

If I try the following code

```
static void fnConfigIIC_Interface(void)
{
    IICTABLE tIICParameters;

    tIICParameters.Channel = 0;
    tIICParameters.usSpeed = 100;           // 100k
    tIICParameters.Rx_tx_sizes.TxQueueSize = 64; // transmit queue size
    tIICParameters.Rx_tx_sizes.RxQueueSize = 64; // receive queue size
    tIICParameters.Task_to_wake = 0;        // no wake on transmission

    if ((IICPortID = fnOpen( TYPE_IIC, FOR_I_O, &tIICParameters)) != 0) { // open the channel with defined configurations
        fnWrite(IICPortID, (unsigned char *)&IIC_WrTC665_FanSlow, sizeof(IIC_WrTC665_FanSlow)); // set the fan speed
        fnRead(IICPortID, (unsigned char *)&IIC_Rd8575_0); // start the read process of 16 bytes
        fnRead(IICPortID, (unsigned char *)&IIC_Rd8575_1, 0); // start the read process of 16 bytes
        fnRead(IICPortID, (unsigned char *)&IIC_Rd8575_2, 0); // start the read process of 16 bytes
        fnRead(IICPortID, (unsigned char *)&IIC_Rd8575_3, 0); // start the read process of 16 bytes
    }
}
```

I get this trace,



But if I swap the order of the reads as below

```
fnRead(IICPortID, (unsigned char *)&IIC_Rd8575_0); // start the read process of 16 bytes
fnRead(IICPortID, (unsigned char *)&IIC_Rd8575_3, 0); // start the read process of 16 bytes
fnRead(IICPortID, (unsigned char *)&IIC_Rd8575_2, 0); // start the read process of 16 bytes
fnRead(IICPortID, (unsigned char *)&IIC_Rd8575_1, 0); // start the read process of 16 bytes
```

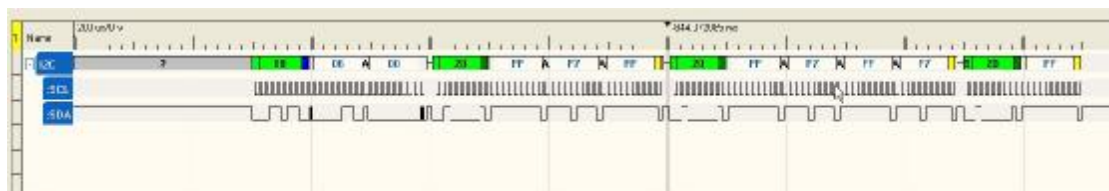
I get



Now if I put the single byte read in the middle

```
fnRead(IICPortID, (unsigned char *)&IIC_Rd8575_0); // start the read process of 16 bytes
fnRead(IICPortID, (unsigned char *)&IIC_Rd8575_3, 0); // start the read process of 16 bytes
fnRead(IICPortID, (unsigned char *)&IIC_Rd8575_2, 0); // start the read process of 16 bytes
fnRead(IICPortID, (unsigned char *)&IIC_Rd8575_1, 0); // start the read process of 16 bytes
```

I get



So why is uTasker trying to read one more byte than requested? And when a single byte read is requested the IIC bus seems to lockup.

When run in the simulator this seems to work so I'm at a bit of a loss.