

Dear Sir,

Date : 2014, 06.03

Please be informed that the following technical changes will be implemented to the following product you are purchasing.

1. Background

The production line for the glass cell used in the TX09D70VM1CEA will transfer from the current V2 line to the newer more efficient V3 line in Mobara Japan. Please find below details of the changes and results of the optical tests performed to confirm compatibility between the old and new versions.

2. Content of Change

Please see below comparison table for the specification comparison and changed portion. The TFT LCD front end process will start its production on the newer line as explained. The components (Driver IC, FPC, LED backlight unit, polarizer, touch panel, etc.) have been used in the display module are the same.

TX09D70VM1CEA	Current specification	New
LCD front end process	V2 TFT line	V3 TFT line
Active area	53.64 (W) x 71.52 (H)	←
Outline	64.0 (W) x 86.0 (H) x 4.0 (D)	←
Viewing direction	6H	←
Op-Temp	-20~70	←
St-Temp	-30~80	←
Brightness(cd/m2)	320	←
Contrast	300	←
B/L	LED	←
LED life time (Hour)	10K	←
NTSC Ratio	48	54
Viewing angle (U/D/R/L)	U/D:140, L/R:140	←
Power supply voltage	3.3V	←
T/P	4 wire resistive type	←

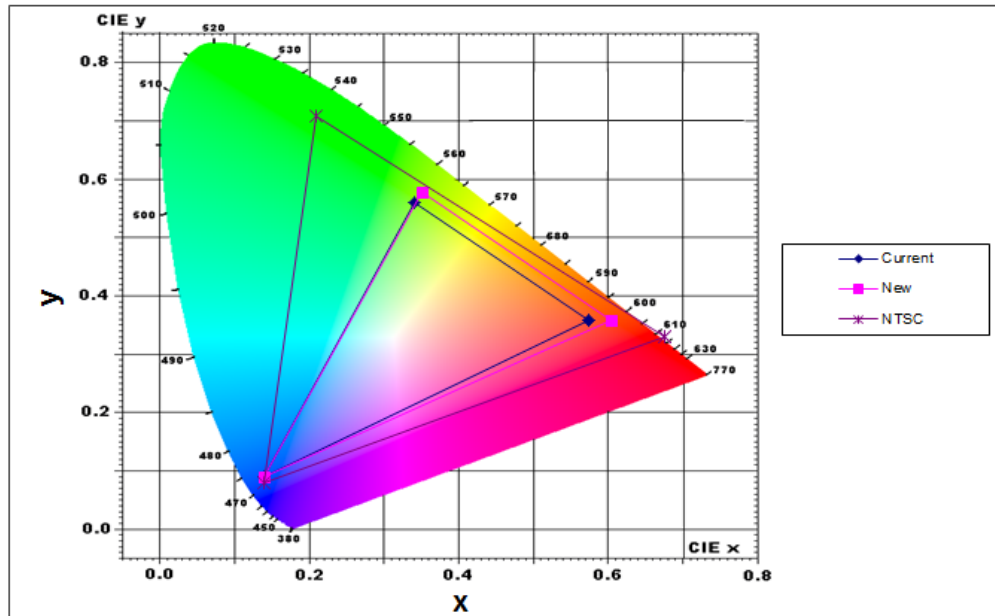
TX09D70VM1CEA comparison table

Optical Characteristic			Spec.			V2 LCD		V3 LCD		Product compliance
			Min.	Typ.	Max.	SPL1	SPL2	SPL1	SPL2	
Color Tone	R	X	0.55	0.6	0.65	0.573	0.571	0.597	0.595	Pass
		Y	0.29	0.34	0.39	0.359	0.36	0.357	0.358	Pass
	G	X	0.28	0.33	0.38	0.341	0.335	0.352	0.353	Pass
		Y	0.54	0.59	0.64	0.562	0.567	0.584	0.581	Pass
	B	X	0.09	0.14	0.19	0.141	0.14	0.146	0.144	Pass
		Y	0.07	0.12	0.17	0.094	0.095	0.093	0.091	Pass
	W	X	0.27	0.32	0.37	0.311	0.304	0.303	0.304	Pass
		Y	0.29	0.34	0.39	0.311	0.311	0.318	0.318	Pass
NTSC (%)				—		47	48	53	52	—

Sample measurement data

3. Variation in product specification

The specification remains mainly unchanged, however due to TFT production line change, the associated color filter improves the LCD's color saturation (NTSC ratio) from 48% to 54%. Please refer to below comparison table for the detailed spectrum comparison.



NTSC comparison table


4. Schedule

4.1 The running change will be implemented. Change timing will depend on customer's demand to consume the LCD stock. The accurate Lot No will be notified 4 weeks before shipment.

4.2 The Rev No. will be changed to identify the change.

Item	Current	New
Rev No.	C	D

Thank you for your cooperation and understanding.

Proposed by : 
 Ken Chen / Section Manager
 Direct LCM Design Section
 KOE Product Business Unit 1