G8200 FPGA Test Report

Spec

- Address = 0X48

Test Condition

- Clock = 400KHz

Test Item

Item	Result
[I2C Test Pattern](#)	**Fail**

I2C Test Pattern

Item	Result
Read/Write Test	**Pass**
Write/Read Data to Register Check	**Fail**

Device Address Check

Read/Write Test

- Action :Read register 0 from device Address 0~127.

- Check: If there is any response from the address other than 0X48

- Result: **Pass**

  Test Log

### Write/Read Data to Register Check

確認暫存器寫入功能

- Action:

  - 對 Register 0x00~0x0xFF 開始執行單筆寫入 1byte 到 256byte

  - 寫入1byte是以一循環是以 bit 位移七次，也就是 byte 值為 1->2->4->8->...->127 為寫入循環

- Check: 檢查是否有寫回ACK

- Result:

  - 寫入 `0XF0` 後,再寫入其他register沒有發出ACK

```
I2C Write Address= 0X48, reg 0XF0
Data = 0X01 ACK
Data = 0X02 ACK
Data = 0X04 ACK
Data = 0X08 ACK
Data = 0X10 ACK
Data = 0X20 ACK
Data = 0X40 ACK
Data = 0X80 ACK
I2C Write Address= 0X48, reg 0XF1
Data = 0X01 Failed
Data = 0X02 Failed
Data = 0X04 Failed
Data = 0X08 Failed
Data = 0X10 Failed
Data = 0X20 Failed
Data = 0X40 Failed
Data = 0X80 Failed
```

Write REG 0XF0 = 0X01. **PASS**
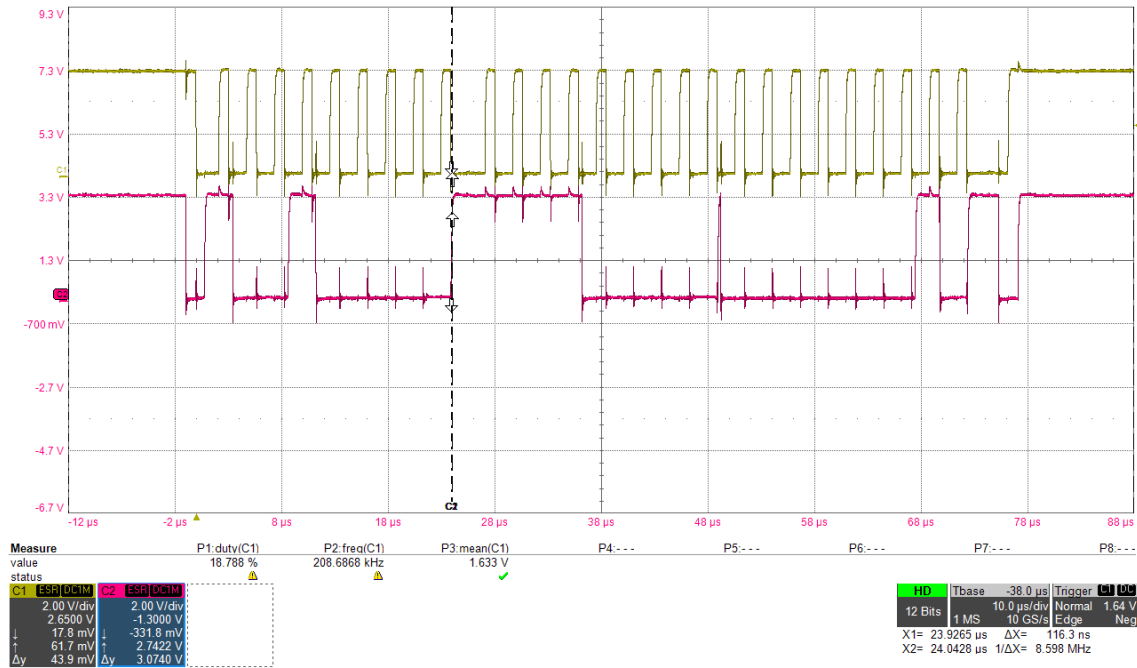
Write REG 0XF1 = 0X01 after write REG0XF0. **No ACK**
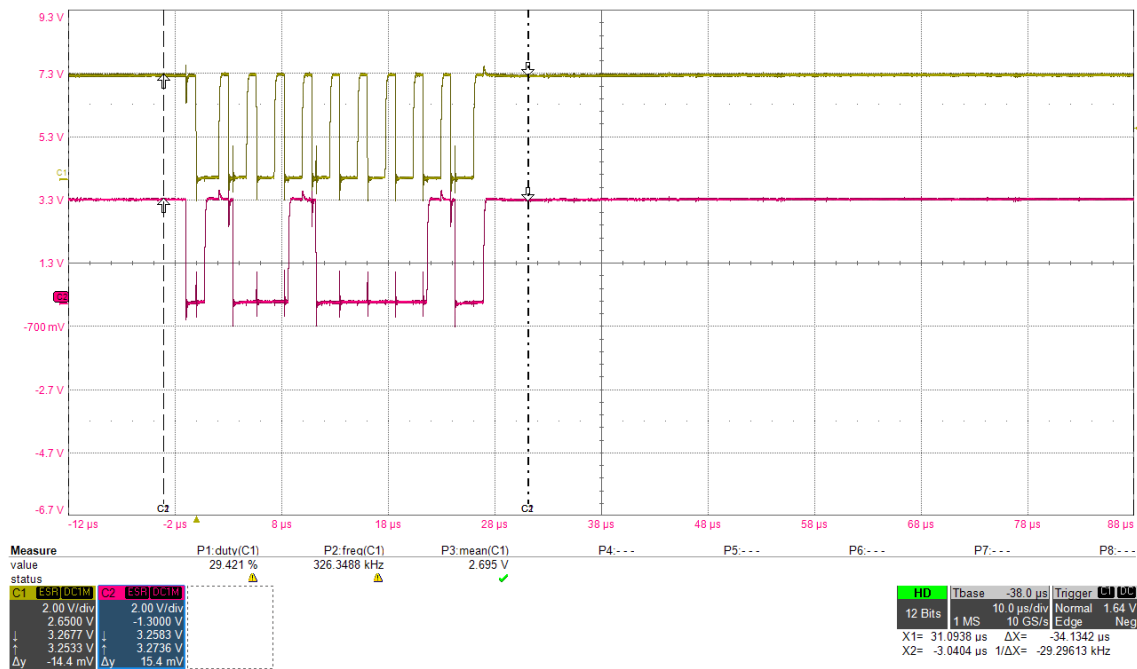
- Note:
    - 重複寫G8200會發生錯誤 => add MCU I2C write timeout