

<http://bo-srv101/redmine/issues/3256>

该issue的描述如下

The i2c-pxa driver used for I2C support on granite2 supports repeated start for a write followed by a read (likely the more common case), but does not support repeated start for a read followed by a write. We currently have a customer that uses I2C to communicate between the 6270 and a separate custom board using both write followed by read and read followed by write repeated start sequences.

Both customer testing and inspection of the i2c-pxa driver show the driver supports repeated start on a write followed by a read but does not support repeated start on a read followed by a write. The code for supporting a repeated start for transitioning from a write to another command (read or write) is in `i2c_pxa_irq_txempty()` with "repeated start" in the comments. To support a repeated start when transitioning from a read to another command (write or read), code similar to this needs to be added to the `i2c_pxa_irq_rxfull()` function.

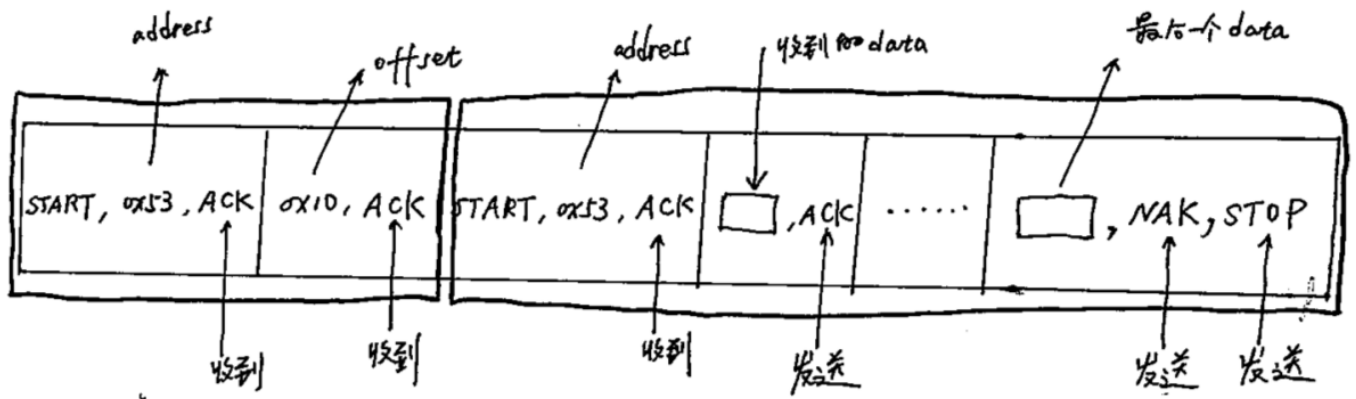
```

1.  int i2c_master_sendrecv(const struct i2c_client *client,
2.                          const char *sndbuf,
3.                          int sndcount,
4.                          char *rcvbuf,
5.                          int rcvcount)
6.  {
7.      int ret;
8.      struct i2c_adapter *adap = client->adapter;
9.      struct i2c_msg msg2;
10.
11.      msg0.addr = msg1.addr = client->addr;
12.      msg0.flags = msg1.flags = client->flags & I2C_M_TEN;
13.      msg1.flags |= I2C_M_RD;
14.      msg0.len = sndcount;
15.      msg0.buf = (char *)sndbuf;
16.      msg1.len = rcvcount;
17.      msg1.buf = (char *)rcvbuf;
18.
19.      ret = i2c_transfer(adap, msg, 2);
20.
21.      return (ret == 2) ? 0 : -1;
22.  }
23.
24.  int i2c_master_recvsend(const struct i2c_client *client,
25.                          char *rcvbuf,
26.                          int rcvcount,
27.                          const char *sndbuf,
28.                          int sndcount)
29.  {
30.      int ret;
31.      struct i2c_adapter *adap = client->adapter;
32.      struct i2c_msg msg2;
33.
34.      msg0.addr = msg1.addr = client->addr;
35.      msg1.flags = msg0.flags = client->flags & I2C_M_TEN;
36.      msg0.flags |= I2C_M_RD;
37.      msg0.len = rcvcount;
38.      msg0.buf = (char *)rcvbuf;
39.      msg1.len = sndcount;
40.      msg1.buf = (char *)sndbuf;
41.
42.      ret = i2c_transfer(adap, msg, 2);
43.
44.      return (ret == 2) ? 0 : -1;
45.  }

```

根据描述，i2c_master_sendrecv()在现有i2c-pxa driver中已经支持，但i2c_master_recvsend()部支持！

i2c_master_sendrecv()就有点像对eeprom的读操作。



I2C device 的 address 为 0x53

从 0x10 offset 处读取 10 个 bytes

每发送/接收一个 byte, 都要有 ACK/NAK 对应

msg0 发送的是 eeprom 的 offset, 而 msg1 则是要读取的内容。

这里关键是 msg0 不能发送 STOP signal.

i2c_master_recvsend() 在 eeprom 的场景中好像没有。