1. 目录

HCCHIP SIS9509触摸屏使用说明文档

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2. 文档履历

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3. 概述

3.1 编写目的

介绍hcchip sis9509触摸屏驱动的使用

3.2 读者对象

软件开发工程师和技术支持工程师。

4. 如何使用

4.1 HCRTOS

4.1.1 设备树配置

在对应的板子设备树文件中,添加响应的节点

```
1 i2c@2{
 2
           pinmux-active = <PINPAD_T14 3 PINPAD_T15 3>;
          devpath = "/dev/i2c2";
          baudrate = <100000>;
 5
          mode = "master";
          status = "okay";
 6
7 };
9 sis_touchscreen@5c {
10
          compatible = "sis,sis_touch";
11
          touch-gpio = <PINPAD_L15 0>;
12
          i2c-devpath = "/dev/i2c2";
13
          reg = <0x5c>;
14
          status = "okay";
15 };
```

4.1.2 menuconfig配置

根据下面路径选中ilitek驱动。

```
There is no help available for this option.
2 Symbol: CONFIG_HC_SIS9509 [=y]
   Type : bool
  Prompt: sis9509
5
     Location:
 6
       -> Components
 7
         -> kernel (BR2_PACKAGE_KERNEL [=y])
 8
          -> Drivers
              -> input event (CONFIG_DRV_INPUT [=y])
10
               -> tp menu (CONFIG_TP [=y])
11
    Defined at tp:21
12
     Depends on: BR2_PACKAGE_KERNEL [=y] && CONFIG_DRV_INPUT [=y] && CONFIG_TP
    [=y]
```

配置完成后,在sdk根目录输入:make kernel-rebuild all,进行编译后烧录,在串口控制台终端输入ls命令既可以查看驱动节点。

```
llav hdmi
        spin platform
        spo platform
        i2si platform
       i2so platform
       hc sis9509 driver
        ge
        llav_vdec
        hc16xx link
driver late modules:
        usb core
        usb storage driver
others modules:
        projector auto start
        clock init
        reset cjc8990
        reset_cjc8988
hc1512a@dbA210#
```

使用时,需要open对应的input节点。这里open的是/dev/input/event1。具体操作参考Sample Code。

```
hc1600a@dbC5200v10# nsh
hc1600a@dbC5200v10(nsh)# cd dev
hc1600a@dbC5200v10(nsh)# ls
/dev:
 auddec
 audsink
 avsync0
 avsync1
 bus/
 dis
 efuse
 fbø
 ge
 i2c0
 i2c3
 input/
 lvds
 mmz
 mtdblock0
 mtdblock1
 mtdblock2
 mtdblock3
 mtdblock4
 null
 persistentmem
 pq
sf_prodect
 sndC0i2so
 sndC0spo
 sndClspin
 tv_decoder
 uart0
 uart_dummy
viddec
 vidsink
 vindvp
hc1600a@dbC5200v10(nsh)# cd_input
hc1600a@dbC5200v10(nsh)# ls
/dev/input:
 event0
 event1
hc1600a@dbC5200v10(nsh)# 📕
```

4.1.3 模块接口说明

该模块没有提供额外接口。

4.1.4 模块测试用例与Sample Code

介绍本模块相关的测试用例及相关Sample Code

```
1 #include <stdlib.h>
2
   #include <poll.h>
3
    #include <unistd.h>
    #include <stddef.h>
4
5
    #include <stdio.h>
    #include <fcntl.h>
6
    #include <sys/ioctl.h>
7
8
    #include <hcuapi/input.h>
    #include <kernel/lib/console.h>
9
10
```

```
#define BUF_SIZE 1024
11
12
13
    static void print_help(void) {
        14
15
        printf("input test cmds help\n");
16
        printf("\tfor example : input_test -i 1\n");
17
        printf("\t'i'
                       1 means event1\n");
        printf("********************************
n");
18
19
    }
20
21
    static int input_test(int argc, char *argv[])
22
23
        int fd;
24
        struct input_event t;
25
        struct pollfd pfd;
        char input_buf[BUF_SIZE];
26
27
        char *s = "/dev/input/event";
28
29
        long tmp;
30
        int x = 0, y = 0;
31
        int event_num = -1;
32
        char ch;
33
        opterr = 0;
34
        optind = 0;
35
        while ((ch = getopt(argc, argv, "hi:")) != EOF) {
36
37
            switch (ch) {
            case 'h':
38
39
                print_help();
40
                return 0;
            case 'i':
41
42
                tmp = strtoll(optarg, NULL, 10);
43
                event_num = tmp;
44
                break;
45
            default:
                printf("Invalid parameter %c\r\n", ch);
46
47
                print_help();
48
                return -1;
            }
49
50
        }
51
        if (event_num == -1) {
52
            print_help();
53
            return -1;
        }
54
55
56
        sprintf(input_buf, "/dev/input/event%d", event_num);
57
58
        fd = open(input_buf, O_RDONLY);
59
        pfd.fd = fd;
60
        pfd.events = POLLIN | POLLRDNORM;
61
62
        if (fd < 0) {
            printf("can't open %s\n", input_buf);
63
64
            return -1;
65
        }
66
67
        char name[256] = "Unknown";
68
        ioctl(fd, EVIOCGNAME(sizeof(name)), name);
```

```
printf("\nInput Device Name:[%s]. \n", name);
69
70
71
        while (1) {
            if (poll(\&pfd, 1, -1) \le 0)
72
73
                continue;
74
75
            if (read(fd, &t, sizeof(t)) != sizeof(t))
76
                continue;
77
            printf("type:%d, code:%d, value:0x%lx\n", t.type, t.code,
78
79
                   t.value);
        }
80
81
82
        close(fd);
83
84
        return 0;
85
    }
86
87 CONSOLE_CMD(input, NULL, input_test, CONSOLE_CMD_MODE_SELF, "input test,
    press power to exit test")
```

4.1.5 模块调试方法

暂无

4.1.6 常见问题

暂无

4.2 HCLINUX