

在库开发指南触摸画板章节教程中，初始化触摸函数会去写入一遍屏幕触摸芯片参数。

5、7、4.5 寸等等屏幕触摸芯片本身已保存好合适的参数，但是触摸芯片厂商对同型号不同批次芯片使用的参数不同。因此在不确定芯片参数的情况下，屏幕触摸和 emWin 相关程序都已经改为默认不要重复写入参数，其他部分不影响。

旧 5 寸屏幕使用 GT9157 触摸芯片，新 5 寸屏幕使用 GT917S 芯片，改后的程序中已经包含两个型号的识别，同样也是默认不重复写入参数。

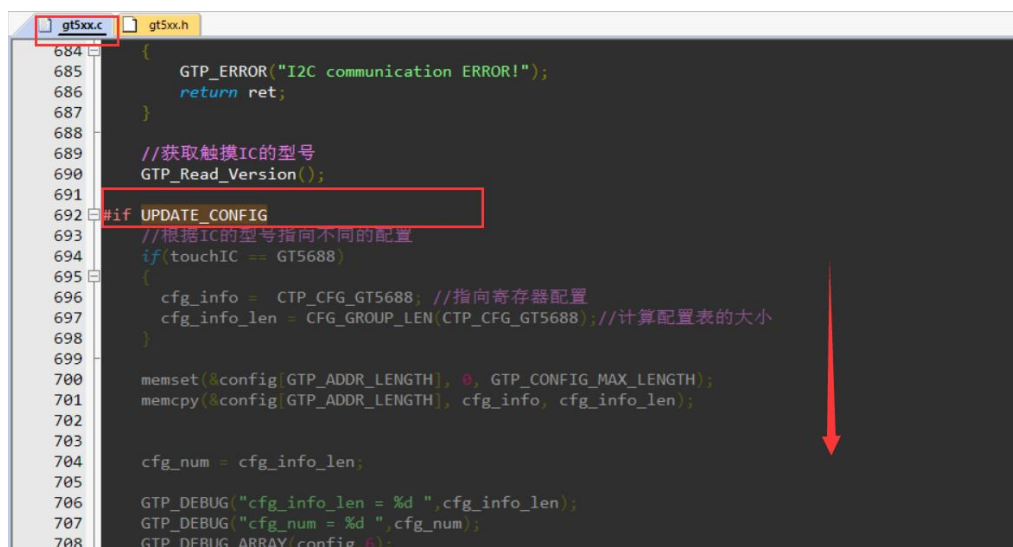
已经修改好的程序如下：（以 F4 工程截图举例，其他芯片工程都一致）

g5xx.h 中添加一个控制是否更新配置的宏。

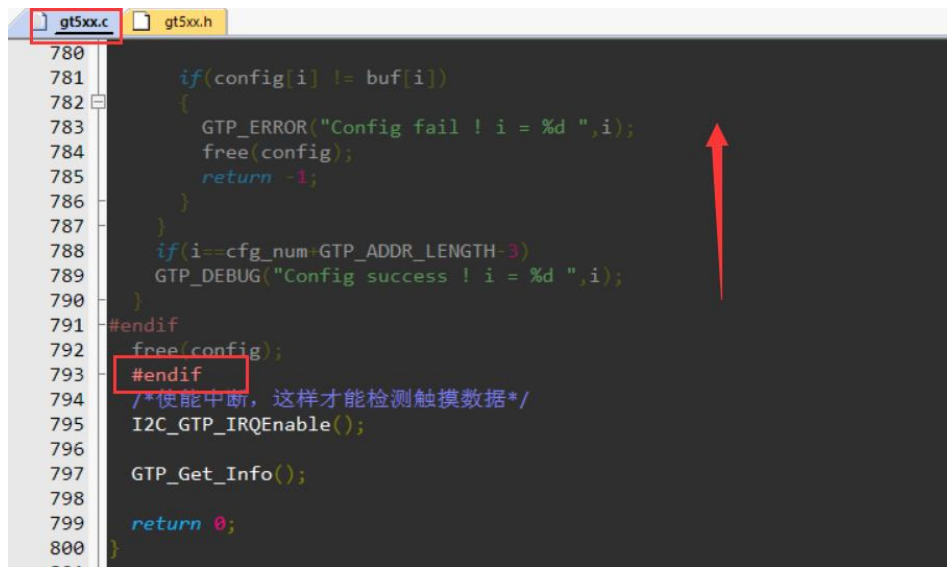


```
16  /*
17
18  #ifndef _GOODIX_GT9XX_H
19  #define _GOODIX_GT9XX_H
20
21  #include "stm32f4xx.h"
22
23  #ifndef NULL
24  #define NULL 0
25  #endif
26
27  #define UPDATE_CONFIG 0 // 1 : 更新配置 0 : 不更新配置
28
```

在 **gt5xx.c** **GTP_Init_Panel** 函数中 由宏控制的条件编译部分，默认不参与编译，不执行更新过程。



```
684 {
685     GTP_ERROR("I2C communication ERROR!");
686     return ret;
687 }
688
689 //获取触摸IC的型号
690 GTP_Read_Version();
691
692 #if UPDATE_CONFIG
693     //根据IC的型号指向不同的配置
694     if(touchIC == GT5688)
695     {
696         cfg_info = CTP_CFG_GT5688, //指向寄存器配置
697         cfg_info_len = CFG_GROUP_LEN(CTP_CFG_GT5688); //计算配置表的大小
698     }
699
700     memset(&config[GTP_ADDR_LENGTH], 0, GTP_CONFIG_MAX_LENGTH);
701     memcpy(&config[GTP_ADDR_LENGTH], cfg_info, cfg_info_len);
702
703     cfg_num = cfg_info_len;
704
705     GTP_DEBUG("cfg_info_len = %d ", cfg_info_len);
706     GTP_DEBUG("cfg_num = %d ", cfg_num);
707     GTP_DEBUG_ARRAY(config, 6);
708
```



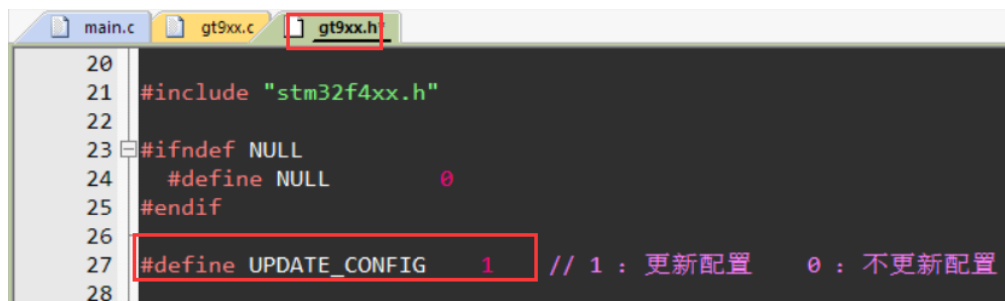
```
780
781     if(config[i] != buf[i])
782     {
783         GTP_ERROR("Config fail ! i = %d ",i);
784         free(config);
785         return -1;
786     }
787
788     if(i==cfg_num+GTP_ADDR_LENGTH-3)
789         GTP_DEBUG("Config success ! i = %d ",i);
790 }
791 #endif
792 free(config);
793 #endif
794 /*使能中断，这样才能检测触摸数据*/
795 I2C_GTP_IRQEnable();
796
797 GTP_Get_Info();
798
799 return 0;
800 }
```

如果是自己以前写的触摸或者 emWin 相关程序用最近买的电容屏幕，请参考上面意思改为默认不要重复写入配置，其他部分不影响。

如果是下载了旧的资料程序，或者自己程序运行后把不对应的参数覆盖写入了，触摸已经乱了，按照下面的说明尝试。

下载最新资料后，打开库开发指南的 **电容触摸屏-触摸画板** 例程

在 **gt5xx.h** 更新宏改 1



```
20
21 #include "stm32f4xx.h"
22
23 #ifndef NULL
24     #define NULL        0
25 #endif
26
27 #define UPDATE_CONFIG 1 // 1 : 更新配置    0 : 不更新配置
28
```

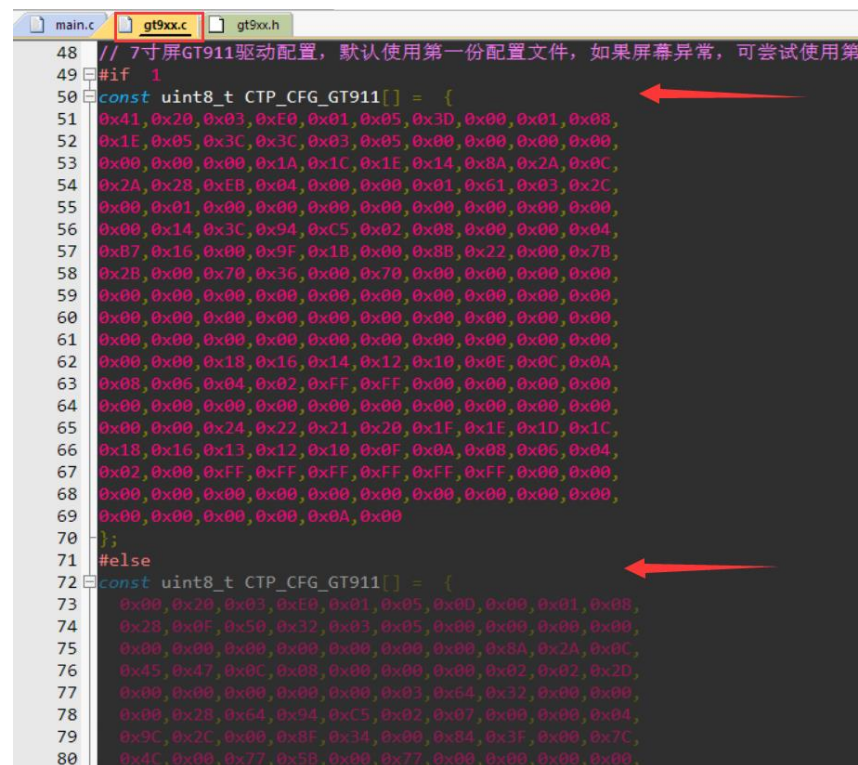
5 寸屏幕用过的两种触摸芯片配置只有一种，所以 5 寸屏幕只要改了 UPDATE_CONFIG 为 1 重新编译下载即可。

7 寸的 GT911 和 4.5 寸的 GT5688 有多组配置，打开 gt9xx.c 看到文件上面部分有定义对应触摸芯片的配置数组。

改 UPDATE_CONFIG 为 1 后重新编译下载先试其中一个配置，如果不行则注释掉试过的数组，取消另一数组的注释再重新编译下载。

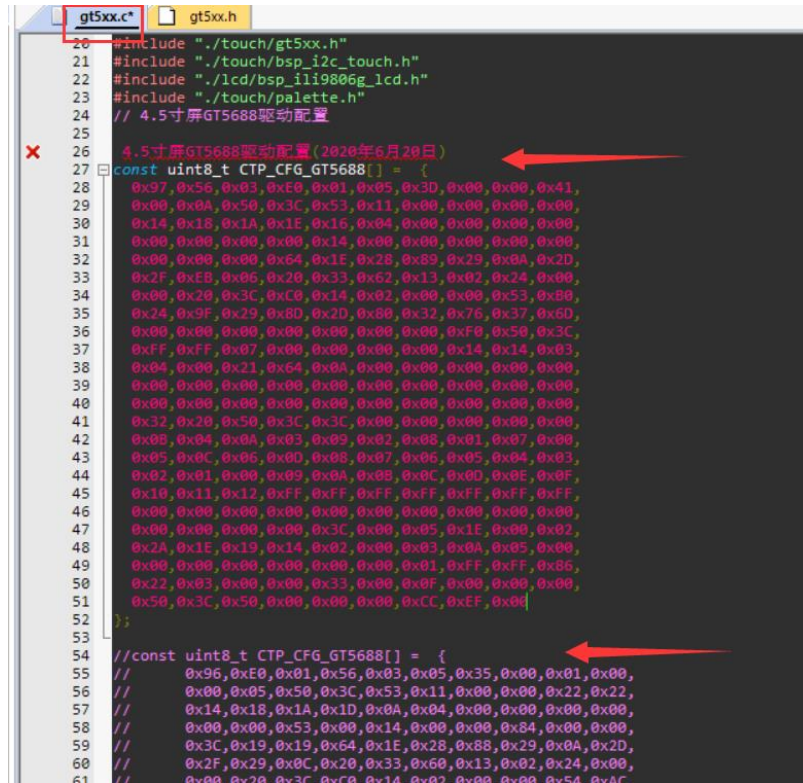
试的某个可以时，记录下来或者改到自己的程序，重新写入正确之后也改回默认不要重新写入。

GT911



```
48 // 7寸屏GT911驱动配置，默认使用第一份配置文件，如果屏幕异常，可尝试使用第
49 #if 1
50 const uint8_t CTP_CFG_GT911[] = {
51     0x41, 0x20, 0x03, 0xE0, 0x01, 0x05, 0x3D, 0x00, 0x01, 0x08,
52     0x1E, 0x05, 0x3C, 0x3C, 0x03, 0x05, 0x00, 0x00, 0x00, 0x00,
53     0x00, 0x00, 0x00, 0x1A, 0x1C, 0x1E, 0x14, 0x8A, 0x2A, 0x0C,
54     0x2A, 0x28, 0xEB, 0x04, 0x00, 0x00, 0x01, 0x61, 0x03, 0x2C,
55     0x00, 0x01, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
56     0x00, 0x14, 0x3C, 0x94, 0xC5, 0x02, 0x08, 0x00, 0x00, 0x04,
57     0xB7, 0x16, 0x00, 0x9F, 0x1B, 0x00, 0x88, 0x22, 0x00, 0x7B,
58     0x2B, 0x00, 0x70, 0x36, 0x00, 0x70, 0x00, 0x00, 0x00, 0x00,
59     0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
60     0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
61     0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
62     0x00, 0x00, 0x18, 0x16, 0x14, 0x12, 0x10, 0x0E, 0x0C, 0x0A,
63     0x08, 0x06, 0x04, 0x02, 0xFF, 0xFF, 0x00, 0x00, 0x00, 0x00,
64     0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
65     0x00, 0x00, 0x24, 0x22, 0x21, 0x20, 0x1F, 0x1E, 0x1D, 0x1C,
66     0x18, 0x16, 0x13, 0x12, 0x10, 0x0F, 0x0A, 0x08, 0x06, 0x04,
67     0x02, 0x00, 0xFF, 0xFF, 0xFF, 0xFF, 0xFF, 0xFF, 0x00, 0x00,
68     0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
69     0x00, 0x00, 0x00, 0x00, 0x0A, 0x00
70 };
71 #else
72 const uint8_t CTP_CFG_GT911[] = {
73     0x00, 0x20, 0x03, 0xE0, 0x01, 0x05, 0x00, 0x00, 0x01, 0x08,
74     0x28, 0x0F, 0x50, 0x32, 0x03, 0x05, 0x00, 0x00, 0x00, 0x00,
75     0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x8A, 0x2A, 0x0C,
76     0x45, 0x47, 0x0C, 0x08, 0x00, 0x00, 0x00, 0x02, 0x02, 0x2D,
77     0x00, 0x00, 0x00, 0x00, 0x00, 0x03, 0x64, 0x32, 0x00, 0x00,
78     0x00, 0x28, 0x64, 0x94, 0xC5, 0x02, 0x07, 0x00, 0x00, 0x04,
79     0x9C, 0x2C, 0x00, 0x8F, 0x34, 0x00, 0xB4, 0x3F, 0x00, 0x7C,
80     0x4C, 0x00, 0x77, 0x5B, 0x00, 0x77, 0x00, 0x00, 0x00, 0x00,
```

GT5688



```

20 #include "../touch/gt5xx.h"
21 #include "../touch/bsp_i2c_touch.h"
22 #include "../lcd/bsp_ili9806g_lcd.h"
23 #include "../touch/palette.h"
24 // 4.5寸屏GT5688驱动配置
25
26 4.5寸屏GT5688驱动配置(2020年6月20日)
27 const uint8_t CTP_CFG_GT5688[] = {
28     0x97, 0x56, 0x03, 0xE0, 0x01, 0x05, 0x3D, 0x00, 0x00, 0x41,
29     0x00, 0x0A, 0x50, 0x3C, 0x53, 0x11, 0x00, 0x00, 0x00, 0x00,
30     0x14, 0x18, 0x1A, 0x1E, 0x16, 0x04, 0x00, 0x00, 0x00, 0x00,
31     0x00, 0x00, 0x00, 0x00, 0x14, 0x00, 0x00, 0x00, 0x00, 0x00,
32     0x00, 0x00, 0x00, 0x64, 0x1E, 0x28, 0x89, 0x29, 0x0A, 0x2D,
33     0x2F, 0xEB, 0x06, 0x20, 0x33, 0x62, 0x13, 0x02, 0x24, 0x00,
34     0x00, 0x20, 0x3C, 0xC0, 0x14, 0x02, 0x00, 0x00, 0x53, 0x00,
35     0x24, 0x9F, 0x29, 0x8D, 0x2D, 0x00, 0x32, 0x76, 0x37, 0x6D,
36     0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x50, 0x3C,
37     0xFF, 0xFF, 0x07, 0x00, 0x00, 0x00, 0x00, 0x14, 0x14, 0x03,
38     0x04, 0x00, 0x21, 0x64, 0x0A, 0x00, 0x00, 0x00, 0x00, 0x00,
39     0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
40     0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
41     0x32, 0x20, 0x50, 0x3C, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
42     0x00, 0x04, 0x0A, 0x03, 0x09, 0x02, 0x00, 0x01, 0x07, 0x00,
43     0x05, 0x0C, 0x06, 0x0D, 0x08, 0x07, 0x06, 0x05, 0x04, 0x03,
44     0x02, 0x01, 0x00, 0x09, 0x0A, 0x0B, 0x0C, 0x0D, 0x0E, 0x0F,
45     0x10, 0x11, 0x12, 0xFF, 0xFF, 0xFF, 0xFF, 0xFF, 0xFF, 0xFF,
46     0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,
47     0x00, 0x00, 0x00, 0x00, 0x3C, 0x00, 0x05, 0x1E, 0x00, 0x02,
48     0x2A, 0x1E, 0x19, 0x14, 0x02, 0x00, 0x03, 0x0A, 0x05, 0x00,
49     0x00, 0x00, 0x00, 0x00, 0x00, 0x01, 0xFF, 0xFF, 0x86,
50     0x22, 0x03, 0x00, 0x00, 0x33, 0x00, 0x0F, 0x00, 0x00, 0x00,
51     0x50, 0x3C, 0x50, 0x00, 0x00, 0x00, 0xCC, 0xEF, 0x00,
52 };
53
54 //const uint8_t CTP_CFG_GT5688[] = {
55 //    0x96, 0xE0, 0x01, 0x56, 0x03, 0x05, 0x35, 0x00, 0x01, 0x00,
56 //    0x00, 0x05, 0x50, 0x3C, 0x53, 0x11, 0x00, 0x00, 0x22, 0x22,
57 //    0x14, 0x18, 0x1A, 0x1D, 0x0A, 0x04, 0x00, 0x00, 0x00, 0x00,
58 //    0x00, 0x00, 0x53, 0x00, 0x14, 0x00, 0x00, 0x84, 0x00, 0x00,
59 //    0x3C, 0x19, 0x19, 0x64, 0x1E, 0x28, 0x88, 0x29, 0x0A, 0x2D,
60 //    0x2F, 0x29, 0x0C, 0x20, 0x33, 0x60, 0x13, 0x02, 0x24, 0x00,
61 //    0x00, 0x20, 0x3C, 0xC0, 0x14, 0x02, 0x00, 0x00, 0x54, 0x00,

```

下面列出 GT911 和 GT5688 的可以尝试的数组，如果有的工程里面的数组不全或者不行，从下面复制到程序试。

GT911

//1

// 7 寸屏 GT911 驱动配置 2017-5

```

const uint8_t CTP_CFG_GT911[] = {
    0x00, 0x20, 0x03, 0xE0, 0x01, 0x05, 0x3D, 0x00, 0x01, 0x48,
    0x28, 0x0D, 0x50, 0x32, 0x03, 0x05, 0x00, 0x00, 0x00, 0x00,
    0x00, 0x00, 0x00, 0x18, 0x1A, 0x1E, 0x14, 0x8A, 0x2A, 0x0C,
    0x30, 0x38, 0x31, 0x0D, 0x00, 0x00, 0x02, 0xB9, 0x03, 0x2D,
    0x00, 0x00, 0x00, 0x00, 0x00, 0x03, 0x64, 0x32, 0x00, 0x00,
    0x00, 0x1D, 0x41, 0x94, 0xC5, 0x02, 0x07, 0x00, 0x00, 0x04,
    0xA5, 0x1F, 0x00, 0x94, 0x25, 0x00, 0x88, 0x2B, 0x00, 0x7D,
    0x33, 0x00, 0x74, 0x3C, 0x00, 0x74, 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, 0x00, 0x00, 0x00, 0x00, 0x00, 0x00,

```

```

0x00,0x00,0x18,0x16,0x14,0x12,0x10,0x0E,0x0C,0x0A,
0x08,0x06,0x04,0x02,0xFF,0xFF,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x24,0x22,0x21,0x20,0x1F,0x1E,0x1D,0x1C,
0x18,0x16,0x13,0x12,0x10,0x0F,0x0A,0x08,0x06,0x04,
0x02,0x00,0xFF,0xFF,0xFF,0xFF,0xFF,0xFF,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x11,0x01
};

```

```

//2
const uint8_t CTP_CFG_GT911[] = {
0x41,0x20,0x03,0xE0,0x01,0x05,0x3D,0x00,0x01,0x08,
0x1E,0x05,0x3C,0x3C,0x03,0x05,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x1A,0x1C,0x1E,0x14,0x8A,0x2A,0x0C,
0x2A,0x28,0xEB,0x04,0x00,0x00,0x01,0x61,0x03,0x2C,
0x00,0x01,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x14,0x3C,0x94,0xC5,0x02,0x08,0x00,0x00,0x04,
0xB7,0x16,0x00,0x9F,0x1B,0x00,0x8B,0x22,0x00,0x7B,
0x2B,0x00,0x70,0x36,0x00,0x70,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x18,0x16,0x14,0x12,0x10,0x0E,0x0C,0x0A,
0x08,0x06,0x04,0x02,0xFF,0xFF,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x24,0x22,0x21,0x20,0x1F,0x1E,0x1D,0x1C,
0x18,0x16,0x13,0x12,0x10,0x0F,0x0A,0x08,0x06,0x04,
0x02,0x00,0xFF,0xFF,0xFF,0xFF,0xFF,0xFF,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x0A,0x00
};

```

```

//3
const uint8_t CTP_CFG_GT911[] = {
0x00,0x20,0x03,0xE0,0x01,0x05,0x0D,0x00,0x01,0x08,
0x28,0x0F,0x50,0x32,0x03,0x05,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x8A,0x2A,0x0C,
0x45,0x47,0x0C,0x08,0x00,0x00,0x00,0x02,0x02,0x2D,
0x00,0x00,0x00,0x00,0x00,0x03,0x64,0x32,0x00,0x00,
0x00,0x28,0x64,0x94,0xC5,0x02,0x07,0x00,0x00,0x04,
0x9C,0x2C,0x00,0x8F,0x34,0x00,0x84,0x3F,0x00,0x7C,

```

```
0x4C,0x00,0x77,0x5B,0x00,0x77,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x18,0x16,0x14,0x12,0x10,0x0E,0x0C,0x0A,
0x08,0x06,0x04,0x02,0xFF,0xFF,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x16,0x18,0x1C,0x1D,0x1E,0x1F,0x20,0x21,
0x22,0x24,0x13,0x12,0x10,0x0F,0x0A,0x08,0x06,0x04,
0x02,0x00,0xFF,0xFF,0xFF,0xFF,0xFF,0xFF,0x00,0x00,
0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
0x00,0x00,0x00,0x00,0x24,0x01
};
```

GT5688

//1

//4.5'çÆÁGT5688Çý¶~ÅäÖÃ(2020Äê6ÔÂ20ÈÖ)

```
const uint8_t CTP_CFG_GT5688[] = {
    0x97,0x56,0x03,0xE0,0x01,0x05,0x3D,0x00,0x00,0x41,
    0x00,0x0A,0x50,0x3C,0x53,0x11,0x00,0x00,0x00,0x00,
    0x14,0x18,0x1A,0x1E,0x16,0x04,0x00,0x00,0x00,0x00,
    0x00,0x00,0x00,0x00,0x14,0x00,0x00,0x00,0x00,0x00,
    0x00,0x00,0x00,0x64,0x1E,0x28,0x89,0x29,0x0A,0x2D,
    0x2F,0xEB,0x06,0x20,0x33,0x62,0x13,0x02,0x24,0x00,
    0x00,0x20,0x3C,0xC0,0x14,0x02,0x00,0x00,0x53,0xB0,
    0x24,0x9F,0x29,0x8D,0x2D,0x80,0x32,0x76,0x37,0x6D,
    0x00,0x00,0x00,0x00,0x00,0x00,0x00,0xF0,0x50,0x3C,
    0xFF,0xFF,0x07,0x00,0x00,0x00,0x00,0x14,0x14,0x03,
    0x04,0x00,0x21,0x64,0x0A,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,
    0x32,0x20,0x50,0x3C,0x3C,0x00,0x00,0x00,0x00,0x00,
    0x0B,0x04,0x0A,0x03,0x09,0x02,0x08,0x01,0x07,0x00,
    0x05,0x0C,0x06,0x0D,0x08,0x07,0x06,0x05,0x04,0x03,
    0x02,0x01,0x00,0x09,0x0A,0x0B,0x0C,0x0D,0x0E,0x0F,
    0x10,0x11,0x12,0xFF,0xFF,0xFF,0xFF,0xFF,0xFF,0xFF,
    0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,
    0x00,0x00,0x00,0x00,0x3C,0x00,0x05,0x1E,0x00,0x02,
    0x2A,0x1E,0x19,0x14,0x02,0x00,0x03,0x0A,0x05,0x00,
```

```
0x00,0x00,0x00,0x00,0x00,0x00,0x01,0xFF,0xFF,0x86,  
0x22,0x03,0x00,0x00,0x33,0x00,0x0F,0x00,0x00,0x00,  
0x50,0x3C,0x50,0x00,0x00,0x00,0xCC,0xEF,0x00  
};
```

//2

```
const uint8_t CTP_CFG_GT5688[] = {  
    0x96,0xE0,0x01,0x56,0x03,0x05,0x35,0x00,0x01,0x00,  
    0x00,0x05,0x50,0x3C,0x53,0x11,0x00,0x00,0x22,0x22,  
    0x14,0x18,0x1A,0x1D,0x0A,0x04,0x00,0x00,0x00,0x00,  
    0x00,0x00,0x53,0x00,0x14,0x00,0x00,0x84,0x00,0x00,  
    0x3C,0x19,0x19,0x64,0x1E,0x28,0x88,0x29,0x0A,0x2D,  
    0x2F,0x29,0x0C,0x20,0x33,0x60,0x13,0x02,0x24,0x00,  
    0x00,0x20,0x3C,0xC0,0x14,0x02,0x00,0x00,0x54,0xAC,  
    0x24,0x9C,0x29,0x8C,0x2D,0x80,0x32,0x77,0x37,0x6E,  
    0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0xF0,0x50,0x3C,  
    0xFF,0xFF,0x07,0x00,0x00,0x00,0x02,0x14,0x14,0x03,  
    0x04,0x00,0x21,0x64,0x0A,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,  
    0x32,0x20,0x50,0x3C,0x3C,0x00,0x00,0x00,0x00,0x00,  
    0x0D,0x06,0x0C,0x05,0x0B,0x04,0x0A,0x03,0x09,0x02,  
    0xFF,0xFF,0xFF,0xFF,0x00,0x01,0x02,0x03,0x04,0x05,  
    0x06,0x07,0x08,0x09,0x0A,0x0B,0x0C,0x0D,0x0E,0x0F,  
    0x10,0xFF,0xFF,0xFF,0xFF,0xFF,0xFF,0xFF,0xFF,0xFF,  
    0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,0x00,  
    0x00,0x00,0x00,0x00,0x3C,0x00,0x05,0x1E,0x00,0x02,  
    0x2A,0x1E,0x19,0x14,0x02,0x00,0x03,0x0A,0x05,0x00,  
    0x00,0x00,0x00,0x00,0x00,0x00,0x01,0xFF,0xFF,0x86,  
    0x22,0x03,0x00,0x00,0x33,0x00,0x0F,0x00,0x00,0x00,  
    0x50,0x3C,0x50,0x00,0x00,0x00,0x1A,0x64,0x01  
};
```