Canon VietNam Co.,LTD.

ENGINEERING REPORT

IJPE-0008
Attachment 01/Rev03

ISSUE NO.:

MODEL:	TITLE:	APPROVED BY:
	T565 happened LCD display E302-001 at combox	
PART NO.:	PURPOSE:	CHECKED BY:
PART NAME:	**Report for problem LCD display E302-001 at combox 1 checker of T565 model**	ISSUED BY: DATE: EXT:

DETAILS: (☑Trouble:1. Problem, 2.Cause, 3.Temporary solution, 4.Permanent solution
☐echnical report: 1.Background, 2.Conclusion, 3.Result)

I. PROBLEM

II. INVESTIGATION

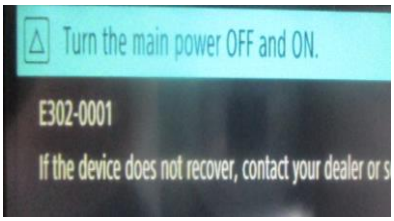
III. CONCLUSION

IV. ACTION

attached sheet for: 0

I. PROBLEM :

- Phenomenon: LCD display E302-001 at combox 1 checker
- Model: T565
- Line : All cell T565
- Quantity : 5 pcs
- Time happen : From Jan to Feb.23
- Cause : IC38 on AQUA unit NG



Detail:

No	Model	Date happened	Part no	Seri AQUA	Lot product	Q'ty
1	T565	16-Jan-23	FM3-B937	5C625A24783A	30106001	1
2	T565	17-Jan-23	FM3-B937	5C625A246C67	30104001	1
3	T565	18-Jan-23	FM3-B937	5C625A246BD5	30104001	1
4	T565	6-Feb-23	FM3-B936	5C625A247C1E	30107001	1
5	T565	7-Feb-23	FM3-B936	5C625A24A9B1	30130001	1

II. INVESTIGATION :

E302-001 happened when the light intensity is below the reference level at shading.

=> It come from ADF unit NG or AQUA unit NG.

1. Exchange AQUA unit :

	OK AQUA	NG AQUA
OK machine	OK	NG
NG machine	OK	NG (Normal machine)

=> AQUA unit NG

2. Recheck FCT :

=> Result: 5/5 pcs Pass FCT

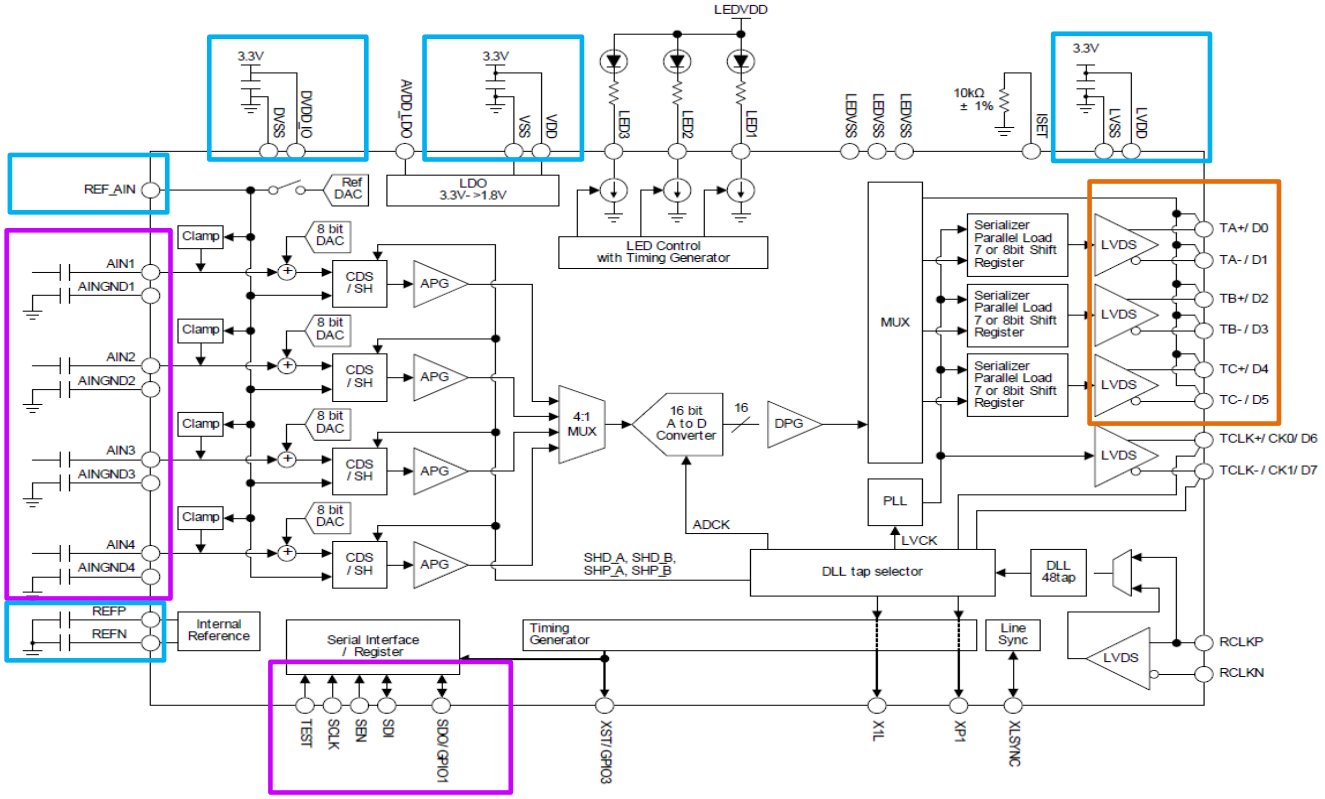
=> FCT can't detect problem.

3. Investigate AQUA unit :

3.1 Apperance check: No detect abnormal

3.2 Measurement waveform

*** AFE diagram block** Power & referance Serial interface & analog input Data output



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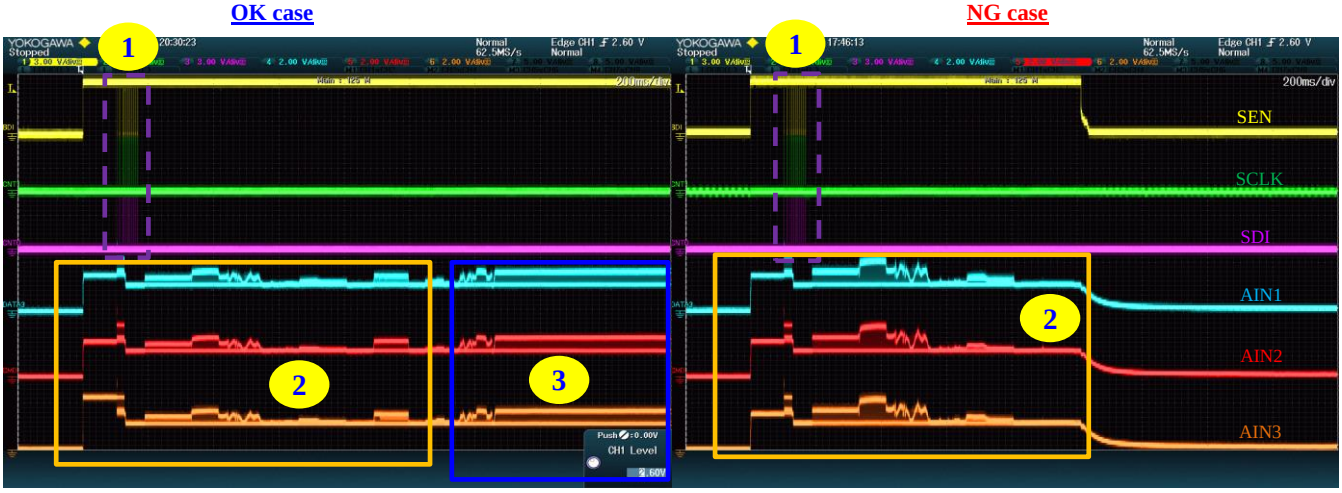
*** Measurement power signal for AFE unit**

OK case NG case

=> No detect abnormal point (power supply for AFE is OK)

*** Measurement seting signal & Analog input signal for AFE unit**

OK case NG case



Zoom block 1 OK case NG case

Block	Function/ activity	Compare OK case/ Judgement
1	Set up serial interface between AFE (IC38) & ASIC (IC1)	**No detect abnormal**
2	Input signal (input to AINx)	**No detect abnormal**
3	Output signal (after convert)	**Abnormal:** frequence… (see next page)

=> Suggest AFE was NG (ADC block).

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*** Measurement Analog input signal & out put signal for AFE unit**

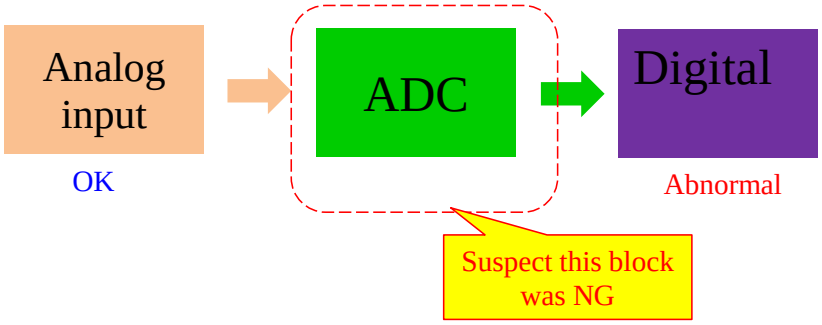
OK case

NG case

Zoom 6.25M

Zoom125k

=> NG case: data output was abnormal (same with chanel AIN2,TB+/D2,TB-/D3, AIN3,TC+/D4,TC-/D5)



3.3 Temperature test (On IC 38)

- Normal (25~27 °C) : Still NG
- Cool down (10 °C) : Still NG
- Heat up (50 °C) : Still NG

=> NG case no affect by temperature.

3.4 Exchange IC38

	OK AQUA	NG AQUA
OK IC38	OK	OK
NG IC38	NG	NG

=> Sure IC38 on AQUA unit was NG

3.5 IC38 measurement by tester

=> No detect abnormal point

Pin no	Pin name	OK	NG
1	VSS	0	0
2	AIN1	0.49	0.5
3	AINGND1	0.49	0.5
4	AIN2	0.49	0.5
5	AINGND2	0.49	0.5
6	AIN3	0.49	0.5
7	AINGND3	0.49	0.5
8	AIN4	0.49	0.5
9	AINGND4	0.49	0.5
10	VSS	0	0
11	REF_AIN	0.49	0.5
12	ISET	0.49	0.5
13	REFP	0.39	0.43
14	REFN	0.35	0.39
15	VSS	0	0
16	VDD	0.48	0.5
17	LEDVSS	1.5	1.5
18	LEDVSS	0.6	0.6
19	LED1	0.6	0.6
20	LED2	0.6	0.6
21	LED3	0.6	0.6
22	LEDVSS	0.6	0.6
23	RCLKN	0.49	0.5
24	RCLKP	0.49	0.5

Pin no	Pin name	OK	NG
25	SEN	0.49	0.5
26	SDI	0.49	0.5
27	SCLK	0.49	0.5
28	TCLK/CK1/D7	0.49	0.5
29	TCLK/CK0/D6	0.49	0.5
30	TC/D5	0.49	0.5
31	TC/D4	0.49	0.5
32	TB/D3	0.49	0.5
33	TB/D2	0.49	0.5
34	TA/D1	0.49	0.5
35	TA/D0	0.49	0.5
36	LVDD	0.49	0.5
37	LVSS	0.5	0.6
38	DVDD_IO	0.47	0.5
39	DVSS	0	0
40	XLSYNC	0.49	0.5
41	SDO/GPIO1	0.49	0.5
42	XST/GPIO3	0.49	0.5
43	XP1	0.49	0.5
44	X1L	0.49	0.5
45	DVSS	0	0
46	VSS	0	0
47	TEST	0.49	0.5
48	AVDD_LDO	0.4	0.4

III. CONCLUSION :

- IC38 NG make printer display E302-001 .
  + Part no: WA6-3117-000
  + Maker : TI (TEXAS INSTRUMENTS)
  + Lot no:
- Why IC38 NG? --> suspect ADC block was NG .
- Rootcause :Not yet clear

IV. ACTION :

- FB Toride improve FCT --> Result: can't improve FCT
- Send part to maker support analysis.