

Following figures are whole command sequence on ADS1240.

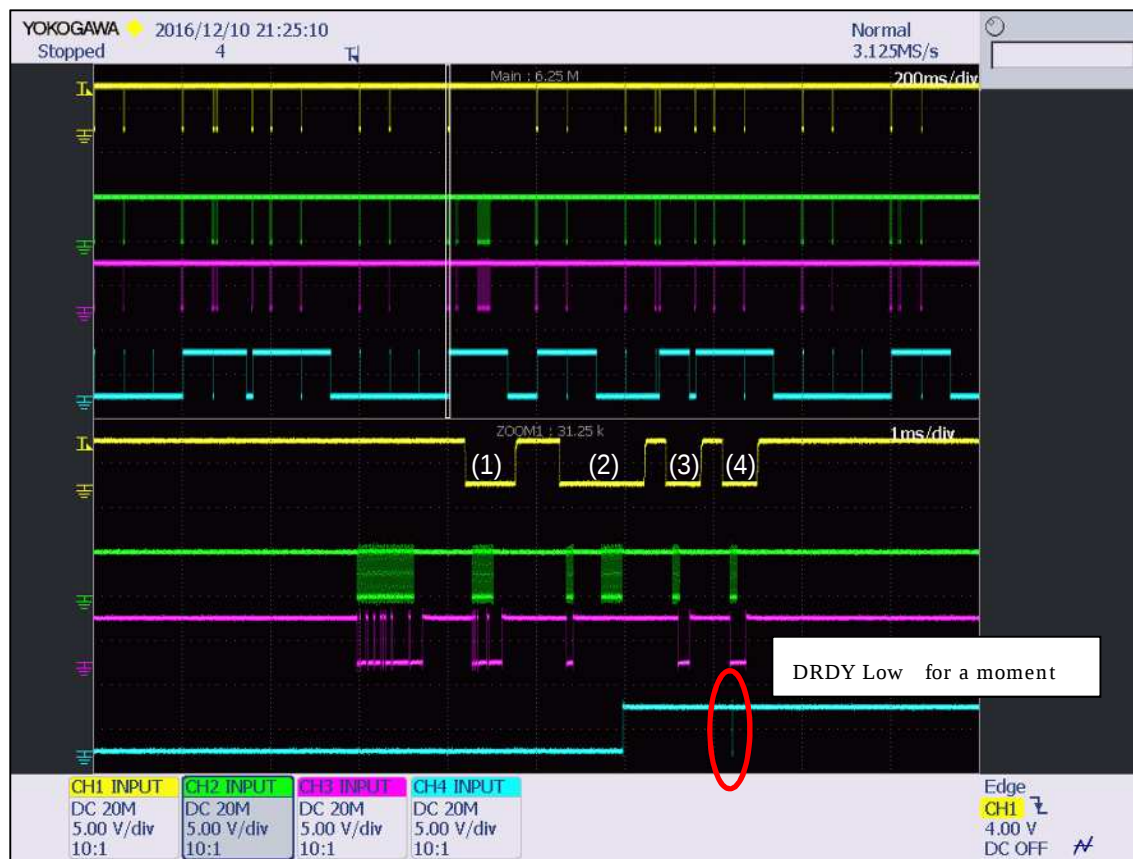


Figure.1 Whole command sequence (Yellow:CS Green:CLK Pink:DIN Blue:DRDY)

(1): ACR command (15 Hz setting) : write 0x60

bit 7	bit 6	bit 5	bit 4	bit 3	bit 2	bit 1	bit 0
DRDY	U/B	SPEED	BUFEN	BIT ORDER	RANGE	DR1	DR0
0	1	1	0	0	0	0	0

(2): Measurement reading (**processing to set DRDY to H**)

OP CODE = 0000 0001 (01H)

(3): DSYNC command

OP CODE = 1111 1100 (FCH)

(4): Dummy clock (start conversion at the first SCLK rising edge)

0x00 1byte sent

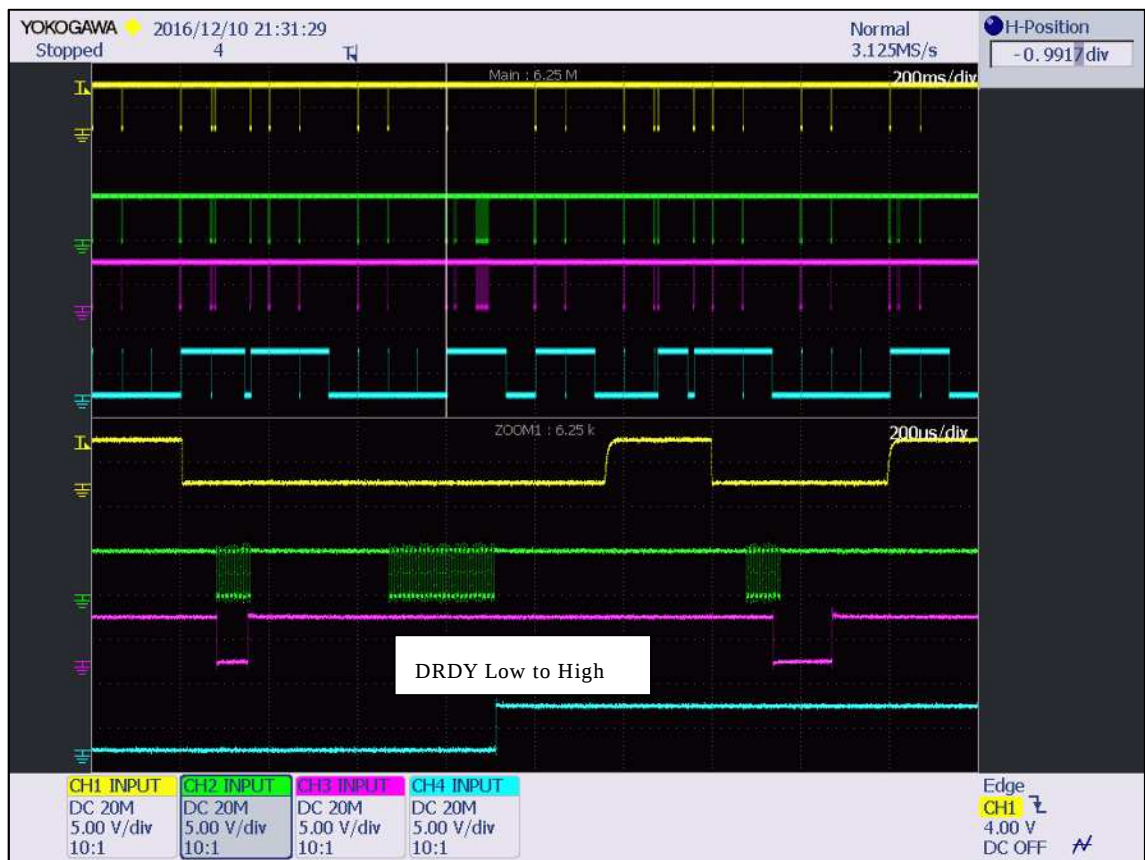


Figure.2 Measurement data reading (Yellow:CS Green:CLK Pink:DIN Blue:DRDY)

(2): Measurement reading (**processing to set DRDY to H**)

OP CODE = 0000 0001 (01H)



Figure.3 **Zoomed DRDY High** timing on measurement data reading (3)
 (Yellow:CS Green:CLK Pink:DIN Blue:DRDY)



Figure.4 DSYNC command and DUMMY command (Yellow:CS Green:CLK Pink:DIN Blue:DRDY)

(3): DSYNC command

OP CODE = 1111 1100 (FCH)

(4): Dummy clock (start conversion at the first SCLK rising edge)

0x00 1byte sent

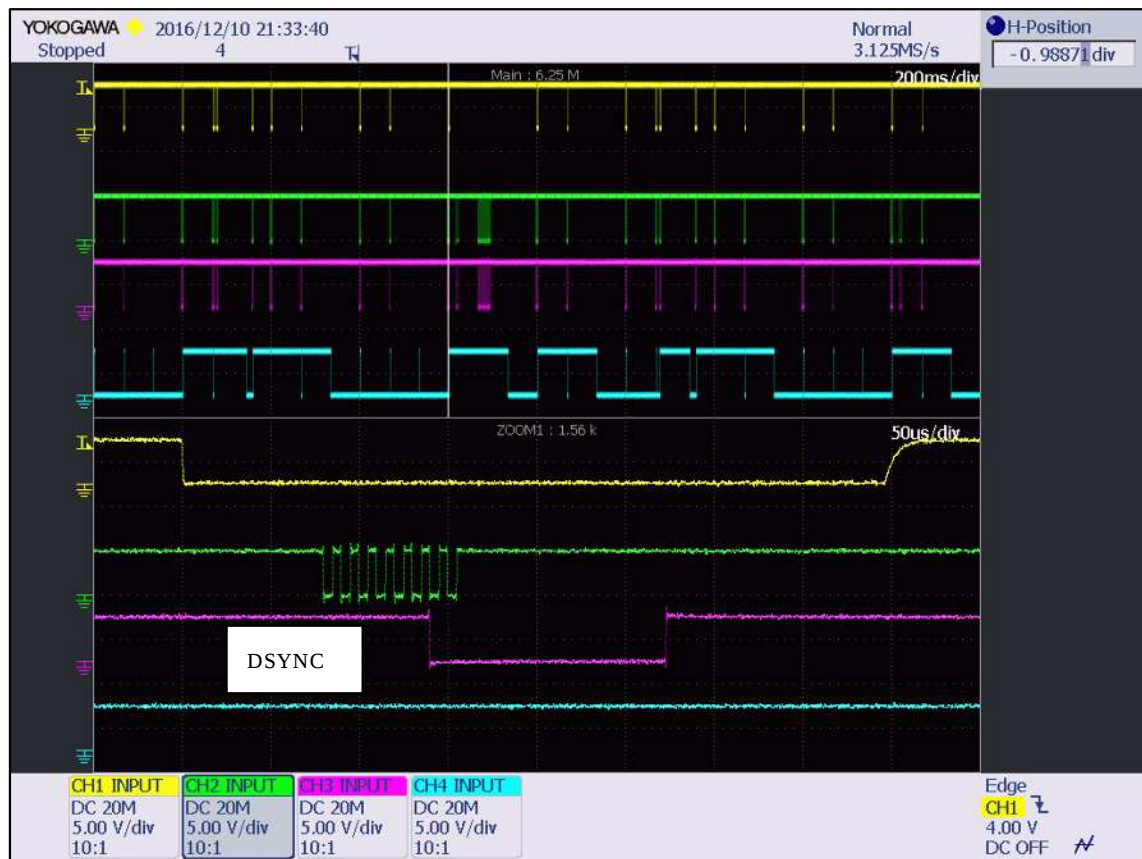


Figure.5 Zoomed DSYNC Command (Yellow:CS Green:CLK Pink:DIN Blue:DRDY)

(3): DSYNC command

OP CODE = 1111 1100 (FCH)

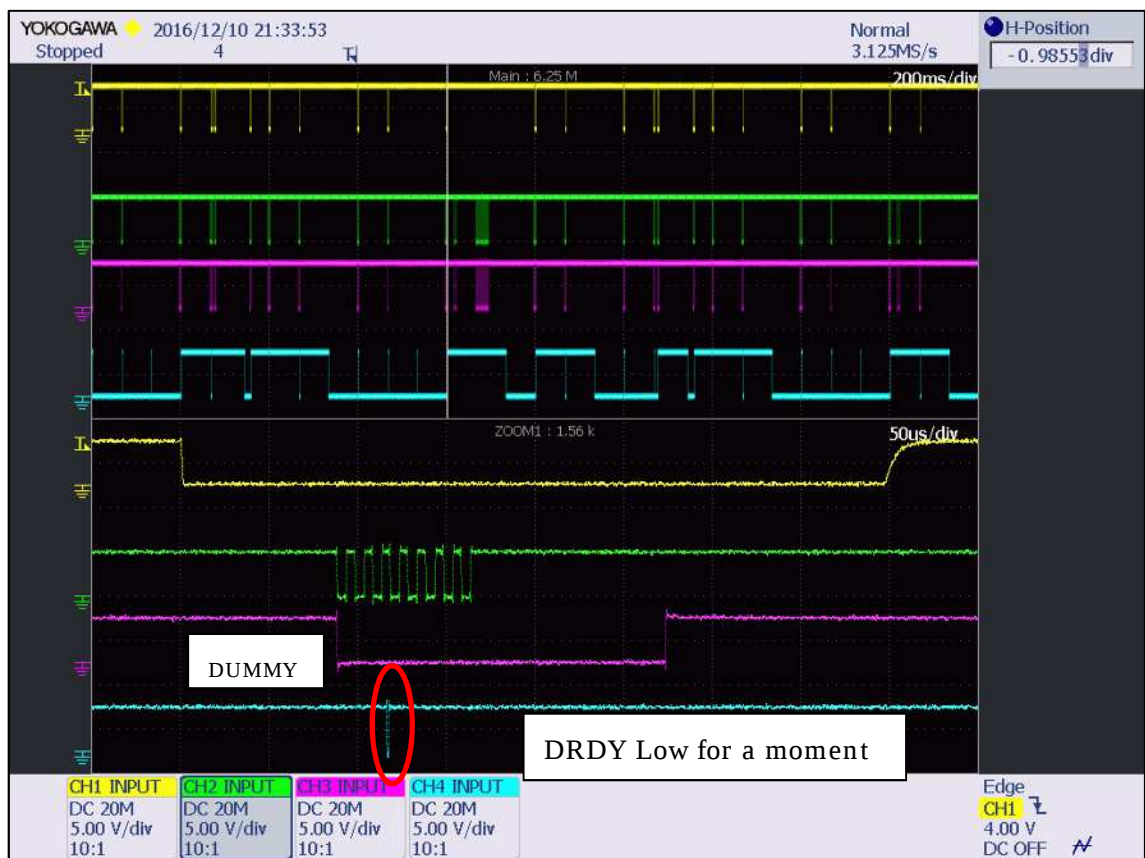


Figure.6 Zoomed Dummy Command (Yellow:CS Green:CLK Pink:DIN Blue:DRDY) (3):

(4): Dummy clock (start conversion at the first SCLK rising edge
 0x00 1byte sent

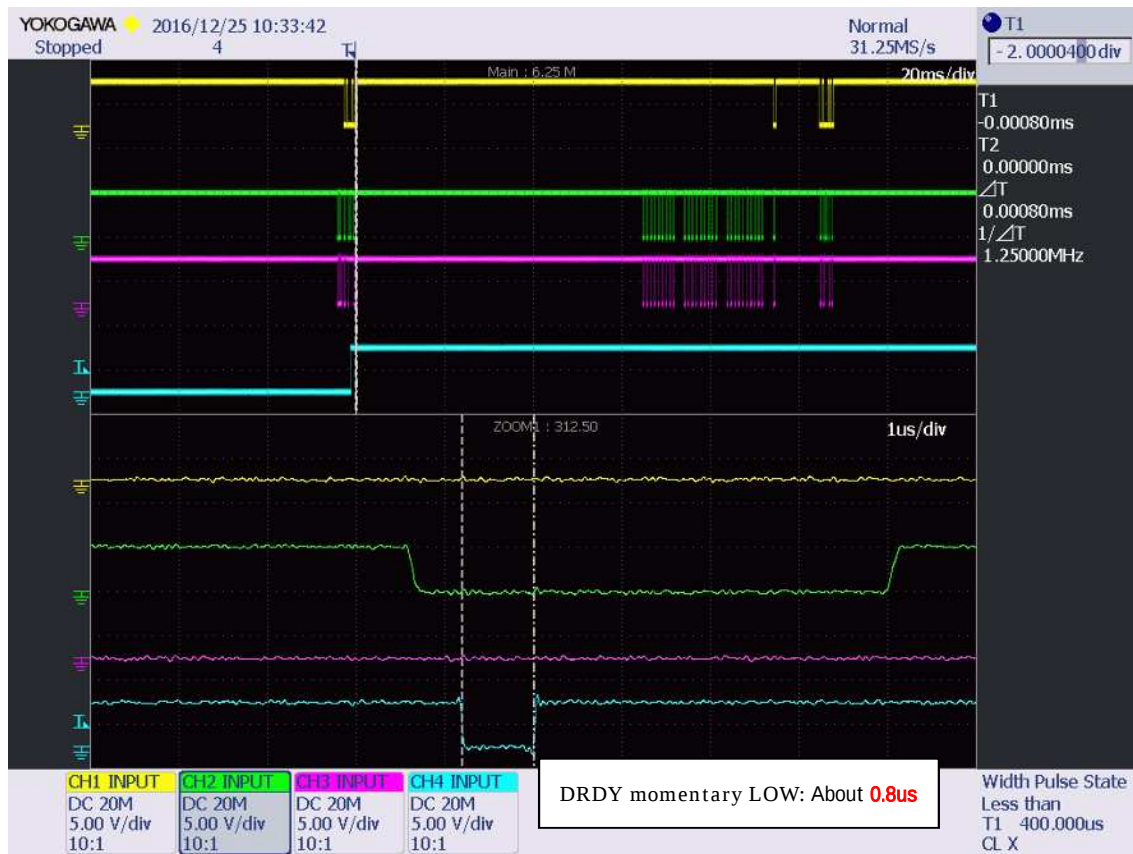


Figure.7 Zoomed momentary DRDY Low (Yellow:CS Green:CLK Pink:DIN Blue:DRDY)

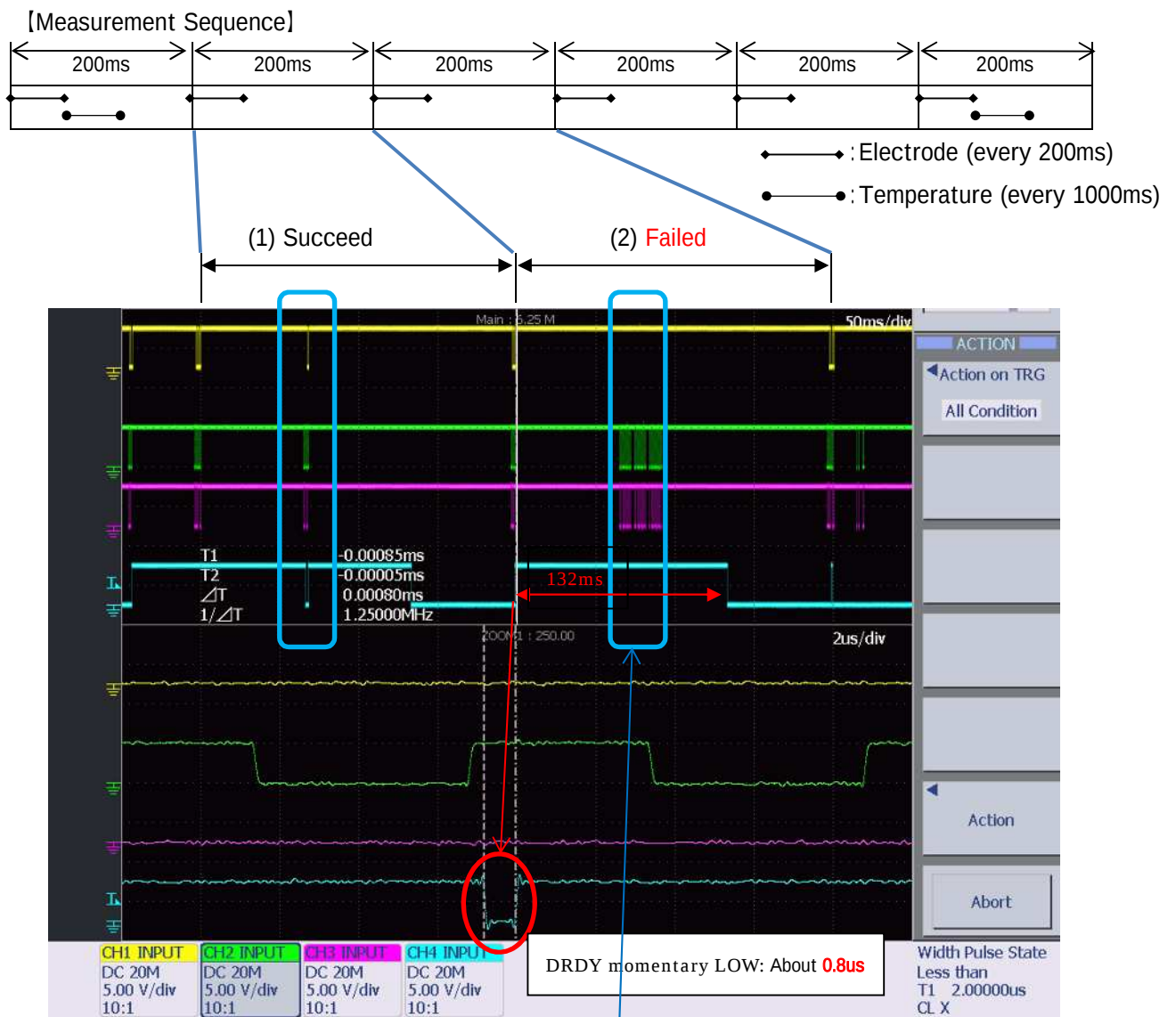


Figure.8 Whole waveform when error occurred (Yellow:CS Green:CLK Pink:DIN Blue:DRDY)

1) Measurement succeed

2) Measurement failed DRDY/ keeps High at blue circle.