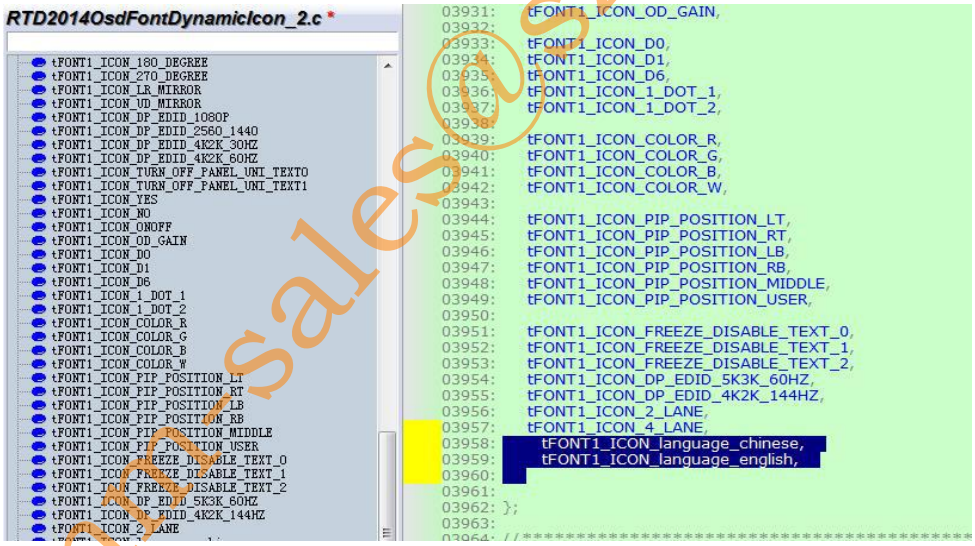
//tFONT1_ICON_language_chinese,

//tFONT1_ICON_language_english,

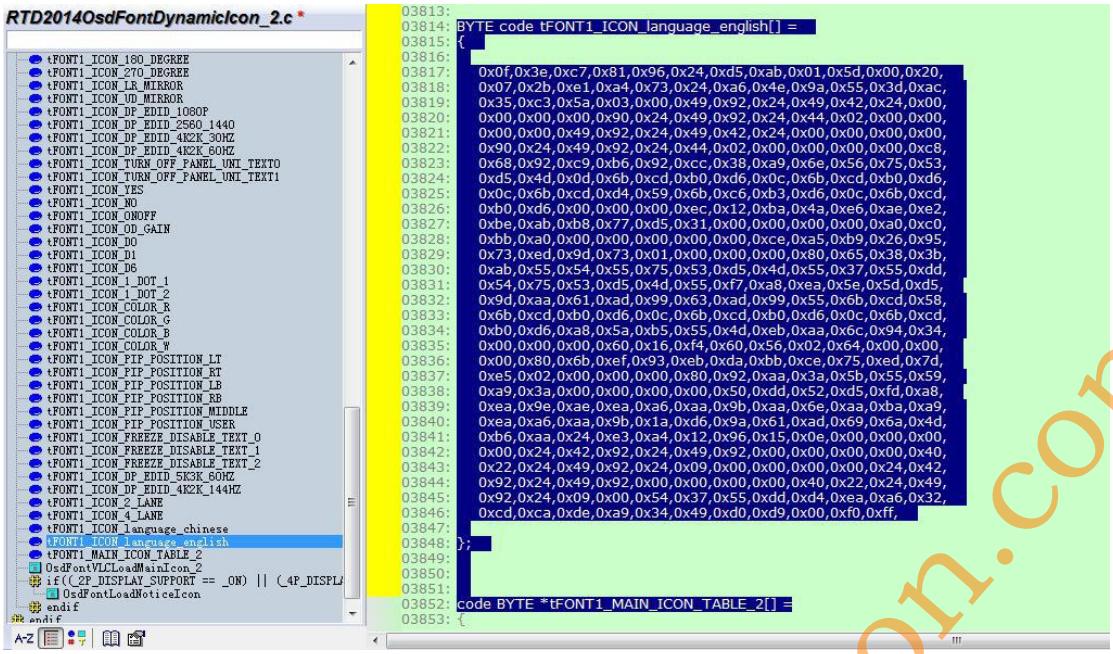
//决定图标的前后顺序-这个 E 图标在前

tFONT1_ICON_language_english,

tFONT1_ICON_language_chinese,



并在此文件 **RTD2014OsdFontDynamicIcon_2.c 程序最**上面将图标数组数据添加：



14）在 RTD2014Osd.c 函数中找到

void MenuOtherLanguage(void);--画菜单图标

void MenuOtherLanguageAdjust(void);--对应语言功能调节

将中英文两个图标功能加进去：

1>修改 **void MenuOtherLanguage(void);**

```
void MenuOtherLanguage(void)
{
      switch(GET_KEYMESSAGE())
     {
          case _MENU_KEY_MESSAGE:
               g_usBackupValue = GET_OSD_LANGUAGE();
               SET_OSD_STATE(_MENU_OTHER_LANGUAGE_ADJUST);
OsdDispMainMenuCursor(GET_OSD_STATE(),GET_OSD_STATE_PREVIOUS(),_INSUBSET);
               break;

            case _RIGHT_KEY_MESSAGE:
                 OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_CLEAR);//
                 OsdDispClearSelectColor(_DOWN);//

                 SET_OSD_STATE(_MENU_OTHER_TRNASPARENCY);
                 OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(),_OUTSUBSET);
OsdDispSliderAndNumber(_MENU_OTHER_TRNASPARENCY,GET_OSD_TRANSPARENCY_STATUS());
                 break;

            case _LEFT_KEY_MESSAGE:
                 OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_CLEAR);//
                 OsdDispClearSelectColor(_DOWN);//
```

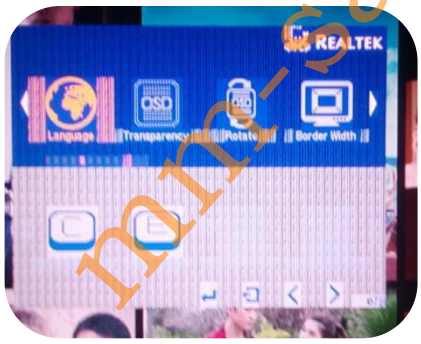
```
                SET_OSD_STATE(_MENU_OTHER_OSD_VPOS);
OsdDispMainMenuCursor(GET_OSD_STATE(),GET_OSD_STATE_PREVIOUS(),_OUTSUBSET);
                OsdDispMainMenuIconPage(_UP, _ICON_PAGE_OTHER_0);
                OsdDispSliderAndNumber(_MENU_OTHER_OSD_VPOS, GET_OSD_VPOS());
                break;

            case _EXIT_KEY_MESSAGE:
                OsdDispClearSliderAndNumber();
                SET_OSD_STATE(_MENU_OTHER);
OsdDispMainMenuCursor(GET_OSD_STATE(),GET_OSD_STATE_PREVIOUS(),_OUTSUBSET);
                OsdDispMainMenuIconPage(_UP, _ICON_PAGE_MAIN_2);
                OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_OTHER_0);
                break;

            default:
                break;
        }
}
```

2>修改 void MenuOtherLanguageAdjust(void);-里面的函数修改在后面再进行。

3>后一个图标的左键加入：

```
void MenuOtherTransparency(void)
            case _LEFT_KEY_MESSAGE:
                OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_CLEAR);//
                OsdDispClearSelectColor(_DOWN);//


                OsdDispClearSliderAndNumber();
                SET_OSD_STATE(_MENU_OTHER_LANGUAGE);
                OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(), _OUTSUBSET);
                OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_language_0);
                break;
```

4>菜单修改后图片为：



发现图标乱码，原因是 void MenuOtherLanguageAdjust(void)里面还未修改，受里面的影响。不过在后面的添加中发现是用了写字符串函数来画图标才显示乱码，问题解决详见后面 bug1.

15） RTD2014OsdFontProp.c->OsdPropPutStringCenter（）函数修改，添加中文菜单的地址

--2556 函数中应用

```
//--------------------------------------------------
// Description  :
// Input Value  : None
// Output Value : None
//--------------------------------------------------
void OsdPropPutStringCenter(BYTE ucRow, BYTE ucCol, BYTE ucWidth, BYTE ucFptsSelect, BYTE ucString, BYTE ucColor, BYTE ucLanguage)
{
    bit bEndFlag = 0;
    BYTE pucTemp[27] = {0};
    bit bMode = _CENTER;
    BYTE *pucFontTable = 0;
    BYTE *pucArray = 0;
    BYTE ucByte0 = 0x6C;    // palette index 0, 1bit 256 ~ 511
    BYTE pucDataTemp[16] = {0};// replace pData


#if(_OSD_ROTATE_FUNCTION == _OSD_ROTATE_SOFTWARE)
    if((GET_OSD_ROTATE_STATUS() == _OSD_ROTATE_DEGREE_90) ||
       (GET_OSD_ROTATE_STATUS() == _OSD_ROTATE_DEGREE_270))
    {
        ucByte0 = 0x6E;
    }
#endif
    pucArray = OsdPropGetStringTableAddress(ucString);

     if(ucLanguage == _CHINESE_T)
     {
//         pucFontTable = tFONT_CHINESE;//中文字库数据数组

 pucArray = OsdPropGetStringTableAddress_ChnS(ucString);//自造函数，获取单文字地址
 pucFontTable = OsdGetChnTFontPage(ucString);//自造函数

     }
     else
     {
         pucFontTable = tFONT_EUROPE;//英文字库数据数组
  ///////----------
           pucArray = OsdPropGetStringTableAddress(ucString);
//////////-------------------------
     }

////////////////////////////////////
    if(pucFontTable == 0)
           pucFontTable = tFONT_EUROPE;
       if(pucArray == 0)
           pucArray = OsdPropGetStringTableAddress(ucString); //

/*
```

```
    pucDataTemp[0] = ucLanguage;

    while(pucDataTemp[0] != _ENGLISH)
    {
        if(*pucArray == _END_)
        {
            pucDataTemp[0]--;
        }
        pucArray++;
    }
*/

    pucDataTemp[1] = OsdPropGetFontPointer(ucFptsSelect);

    // reorder
    SCALEROSD_FONT_ROTATE_SETTING_SET(SCALEROSD_FONT_ROTATE_SETTING_GET() | _BIT6);
    SCALEROSD_FONT_ROTATE_SETTING_SET(SCALEROSD_FONT_ROTATE_SETTING_GET() & (~(_BIT7 | _BIT5)));

    pucDataTemp[2] = 0;
    pucDataTemp[3] = 0;
    pucDataTemp[4] = 0;
    pucDataTemp[7] = 0;
    pucDataTemp[10] = 0;

    while(*(pucArray + pucDataTemp[2]) != _END_)
    {
        switch(*(pucArray + pucDataTemp[2]))
        {
            case _END_:
                break;
            default:
                pucDataTemp[3] = *(pucArray + pucDataTemp[2]);
                if(ucLanguage == _ENGLISH)
                {
                    pucDataTemp[4] = pucDataTemp[4] + tOSD_CHARWIDTH_EUROPE[pucDataTemp[3]][1];
                }
                    else if(ucLanguage == _CHINESE_T)
                    {
//pucDataTemp[4] = pucDataTemp[4] + tOSD_CHARWIDTH_CHINESE[pucDataTemp[3]][1];

        if(pucFontTable == tFONT_EUROPE)
    pucDataTemp[4] = pucDataTemp[4] + tOSD_CHARWIDTH_EUROPE[pucDataTemp[3]][1];
        else
        pucDataTemp[4] = pucDataTemp[4] + 12;
                    }
                    else
                {
                    pucDataTemp[4] = pucDataTemp[4] + 12;
                }
                pucDataTemp[2] ++;
                break;
```

```
        }
    }
    pucDataTemp[5] = ucCol + (((((WORD)((ucWidth) * 12) - pucDataTemp[4]) / 2)) / 12);
    pucDataTemp[0] = ((((WORD)((ucWidth) * 12) - pucDataTemp[4]) / 2)) % 12;

/*//for Right mode
    ucCol = (ucColEnd - (ucCharWidth/12) -1);
    ucBlinking = 12 - (ucCharWidth % 12);
*/

    pucDataTemp[4] = 0;
    pucDataTemp[2] = 0;


    if(pucDataTemp[0] == 0)
    {
        bMode = _NORMAL;
    }
    else
    {
        bMode = _CENTER;
    }

    while(*(pucArray + pucDataTemp[2]) != _END_)
    {
        switch(*(pucArray + pucDataTemp[2]))
        {
            case _END_:
                bEndFlag = 1;
                break;

            default:

                if(bMode == _CENTER)
                {
                    pucDataTemp[6] = _;
                }
                else
                {
                    pucDataTemp[6] = *(pucArray + pucDataTemp[2]);
                }

                if(ucLanguage == _ENGLISH)
                {
                    if(bMode == _CENTER)
                    {
                        pucDataTemp[4] = pucDataTemp[0];
                    }
                    else
                    {
                        pucDataTemp[4] = tOSD_CHARWIDTH_EUROPE[pucDataTemp[6]][1];
                    }
                }
                  else if(ucLanguage == _CHINESE_T)
                  {
                      if(bMode == _CENTER)
                      {
```

```
                    pucDataTemp[4] = pucDataTemp[0];
                }
                else
                {
// pucDataTemp[4] = tOSD_CHARWIDTH_CHINESE[pucDataTemp[6]][1];
////////////////////////////////////
                if(pucFontTable == tFONT_EUROPE)
                 pucDataTemp[4] = tOSD_CHARWIDTH_EUROPE[pucDataTemp[6]][1];
                else
                pucDataTemp[4] = 12;
////////////////////////////////////////
                }
              }
            else
        {
            pucDataTemp[4] = 12;
        }
        pucDataTemp[2] ++;
        break;
    }

    if(pucDataTemp[7] == 0)
    {
        pucDataTemp[7] = pucDataTemp[4];
    }

    SCALEROSD_FONT_ROTATE_SETTING_SET(SCALEROSD_FONT_ROTATE_SETTING_GET() | _BIT3);    // first bits shift direction:
left shift
    SCALEROSD_FONT_ROTATE_SETTING_SET(SCALEROSD_FONT_ROTATE_SETTING_GET() & (~_BIT2)); // left bits shift direction:
rigth shift
    SCALEROSD_FONT_ROTATE_1_2_BITS_SHIFT_SET(((pucDataTemp[4] - pucDataTemp[7]) << 4) | pucDataTemp[7]); // first bits
shift and second bits shift

    pucDataTemp[8] = pucDataTemp[2];
    pucDataTemp[9] = pucDataTemp[7];

    if(bMode == _CENTER)
    {
        pucDataTemp[8] = 0;
        pucDataTemp[6] =0;
        pucDataTemp[2] = 0;
        bMode = _NORMAL;
    }
    for(pucDataTemp[0] = 0; pucDataTemp[0] < 9; pucDataTemp[0]++)
    {
        SCALEROSD_FONT_ROTATE_SETTING_SET(SCALEROSD_FONT_ROTATE_SETTING_GET() | _BIT0);  // restart from last three
bytes
        PDATA_WORD(7)= pucDataTemp[6] * 27 + pucDataTemp[0] * 3;

        SCALEROSD_FONT_ROTATE_INPUT_SET(*(pucFontTable + PDATA_WORD(7)));
        SCALEROSD_FONT_ROTATE_INPUT_SET(*(pucFontTable + PDATA_WORD(7) + 1));
        SCALEROSD_FONT_ROTATE_INPUT_SET(*(pucFontTable + PDATA_WORD(7) + 2));

        pucDataTemp[2] = pucDataTemp[8];
```

```
            pucDataTemp[7] = pucDataTemp[9];


            if((pucDataTemp[7] == 12) || (*(pucArray + pucDataTemp[2]) == _END_))
            {
                SCALEROSD_FONT_ROTATE_INPUT_SET(0x00);
                SCALEROSD_FONT_ROTATE_INPUT_SET(0x00);
                SCALEROSD_FONT_ROTATE_INPUT_SET(0x00);
            }
            else
            {
                    pucDataTemp[3] = *(pucArray + pucDataTemp[2]);
                    if(ucLanguage == _CHINESE_T)
                    {
// pucDataTemp[4] = tOSD_CHARWIDTH_CHINESE[pucDataTemp[3]][1];
                    if(pucFontTable == tFONT_EUROPE)
    pucDataTemp[4] = tOSD_CHARWIDTH_EUROPE[pucDataTemp[3]][1];
                        else
                           pucDataTemp[4] = 12;


                    }
                  else
                {
                    pucDataTemp[4] = tOSD_CHARWIDTH_EUROPE[pucDataTemp[3]][1];
                }
                pucDataTemp[2] ++;

                PDATA_WORD(7) = pucDataTemp[3] * 27 + pucDataTemp[0] * 3;

                SCALEROSD_FONT_ROTATE_INPUT_SET(*(pucFontTable + PDATA_WORD(7)));
                SCALEROSD_FONT_ROTATE_INPUT_SET(*(pucFontTable + PDATA_WORD(7) + 1));
                SCALEROSD_FONT_ROTATE_INPUT_SET(*(pucFontTable + PDATA_WORD(7) + 2));

                pucDataTemp[7] += pucDataTemp[4];
            }

            while((pucDataTemp[7] < 12) && (*(pucArray + pucDataTemp[2]) != _END_))
            {
                SCALEROSD_FONT_ROTATE_3_L_BITS_SHIFT_SET((pucDataTemp[7] << 4) | pucDataTemp[7]); // third bits shift and
left bits shift

                switch(*(pucArray + pucDataTemp[2]))
                {
                    case _END_:
                        bEndFlag = 1;
                        break;

                    default:
                        pucDataTemp[3] = *(pucArray + pucDataTemp[2]);

                        if(ucLanguage == _ENGLISH)
                        {
                            pucDataTemp[4] = tOSD_CHARWIDTH_EUROPE[pucDataTemp[3]][1];
                        }
```

```
                    else if(ucLanguage == _CHINESE_T)
                    {
//pucDataTemp[4] = tOSD_CHARWIDTH_CHINESE[pucDataTemp[3]][1];
//////
          if(pucFontTable == tFONT_EUROPE)
     pucDataTemp[4] = tOSD_CHARWIDTH_EUROPE[pucDataTemp[3]][1];
                     else
                   pucDataTemp[4] = 12;
                          }
                    else
                    {
                        pucDataTemp[4] = 12;
                    }
                    pucDataTemp[2] ++;
                    break;
                }

                pucDataTemp[7] += pucDataTemp[4];

                PDATA_WORD(7) = pucDataTemp[3] * 27 + pucDataTemp[0] * 3;

                SCALEROSD_FONT_ROTATE_INPUT_SET(*(pucFontTable + PDATA_WORD(7)));
                SCALEROSD_FONT_ROTATE_INPUT_SET(*(pucFontTable + PDATA_WORD(7) + 1));
                SCALEROSD_FONT_ROTATE_INPUT_SET(*(pucFontTable + PDATA_WORD(7) + 2));
            }

            pucTemp[pucDataTemp[0] * 3 + 2] = SCALEROSD_FONT_ROTATE_ONPUT_GET();
            pucTemp[pucDataTemp[0] * 3 + 1] = SCALEROSD_FONT_ROTATE_ONPUT_GET();
            pucTemp[pucDataTemp[0] * 3] = SCALEROSD_FONT_ROTATE_ONPUT_GET();
        }

        if(pucDataTemp[7] <= 12)
        {
            pucDataTemp[7] = 0;
        }
        else
        {
            pucDataTemp[7] = pucDataTemp[7] - 12;
            pucDataTemp[2] --;
        }

        // Write the pro font data to sram
        // COsdFxLoadFontDataAddrCal(ucBankupFontPointer);

        // PDATA_WORD(7) = (WORD)pucDataTemp[1] * 9;
        PDATA_WORD(7) = ((WORD)pucDataTemp[1] + 0x100) * 9;
        PDATA_WORD(7) += g_usFontTableStart;

#if((_OSD_ROTATE_FUNCTION == _OSD_ROTATE_SOFTWARE) || (_OSD_ROTATE_FUNCTION == _OSD_ROTATE_HARDWARE))
        if(GET_OSD_ROTATE_STATUS() != _OSD_ROTATE_DEGREE_0)
        {
            ScalerOsdFontRotateCtrl(GET_OSD_ROTATE_STATUS(), _ENABLE, _ENABLE);
            ScalerOsdCompressionCtrl(_OSD_DECODE_NON_COMPRESSED, _OSD_COMPRESSION_ENABLE);
        }
        else
```

```
#endif
        {
            ScalerOsdFontRotateCtrl(GET_OSD_ROTATE_STATUS(), _DISABLE, _DISABLE);
            ScalerOsdCompressionCtrl(_OSD_DECODE_COMPRESSED, _OSD_COMPRESSION_DISABLE);
        }

        if(PDATA_WORD(7) > 4095)
        {
            ScalerOsdScrambleLoadFontAddrHsbSet();
        }
        else
        {
            ScalerOsdScrambleLoadFontAddrHsbClr();
        }

        ScalerOsdAddrSet(_OSD_SRAM, _OSD_BYTEALL, PDATA_WORD(7), _DISABLE);

        ScalerOsdBurstWriteDataPort(pucTemp, 27, GET_CURRENT_BANK_NUMBER(), _BURSTWRITE_DATA_OSD, _BURSTWRITE_FROM_XRAM);

        // OSD HW needs time to process it and then write decompressed data into SRAM.
        // The value 1ms is enough at all.
        ScalerTimerDelayXms(1);

        ScalerOsdCompressionCtrl(_OSD_DECODE_COMPRESSED, _OSD_COMPRESSION_DISABLE);

#if((_OSD_ROTATE_FUNCTION == _OSD_ROTATE_SOFTWARE) || (_OSD_ROTATE_FUNCTION == _OSD_ROTATE_HARDWARE))
        if(GET_OSD_ROTATE_STATUS() != _OSD_ROTATE_DEGREE_0)
        {
            ScalerOsdFontRotateCtrl(GET_OSD_ROTATE_STATUS(), _DISABLE, _ENABLE);
        }
#endif
        ScalerOsdScrambleLoadFontAddrHsbClr();

#if(_OSD_ROTATE_FUNCTION == _OSD_ROTATE_SOFTWARE)
        if(GET_OSD_ROTATE_STATUS() == _OSD_ROTATE_DEGREE_90)
        {
            PDATA_WORD(7) = (WORD)((g_ucOsdWidth - ucRow - 1) + g_ucOsdWidth * (pucDataTemp[5] + pucDataTemp[10]));
        }
        else if(GET_OSD_ROTATE_STATUS() == _OSD_ROTATE_DEGREE_270)
        {
            PDATA_WORD(7) = (WORD)(g_ucOsdHeight - 1 - pucDataTemp[5] - pucDataTemp[10]) * g_ucOsdWidth + ucRow;
        }
        else
#endif
        {
            PDATA_WORD(7) = (WORD)ucRow * g_ucOsdWidth + pucDataTemp[5] + pucDataTemp[10];
        }

//          ScalerOsdCommandByte(PDATA_WORD(7) + g_usFontSelectStart, _OSD_BYTE1, pucDataTemp[1]);
        ScalerOsdCommandAllByte(PDATA_WORD(7) + g_usFontSelectStart, ucByte0, pucDataTemp[1], ucColor);

        pucDataTemp[10] ++; // Record the length of prop string

        // Increase the sram address pointer
        pucDataTemp[1] = OsdPropSetFontPointer(ucFptsSelect, pucDataTemp[1]);
    }// End of while(*(pucArray + stringcnt) != _END_)

    if(ucFptsSelect == _PFONT_PAGE_0)
```

```
    {
        g_ucFontPointer0 = pucDataTemp[1];
    }
    else if(ucFptsSelect == _PFONT_PAGE_1)
    {
        g_ucFontPointer1 = pucDataTemp[1];
    }
    else if((ucFptsSelect == _PFONT_PAGE_2) ||
            ((ucFptsSelect >= _PFONT_PAGE_ITEM_1) && (ucFptsSelect <= _PFONT_PAGE_ITEM_8)))
    {
        g_ucFontPointer2 = pucDataTemp[1];
    }
}
```

16）在此文件末尾添加函数：-注意要到文件首部声明。

```
BYTE    *OsdGetChnTFontPage(BYTE ucString)
{
     BYTE *pArray = 0;

     switch(ucString)
     {
          case _STRING_PICTURE:
          case _STRING_BRIGHTNESS:
          case _STRING_CONTRAST:
          case   _STRING_SHARPNESS:
          case _STRING_COLOR_TEMP:
          case   _STRING_OTHER:
          case   _STRING_RESET:
          case   _STRING_DISP_ROTATE:
          case   _STRING_VOLUME:
          case   _STRING_LANGUAGE:
          case   _STRING_INPUT:
                    break;
          case   _STRING_INFORMATION: //蓝色部分是我大概给了几个要翻译为中文的菜单
          pArray = tFONT_CHINESE; //这个中文地址就是刚刚第二步生成的码值文档 1234，可参考英
文
          break;
     }
     return pArray;
}
```

完成以上项编译会报错，

1）OsdPropGetStringTableAddress_ChnS 没有定义；

OsdPropGetStringTableAddress_ChnS 参照 OsdPropGetStringTableAddress 仿照修改添加到文件末尾；

```
//----------------------------------------------------
// Description  :Chinese Address-中文 OSD 的排序中文地址
// Input Value  : None
// Output Value : None
```

```
//--------------------------------------------------
BYTE* OsdPropGetStringTableAddress_ChnS(BYTE ucString)
{
    BYTE *pucArray = 0;
    switch(ucString)
    {
        case _STRING_PICTURE:
                    pucArray = tSTRING_PICTURE_CHS;
                    break;
                case _STRING_DISPLAY:
                    pucArray = tSTRING_DISPLAY_CHS;
                    break;
                case _STRING_COLOR:
                    pucArray = tSTRING_COLOR_CHS;
                    break;
                case _STRING_ADVANCE:
                    pucArray = tSTRING_ADVANCE_CHS;
                    break;
                case _STRING_INPUT:
                    pucArray = tSTRING_INPUT_CHS;
                    break;
                case _STRING_AUDIO:
                    pucArray = tSTRING_AUDIO_CHS;
                    break;
                case _STRING_OTHER:
                    pucArray = tSTRING_OTHER_CHS;
                    break;
                case _STRING_INFORMATION:
                    pucArray = tSTRING_INFORMATION_CHS;
                    break;
                case _STRING_FACTORY:
                    pucArray = tSTRING_FACTORY_CHS;
                    break;
    }
    return pucArray;
}
```


17)RTD2014OsdFontProp.c 中添加中文数组地址

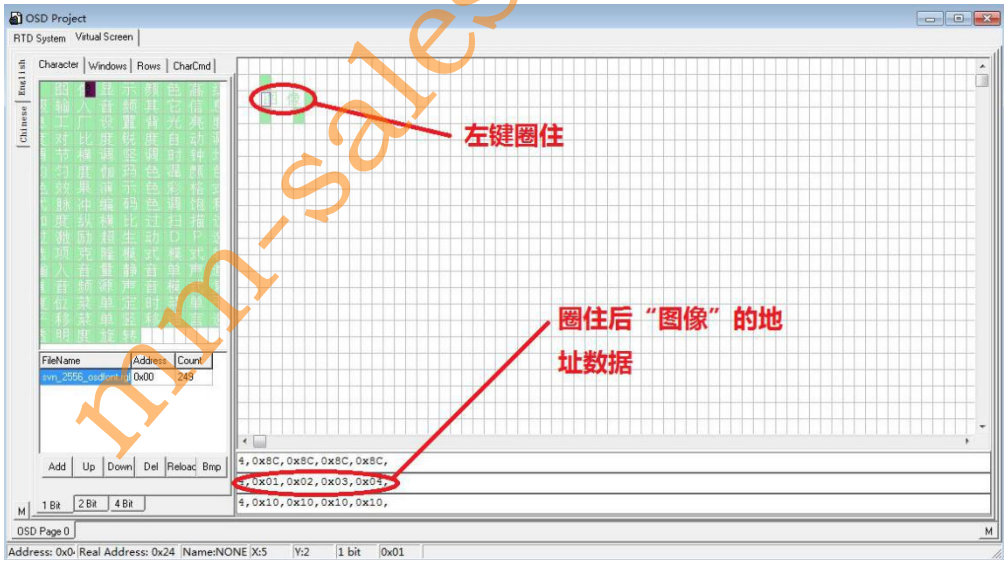
用 OSDEdit.ext 制作字库-svn_2556_osdfont.rgl

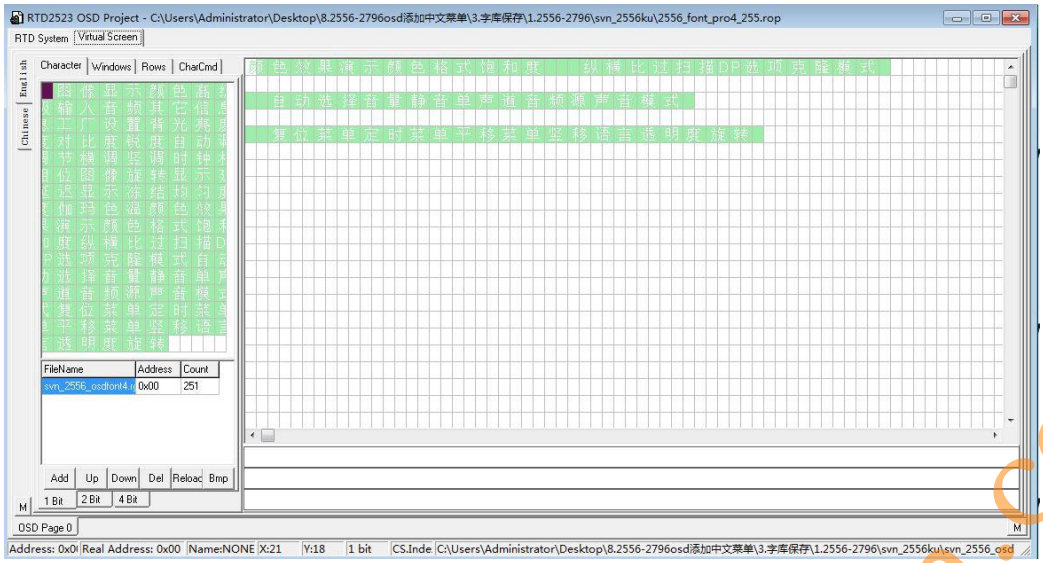
OsdPropGetStringTableAddress_ChnS 中 ， 中文字符串怎么添加， 如英文与中文的区别（我举 picture 为例），

BYTE code tSTRING_PICTURE[] =
{
_P_, _i_, _c_, _t_, _u_, _r_, _e_, _END_,英文
};
BYTE code tSTRING_PICTURE_CHS[] =
{
0x11,0x12,0x01,0x02,_END_,//你可能比较纳闷这中文数据怎么来的，
};

打开 osd edit
点击 file 下的 new project ，
然后点击左下角的 add 添加前面自己制作生成的字库“svn_2556_osdfont.rgl”，
如图 1：添加成功后如图 2 **双击图像**（picture）**然后鼠标圈中图像**即可得到 0x11,0x12,0x01,0x02,即为 picture 的中文添加到程序中 BYTE code tSTRING_PICTURE_CHS[] = { 0x11,0x12,0x01,0x02,_END_,};其他也是相同的方法添加；

图 1



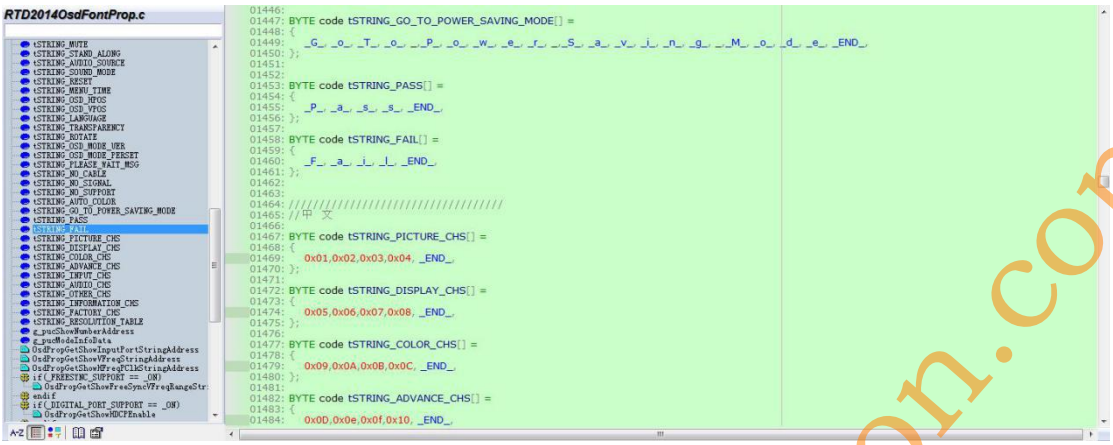


18）**RTD2014OsdFontProp.c 中**

将中文的地址数据写入 **RTD2014OsdFontProp.c** 文件中

```
BYTE code tSTRING_FAIL[] =
{     _F_, _a_, _i_, _l_, _END_};
////////////////////////////////////
//中文
BYTE code tSTRING_PICTURE_CHS[] =
{
      0x01,0x02,0x03,0x04, _END_,
};
BYTE code tSTRING_DISPLAY_CHS[] =
{
      0x05,0x06,0x07,0x08, _END_,
};
BYTE code tSTRING_COLOR_CHS[] =
{
      0x09,0x0A,0x0B,0x0C, _END_,
};
BYTE code tSTRING_ADVANCE_CHS[] =
{
      0x0D,0x0e,0x0f,0x10, _END_,
};
BYTE code tSTRING_INPUT_CHS[] =
{
      0x11,0x12,0x13,0x14, _END_,
};
BYTE code tSTRING_AUDIO_CHS[] =
{
      0x15,0x16,0x17,0x18, _END_,
};
BYTE code tSTRING_OTHER_CHS[] =
{
    0x19,0x1a,0x1b,0x1c, _END_,
};
BYTE code tSTRING_INFORMATION_CHS[] =
{
      0x1d,0x1e,0x1f,0x20, _END_,
```

```
};
BYTE code tSTRING_FACTORY_CHS[] =
{
    0x21,0x22,0x23,0x24,0x25,0x26,0x27,0x28, _END_,
};
////////////////////////////////////
```



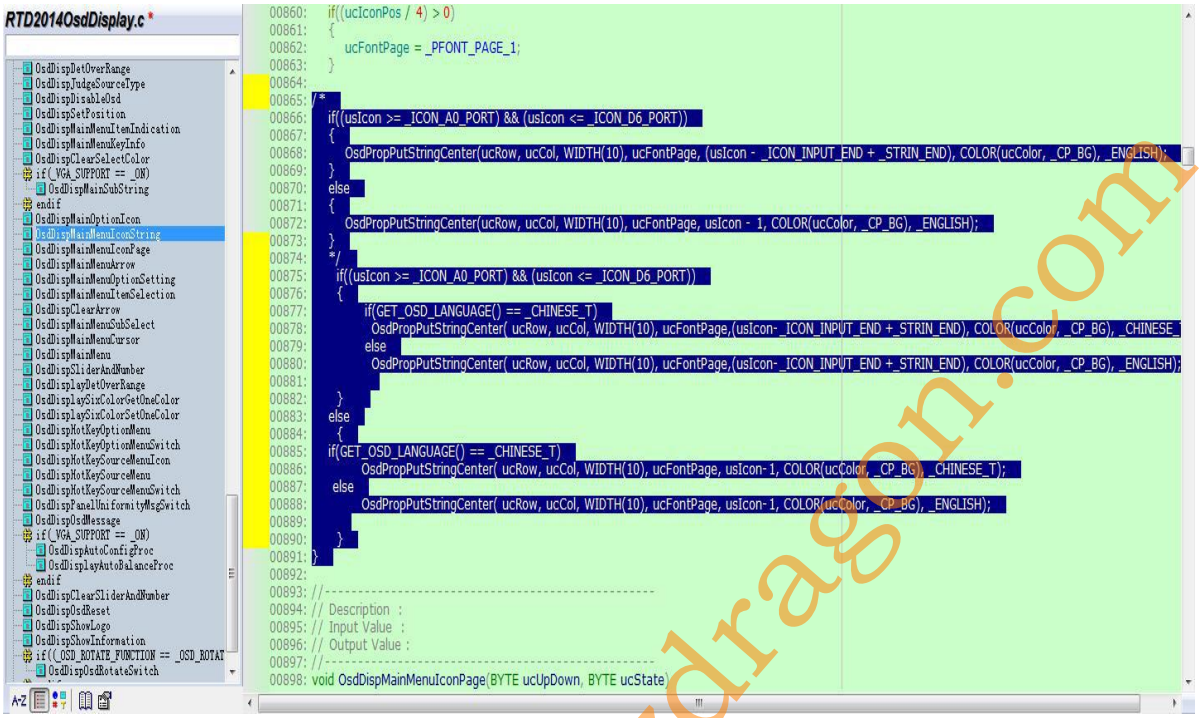
19.在 **OsdDispMainMenuIconString** 函数末尾中添加中文判断的条件：

```
void OsdDispMainMenuIconString(BYTE ucIconPos, WORD usIcon, BYTE ucColor)
{
     BYTE ucRow = 4;
    BYTE ucCol = 4;
    BYTE ucFontPage = _PFONT_PAGE_0;
    WORD usIconLoad = 0;
/*
    if((usIcon >= _ICON_A0_PORT) && (usIcon <= _ICON_D6_PORT))
    {
OsdPropPutStringCenter(ucRow, ucCol, WIDTH(10), ucFontPage, (usIcon - _ICON_INPUT_END + _STRIN_END), COLOR(ucColor, _CP_BG), _ENGLISH);
    }
    else
    {
        OsdPropPutStringCenter(ucRow, ucCol, WIDTH(10), ucFontPage, usIcon - 1, COLOR(ucColor, _CP_BG), _ENGLISH);
    }
     */
     //在函数末尾：
      if((usIcon >= _ICON_A0_PORT) && (usIcon <= _ICON_D6_PORT))
      {
if(GET_OSD_LANGUAGE() == _CHINESE_T)
OsdPropPutStringCenter(ucRow,ucCol,WIDTH(10), ucFontPage,(usIcon-_ICON_INPUT_END +_STRIN_END), COLOR(ucColor, _CP_BG), _CHINESE_T);
else
OsdPropPutStringCenter(ucRow,ucCol, WIDTH(10), ucFontPage,(usIcon-_ICON_INPUT_END +_STRIN_END), COLOR(ucColor, _CP_BG), _ENGLISH);
      }
      else
        {
      if(GET_OSD_LANGUAGE() == _CHINESE_T)
OsdPropPutStringCenter( ucRow, ucCol, WIDTH(10), ucFontPage, usIcon-1, COLOR(ucColor, _CP_BG), _CHINESE_T);
       else
OsdPropPutStringCenter( ucRow, ucCol, WIDTH(10), ucFontPage, usIcon-1, COLOR(ucColor, _CP_BG),
```

_ENGLISH);

}

}



20. 在 MenuOtherLanguageAdjust（）这个函数中还要添加在菜单中左右选择中英文，

```
void MenuOtherLanguageAdjust(void)
{
    switch(GET_KEYMESSAGE())
    {
        case _MENU_KEY_MESSAGE:
        //case _UP_KEY_MESSAGE:
            if(g_usBackupValue != GET_OSD_LANGUAGE())
            {
                SET_OSD_EVENT_MESSAGE(_OSDEVENT_SAVE_NVRAM_OSDUSERDATA_MSG);
            }
            SET_OSD_STATE(_MENU_OTHER_LANGUAGE);
            OsdDispMainMenuItemSelection((3), _OSD_SELECT);
OsdDispMainMenuOptionSetting(_OPTION_LANGUAGE_SELECT,_UNSELECT,GET_OSD_LANGUAGE());
// OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(),_OUTSUBSET);
            break;

        case _RIGHT_KEY_MESSAGE:
        case _LEFT_KEY_MESSAGE:
            OsdDispSliderAndNumber(_MENU_OTHER_LANGUAGE_ADJUST, GET_OSD_LANGUAGE());
```

```
                OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_CLEAR);
            //OsdDispMainMenuIconPage(_UP, _ICON_PAGE_OTHER_0);//进入到选项就跳到第一页去了
                OsdDispMainMenuIconPage(_UP, _ICON_PAGE_OTHER_1);
     //OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_LANGUAGE);//自定义图标
    OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_language_0);

  OsdDispMainMenuOptionSetting(_OPTION_LANGUAGE_SELECT,_SELECT,GET_OSD_LANGUAGE());
                OsdDispMainMenuItemSelection((3), _OSD_PRE_SELECT);
                //OsdDispMainMenuItemSelection((3), _OSD_SELECT);
//OsdDispMainMenuOptionSetting(_OPTION_LANGUAGE_SELECT,_UNSELECT,GET_OSD_LANGUAGE());

                break;
  /*
            case _MENU_KEY_MESSAGE:
                if(g_usBackupValue != GET_OSD_LANGUAGE())
                {
                    g_usAdjustValue = g_usBackupValue;
                    SET_OSD_LANGUAGE(g_usAdjustValue);
                }
                SET_OSD_STATE(_MENU_OTHER_LANGUAGE);
                OsdDispMainMenuItemSelection((3), _OSD_SELECT);
  //    OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(),_OUTSUBSET);
                break;
  */

    case _EXIT_KEY_MESSAGE:
            /*
                if(g_usBackupValue != GET_OSD_LANGUAGE())
                {
                    g_usAdjustValue = g_usBackupValue;
                    SET_OSD_LANGUAGE(g_usAdjustValue);
                }
               // OsdDispMainMenuItemSelection((3), _OSD_SELECT);
                  SET_OSD_STATE(_MENU_OTHER_LANGUAGE);
                  OsdDispMainMenuCursor(GET_OSD_STATE(),
  GET_OSD_STATE_PREVIOUS(),_OUTSUBSET);//选中图标为橙黄色
    // OsdDispMainMenuOptionSetting(_OPTION_LANGUAGE_SELECT,_SELECT,GET_OSD_LANGUAGE());
  // OsdDispMainMenuCursor(GET_OSD_STATE(),GET_OSD_STATE_PREVIOUS(),_OSD_PRE_SELECT);
      */
  //////////////
            if(g_usBackupValue != GET_OSD_LANGUAGE())
                {
                    g_usAdjustValue = g_usBackupValue;
                    SET_OSD_LANGUAGE(g_usAdjustValue);
```

```
                }
SET_OSD_STATE(_MENU_OTHER_LANGUAGE);
OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(), _OUTSUBSET);
OsdDispMainMenuOptionSetting(_OPTION_LANGUAGE_SELECT,_UNSELECT,GET_OSD_VOLUME_MUTE());
                break;
            default:
                break;
    }
}
```

2）在枚举中添加：-**RTD2014Include.h**

-2556 中

```
typedef enum
{
    _OPTION_DP_LANE_COUNT_SELECT,
    _OPTION_HDR_MODE_SELECT, // _ULTRA_HDR_SUPPORT
    _OPTION_DARK_ENHANCE_ON_OFF, // _ULTRA_HDR_SUPPORT
_OPTION_LANGUAGE_SELECT,
}EnumOptionIndex;
```

--2796 则是下面

```
typedef enum
{
末尾添加
    _OPTION_LANGUAGE_SELECT,
}EnumOptiontype;
```

3）在 language 图标的前面的右键添加：

```
void MenuOtherOsdVPos(void)
{
    switch(GET_KEYMESSAGE())
    {
        case _RIGHT_KEY_MESSAGE:
 /*--用注释这个，菜单就花了
                OsdDispClearSliderAndNumber();
                    SET_OSD_STATE(_MENU_OTHER_LANGUAGE);
                    OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_LANGUAGE);
                    OsdDispMainMenuItemSelection((3), _OSD_SELECT);
OsdDispMainMenuOptionSetting(_OPTION_LANGUAGE_SELECT,_UNSELECT,GET_OSD_LANGUAGE());
        */

                OsdDispClearSliderAndNumber();
            SET_OSD_STATE(_MENU_OTHER_LANGUAGE);
            OsdDispMainMenuIconPage(_UP, _ICON_PAGE_OTHER_1);
```

```
                OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_language_0);
// OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(), _OUTSUBSET);
                //OsdDispMainMenuItemSelection((3), _OSD_SELECT);
OsdDispMainMenuOptionSetting(_OPTION_LANGUAGE_SELECT,_UNSELECT,GET_OSD_LANGUAGE());
 OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(), _OUTSUBSET);

                break;
....
}
```

4)void MenuOtherLanguage(void)中

```
void MenuOtherLanguage(void)
{
    switch(GET_KEYMESSAGE())
    {
        case _MENU_KEY_MESSAGE:
            g_usBackupValue = GET_OSD_LANGUAGE();
            SET_OSD_STATE(_MENU_OTHER_LANGUAGE_ADJUST);
OsdDispMainMenuOptionSetting(_OPTION_LANGUAGE_SELECT, _SELECT,GET_OSD_LANGUAGE());
OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(),_INSUBSET);
            break;
        case _RIGHT_KEY_MESSAGE:
            OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_CLEAR);//清一页
            OsdDispClearSelectColor(_DOWN);//

   SET_OSD_STATE(_MENU_OTHER_TRNASPARENCY);
OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(), _OUTSUBSET);
OsdDispSliderAndNumber(_MENU_OTHER_TRNASPARENCY,GET_OSD_TRANSPARENCY_STATUS());
            break;

        case _LEFT_KEY_MESSAGE:
            OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_CLEAR);//
            OsdDispClearSelectColor(_DOWN);//

            SET_OSD_STATE(_MENU_OTHER_OSD_VPOS);
            OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(), _OUTSUBSET);
            OsdDispMainMenuIconPage(_UP, _ICON_PAGE_OTHER_0);
            OsdDispSliderAndNumber(_MENU_OTHER_OSD_VPOS, GET_OSD_VPOS());
            break;
        case _EXIT_KEY_MESSAGE:
            OsdDispClearSliderAndNumber();
            SET_OSD_STATE(_MENU_OTHER);
            OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(), _OUTSUBSET);
    OsdDispClearSelectColor(_DOWN);//清除选中的图标颜色
```

```
                OsdDispMainMenuIconPage(_UP, _ICON_PAGE_MAIN_1);//可能是 MAIN_2
                OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_OTHER_0);
                break;
            default:
                break;
        }
}
```

5）language 的后一个图标的左键修改：

```
void MenuOtherTransparency(void)
{
   case _LEFT_KEY_MESSAGE:
/*
                OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_CLEAR);//
                OsdDispClearSelectColor(_DOWN);//
                OsdDispClearSliderAndNumber();
                SET_OSD_STATE(_MENU_OTHER_LANGUAGE);
                OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_language_0);
                OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(), _OUTSUBSET);
  */
                OsdDispClearSliderAndNumber();
                SET_OSD_STATE(_MENU_OTHER_LANGUAGE);
                OsdDispMainMenuIconPage(_UP, _ICON_PAGE_OTHER_1);
                OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_language_0);
            //OsdDispMainMenuItemSelection((3), _OSD_SELECT);
OsdDispMainMenuOptionSetting(_OPTION_LANGUAGE_SELECT,_UNSELECT,GET_OSD_LANGUAGE());
OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(), _OUTSUBSET);
                break;
}
```

6）void OsdDispMainMenuOptionSetting(BYTE ucItem, BYTE ucSelectState, BYTE ucOption)函数中添加：

```
void OsdDispMainMenuOptionSetting(BYTE ucItem, BYTE ucSelectState, BYTE ucOption)
{
。。。。。。。。。。。。。。。。
            case _OPTION_LANGUAGE_SELECT:
                if(ucOption == _ENGLISH)
                {
                    ucCol = COL(4) + ((_ITEM_0 % 4) * 10) - 2;
                }
                else if(ucOption == _CHINESE_T)
                {
                    ucCol = COL(4) + ((_ITEM_1 % 4) * 10) - 2;
                }
 OsdWindowDrawingByFontHighlight(ucWin, ucRow, ucCol, WIDTH(10), HEIGHT(5), ucWinColor,
ucForegroundColor, _CP_BG);
```

```
                    break;

            default:
                break;
        }

        if(ucItem == _OPTION_COLOR_PCM_TYPE)
        {
#if(_OCC_SUPPORT == _ON)
            OsdFuncChangeIconColor1Bit(ROW(14), _ITEM_6, WIDTH(g_ucOsdWidth), HEIGHT(4), _CP_BLUE);
#endif
        }
        else if(ucItem == _OPTION_DP_MST_TYPE)
        {
        }
        else if(ucItem == _OPTION_DISP_ROTATE_TYPE)
        {
        }
        else
        {
            OsdFuncChangeIconColor1Bit(ROW(14), _ITEM_4, WIDTH(g_ucOsdWidth), HEIGHT(4), _CP_BLUE);
        }
}
```

7） RTD2014Include.h 定义_OPTION_LANGUAGE_SELECT

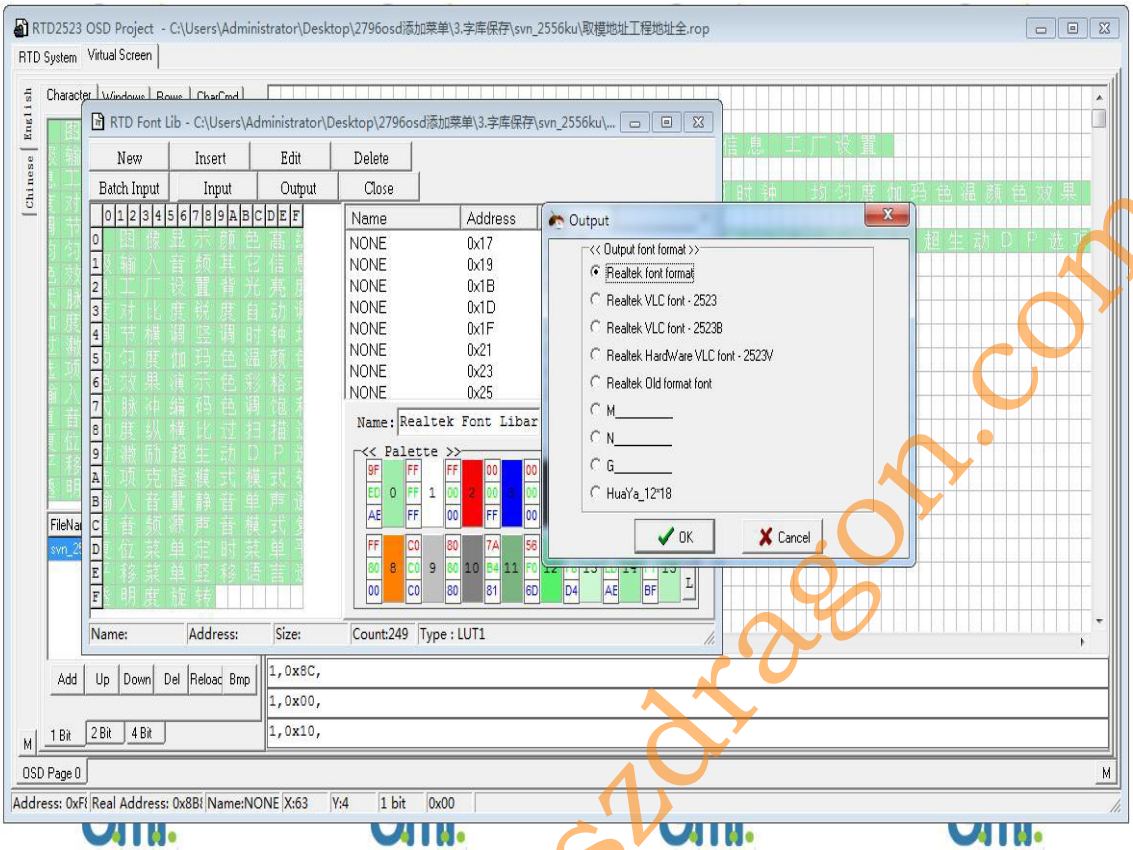
```
typedef enum
{
    _OPTION_LANGUAGE_SELECT,

}EnumOptionIndex;
```

21. OsdDispSliderAndNumber(_MENU_OTHER_LANGUAGE_ADJUST,GET_OSD_LANGUAGE());
中_MENU_OTHER_LANGUAGE_ADJUST 语言选择的条件，这里举例的只有两种语言_ENGLISH 和 _CHINESE_T：

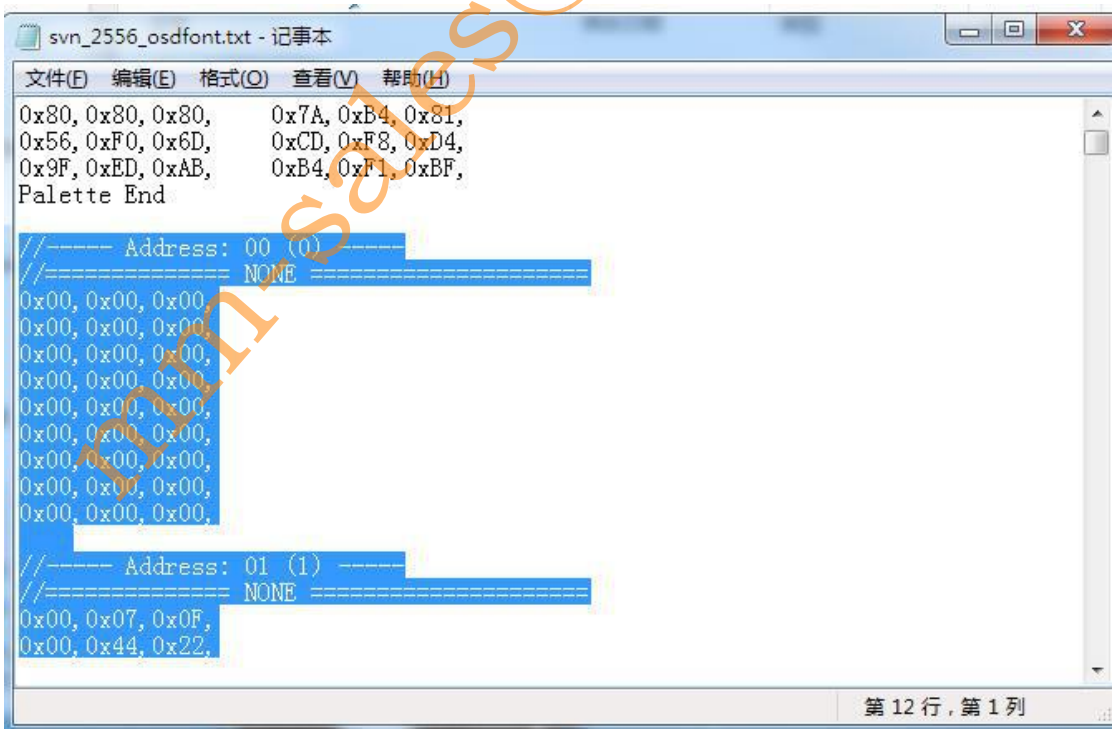
```
 case _MENU_OTHER_LANGUAGE_ADJUST:
                if((GET_KEYMESSAGE()    ==    _LEFT_KEY_MESSAGE)    ||    (GET_KEYMESSAGE()    ==
_RIGHT_KEY_MESSAGE))
                {
                    if(g_usAdjustValue == _ENGLISH)
                    {
                        g_usAdjustValue = _CHINESE_T;
                    }
                    else
                    {
                        g_usAdjustValue = _ENGLISH;
                    }
            SET_OSD_LANGUAGE(g_usAdjustValue);
                }
                break;
```

22.把所做的字库转化为数据

1）output->第一个 Realtek font format-》OK



2）保存为 TXT 格式



3）添加到文件 **RTD2014OsdFontProp.c** 文件前面

根据英文的数据仿照 BYTE code tFONT_EUROPE[];

```
 BYTE code tFONT_CHINESE[] =
    {
    //----- Address: 00 (0) -----
    //============== NONE =====================
    0x00,0x00,0x00,
    0x00,0x00,0x00,
    0x00,0x00,0x00,
    0x00,0x00,0x00,
    0x00,0x00,0x00,
    0x00,0x00,0x00,
    0x00,0x00,0x00,
    0x00,0x00,0x00,
    0x00,0x00,0x00,
    //----- Address: 01 (1) -----
  。。。。。。。。。。。。。。。。
    //----- Address: F7 (247) -----
    //============== NONE =====================
    0x00,0x01,0x00,
    0x00,0x11,0x00,
    0x00,0x72,0xE0,
    0x00,0x24,0x89,
    0x00,0x70,0xE8,
    0x00,0x00,0x8E,
    0x00,0x72,0x88,
    0x00,0x00,0x88,
    0x00,0x00,0x80,

    //============== NONE =====================
    0x01,0x00,0x00,
    0x11,0x00,0x00,
    0xF1,0xE0,0x00,
    0x2F,0x0F,0x00,
    0x24,0x00,0x00,
    0xF0,0xE2,0x00,
    0x42,0x48,0x00,
    0x10,0x08,0x00,
    0x00,0x80,0x00,

};
```

4)

```
////////////////////////////////////
//中文
```

```
BYTE code tSTRING_PICTURE_CHS[] =
{
    0x01,0x02,0x03,0x04, _END_,
};

BYTE code tSTRING_DISPLAY_CHS[] =
{
    0x05,0x06,0x07,0x08, _END_,
};

BYTE code tSTRING_COLOR_CHS[] =
{
    0x09,0x0A,0x0B,0x0C, _END_,
};
.....
```

5)应用：

```
    BYTE *OsdGetChnTFontPage(BYTE ucString)
{
    BYTE *pArray = 0;

    switch(ucString)
    {
        case _STRING_PICTURE:
        case _STRING_DISPLAY:
        case _STRING_COLOR:
        case _STRING_ADVANCE:
        case _STRING_INPUT:
        case _STRING_AUDIO:
        case   _STRING_OTHER:
        case _STRING_INFORMATION:
        case _STRING_FACTORY:

    case _STRING_INFORMATION: //要翻译为中文的菜单图标都添加到上面
        pArray = tFONT_CHINESE; //这个中文地址就是刚刚第二步生成的码值文档 1234，可参考英
文
        break;
    }
    return pArray;
}
```

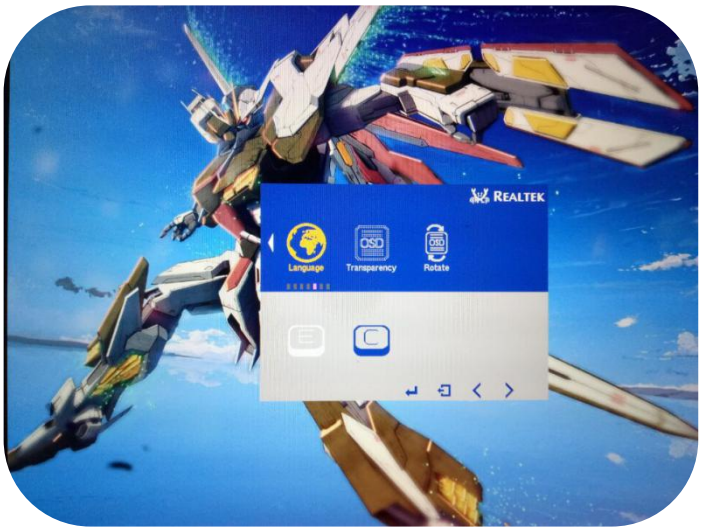
最后编译烧写成功图片：

存在的 bug：

（1）bug1:中英文图标下面乱码

bug2:添加了退出键后按退出颜色状态出现异常。

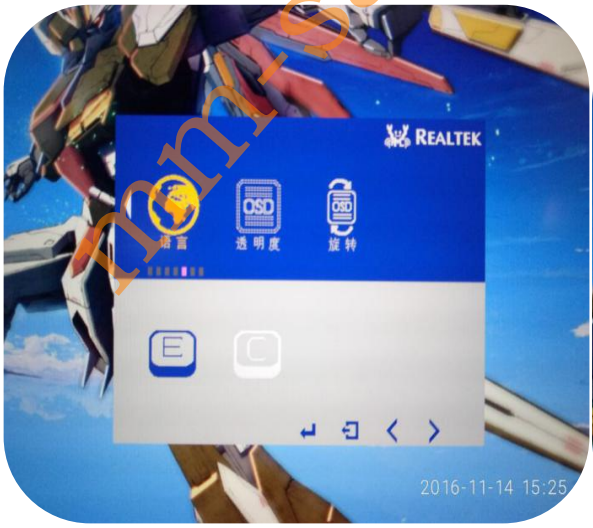
1)问题解决：-问题原因是用了写字符串的函数

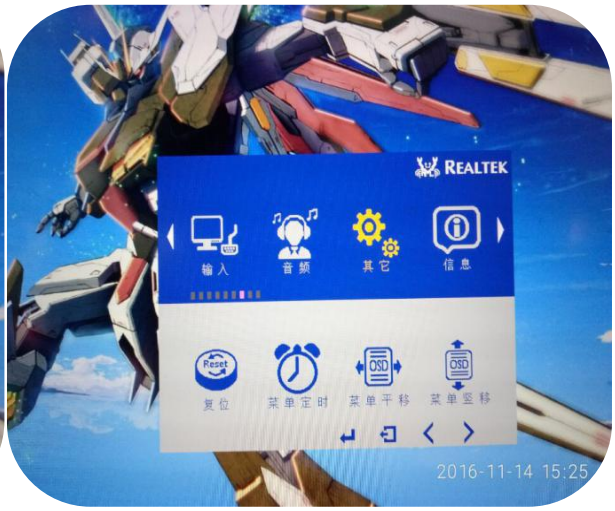


RTD2014OsdDisplay.c->void OsdDispMainMenuIconPage(BYTE ucUpDown, BYTE ucState)中

```
        case _ICON_PAGE_language_0:
//图标显示字符串的：OsdDispMainMenuIconString
///OsdDispMainMenuIconString((ucUpDown+0),_ICON_LANGUAGE_english,pucOsdItemColor[0]);
//OsdDispMainMenuIconString((ucUpDown + 1), _ICON_LANGUAGE_chinese,pucOsdItemColor[1]);
        // OsdDispMainMenuIconString((ucUpDown + 2), _ICON_NONE,pucOsdItemColor[2]);
         //OsdDispMainMenuIconString((ucUpDown + 3), _ICON_NONE, pucOsdItemColor[3]);
//图标不显示字符串：OsdDispMainOptionIcon
        OsdDispMainOptionIcon((ucUpDown + 0), _ICON_LANGUAGE_english, pucOsdItemColor[0]);
        OsdDispMainOptionIcon((ucUpDown + 1), _ICON_LANGUAGE_chinese, pucOsdItemColor[1]);
        OsdDispMainOptionIcon((ucUpDown + 2), _ICON_NONE, pucOsdItemColor[2]);
        OsdDispMainOptionIcon((ucUpDown + 3), _ICON_NONE, pucOsdItemColor[3]);
```

2)问题 2 解决：没有退出键，加入后发现退出上下菜单都是橙黄色，正常的状态是上层是橙黄色，下层是白色。-问题原因是按第二次退出键时没有清除选中的颜色状态：





（1）void **MenuOtherLanguage**(void)

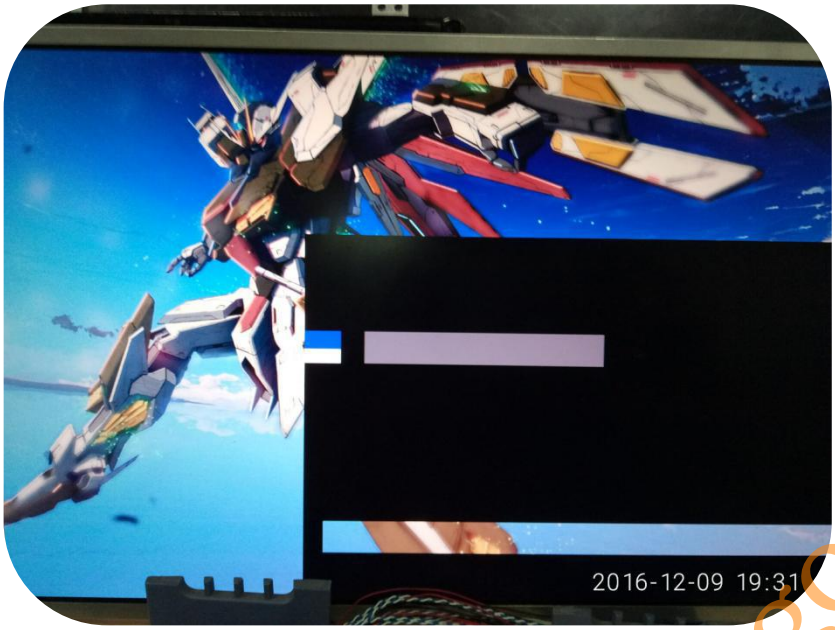
```
{
        case _EXIT_KEY_MESSAGE:
            OsdDispClearSliderAndNumber();
            SET_OSD_STATE(_MENU_OTHER);
            OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(), _OUTSUBSET);
            OsdDispClearSelectColor(_DOWN);
            OsdDispMainMenuIconPage(_UP, _ICON_PAGE_MAIN_1);
            OsdDispMainMenuIconPage(_DOWN, _ICON_PAGE_OTHER_0);

            break;
```

（2）void MenuOtherLanguageAdjust(void)

```
{
    switch(GET_KEYMESSAGE())
    {
            case    _EXIT_KEY_MESSAGE:
            /*//注释部分则会出现退出上下两个图标都是橙黄色
                if(g_usBackupValue != GET_OSD_LANGUAGE())
                {
                    g_usAdjustValue = g_usBackupValue;
                    SET_OSD_LANGUAGE(g_usAdjustValue);
                }
               // OsdDispMainMenuItemSelection((3), _OSD_SELECT);
                 SET_OSD_STATE(_MENU_OTHER_LANGUAGE);
                OsdDispMainMenuCursor(GET_OSD_STATE(),
GET_OSD_STATE_PREVIOUS(),_OUTSUBSET);//选中图标为橙黄色
    // OsdDispMainMenuOptionSetting(_OPTION_LANGUAGE_SELECT,_SELECT,GET_OSD_LANGUAGE());
    // OsdDispMainMenuCursor(GET_OSD_STATE(),GET_OSD_STATE_PREVIOUS(),_OSD_PRE_SELECT);
        */
            if(g_usBackupValue != GET_OSD_LANGUAGE())
                {
                    g_usAdjustValue = g_usBackupValue;
                     SET_OSD_LANGUAGE(g_usAdjustValue);
                }
    SET_OSD_STATE(_MENU_OTHER_LANGUAGE);
    OsdDispMainMenuCursor(GET_OSD_STATE(), GET_OSD_STATE_PREVIOUS(), _OUTSUBSET);
    OsdDispMainMenuOptionSetting(_OPTION_LANGUAGE_SELECT,_UNSELECT,GET_OSD_VOLUME_M
UTE());
            break;
        }
    }
```

20161209 问题三：

2796 添加中文问题：

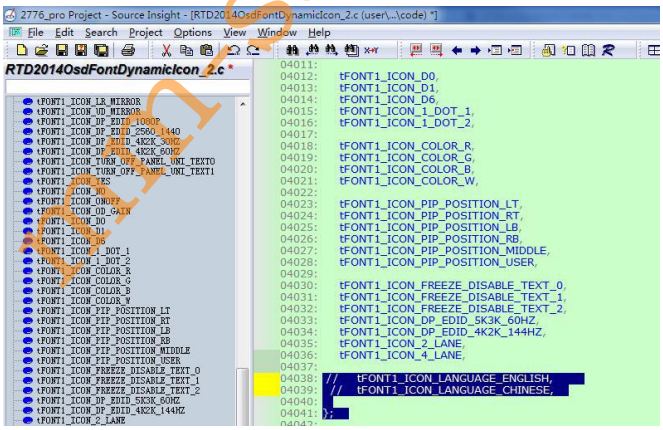


解决：

1）下面限定了图标的范围

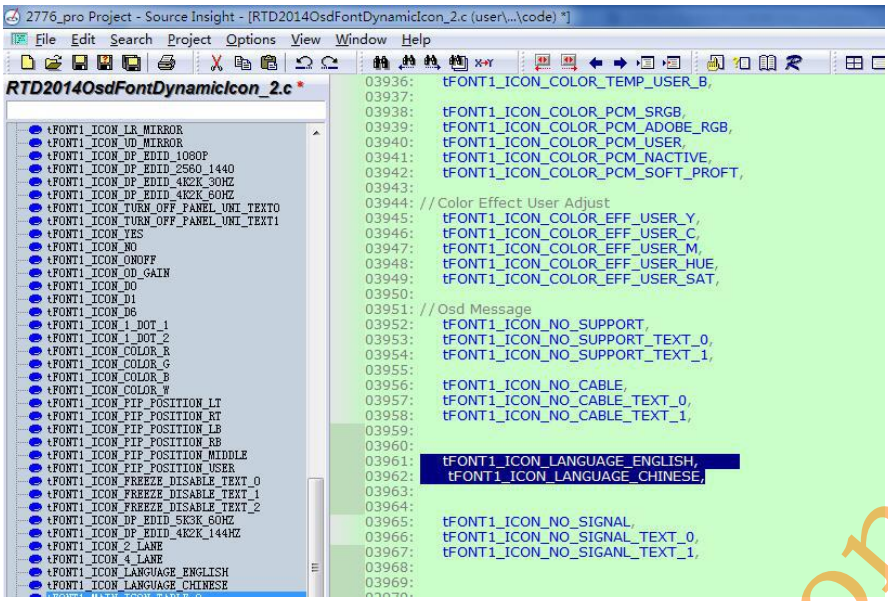
```
void OsdFontLoadNoticeIcon(BYTE ucIconPos, WORD usIcon)
{
    if((usIcon >= _ICON_NO_SUPPORT) && (usIcon <= _ICON_NO_SIGNAL_TEXT_1))
    {
        usIcon = usIcon - _ICON_ON;
    ScalerOsdHardwareVLC(tFONT1_MAIN_ICON_TABLE_2[usIcon],
VLC_TABLE_SIZE(tFONT1_MAIN_ICON_TABLE_2[usIcon]),GET_CURRENT_BANK_NUMBER(),
(_1BIT_NOTICE_ICON_START + (ucIconPos * 24)), g_usFontTableStart, ucOsdRotateStatus);
    }
}
```

所以不能将新增的图标数组**数据**添加到末尾，



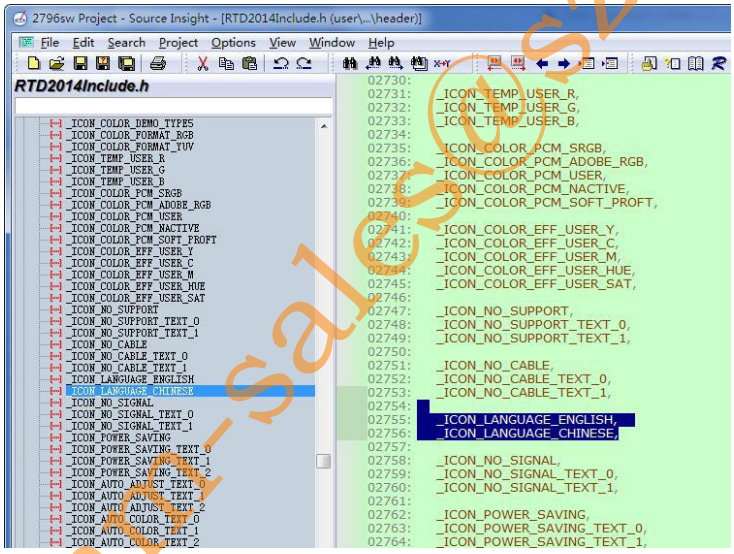
必须放在 code BYTE *tFONT1_MAIN_ICON_TABLE_2[] 范围之间：

if((usIcon >= _ICON_NO_SUPPORT) && (usIcon <= _ICON_NO_SIGNAL_TEXT_1))

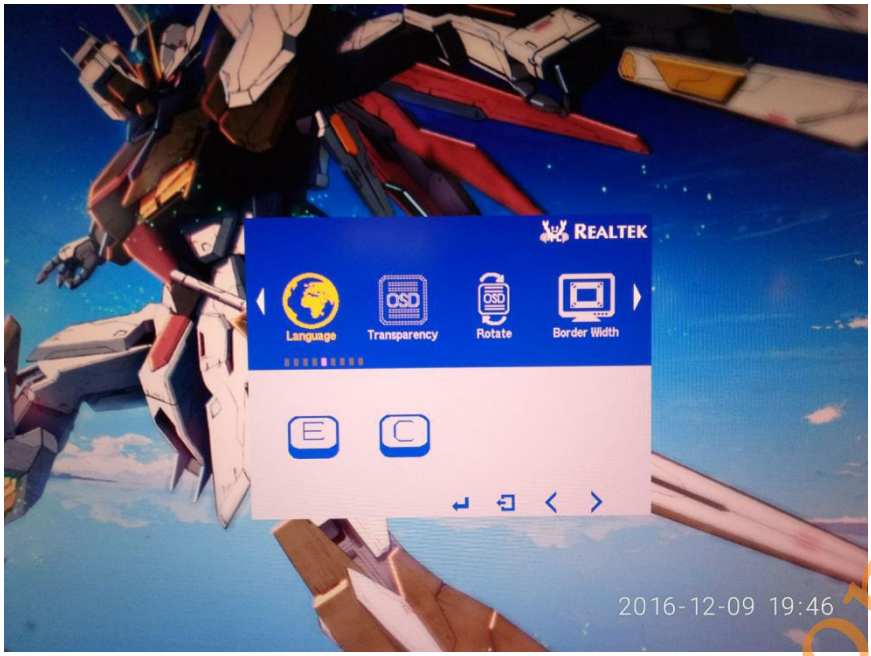


另外图标的存放也要和数据数组位置一致：

```
    _ICON_INFORMATION_HINT,
  // _ICON_LANGUAGE_ENGLISH,
  // _ICON_LANGUAGE_CHINESE,
    _OPTION_ICON_END,
}EnumIconIndex;
```



修改正确后效果



最后添加中文字库成功效果：