

pcsgit/tools/test_automation/tests/eeprom

该tool用于读取eeprom device中的256 bytes内容。
但在实现中好像有点问题。

```
1. static int read_mem( int fd, int addr, char* buffer, size_t len )
2. {
3.     struct i2c_rdwr_ioctl_data packets;
4.     struct i2c_msg messages[1];
5.     int rc = -1;
6.
7.     memset( &messages, 0, sizeof(struct i2c_msg));
8.     memset( &packets, 0, sizeof(struct i2c_rdwr_ioctl_data));
9.     //
10.    messages[0].addr = addr;
11.    messages[0].flags = I2C_M_RD;
12.    messages[0].len = len;
13.    messages[0].buf = (unsigned char *) buffer;
14.    packets.msgs = messages;
15.    packets.nmsgs = 1;
16.
17.    rc = ioctl(fd, I2C_RDWR, &packets );
18.    if( rc < 0 )
19.        fprintf(stderr, "Unable to read\n");
20.    else
21.        fprintf(stdout, "Read successful, rc = %d\n", rc );
22.    return rc;
23. }
```

这里fd即/dev/i2c-0的handle

addr = 0x53

len = 256

从上面code看为了读取eeprom中的256 bytes(也是该eeprom的所有空间的内容), 只是发起了read request ,

而没有看到应该先发的write 0 offset operation!可能是从 0 读取, 而eeprom device可能默认也是从 0 offset

response, 所以看上去一切正常。

/home/walterzh/work/2015-LSP/pcsgit/tools/SPD_EEPROM_init

该tool对256 bytes的i2c address为0x53的eeprom device进行write operation.

该tool并不直接对eeprom进行读写, 而是通过i2c-tools-3.1.2 package中的eeprom utility来操作的。

in eeprom_spd_init.c

```

1. static int write_spd_mem( int dev, int bus, char* filename, size_t len, bool write
   _spd )
2. {
3.
4.     char i2c_devfilename[DEV_FILENAME_LEN];
5.     char cmd_str[CMD_STR_LEN];
6.
7.     snprintf(i2c_devfilename, DEV_FILENAME_LEN-1, "/dev/i2c-%d", bus );
8.
9.     snprintf(cmd_str, CMD_STR_LEN-1, "modprobe i2c-dev;hexdump -vC %s;echo 8 > /pr
   oc/sys/kernel/printk", filename);
10.    system(cmd_str);
11.    if (true == write_spd)
12.    {
13.        snprintf(cmd_str, CMD_STR_LEN-1, "./eeprom -y -d%s -a0x%02x -w -p1 -f %s",
   i2c_devfilename, dev, filename);
14.        system(cmd_str);
15.    } else
16.    {
17.        printf("./eeprom -y -d%s -a0x%02x -w -p1 -f %s\n", i2c_devfilename, dev, f
   ilename);
18.    }
19.    snprintf(cmd_str, CMD_STR_LEN-1, "echo 7 > /proc/sys/kernel/printk");
20.    system(cmd_str);
21.
22.    return 0;
23. }

```

如下command可以programming eeprom

```

1. ./eeprom_spd_init -d0x53 -b0 -cTOC -m00:50:43:00:00:00 -sGemstone2_0123456
   -w

```