

OPTREX

To whom may concern.

Issued on February 13 2009

Product Change Notification

Thank you for your support of our TFT-LCD.

Nowadays, the demand of high image quality is essential for industrial LCD fields. To meet the demands, we will release new models for 6.5VGA to get better image quality. The new products have NCM* function, wider viewing angle compared with current models.

This letter is to inform you that we are changing our 6.5VGA product in order to achieve technical advancements.

*) NCM: Natural Color Matrix function is our original color reproduction technology.

Issue Date	Last Buy Date	Notification No.	Last Ship Date
13-Feb-2009	In August 2009	ECN003	TBD

Product:

New model	Current model	Note
T-51952D065J-FW-A-ADN	T-51952D065J-FW-A-ABN	High brightness & Anti-glare model
T-51952D065J-FW-A-AEN	T-51952D065J-FW-A-ACN	High brightness & Anti-reflection model

New models are ready for production subjecting to 90 days lead time after PO issue.

Description of Change:

- NCM function is built in.
- White color point and color coordination had changed.
- Circuit board, controller IC and driver IC had changed.

Colors and images will change. EMI characteristics may change due to above change. And Outline dimension and connector pin assignment are compatible between both models.

See details in attachment.

Effect of Change:

There is no effect on quality, i.e. performance, reliability, mechanical size, electrical, or RoHS compliance.

Schedule:

- MP schedule: Janury 2009 with 90 dasy lead time

Optrex Corporation
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Items	Current	New
	T-51952D065J-FW-A-AA/ABN/ACN	T-51952D065J-FW-A-ADN/AEN
(a) Overview		
Viewing Angle (CR≥10)	-70~70°(H) -60~50°(V)	-80~80°(H) -60~80°(V)
NCM	No	Yes
(b) Absolute Maximum Ratings		
Power Supply Voltage for LCD [VCC]	Max: 6.5	Max: 4.0
Logic Input Voltage [VI]	Max: 6.5	Max: 6.0
(c) Electrical Characteristics		
Power Supply (5.0V powered) [VCC]	Yes	Not supported
Power Supply Current for LCD (3.3V) [ICC]	Typ: 200, Max: 300	Typ: 185, Max: 280
(d) Interface Pin Connection		
Pin No. 3 [HD]	Yes	N/A
Pin No. 4 [VD]	Yes	N/A
Pin No. 28 & 29 [VCC]	3.3/5.0V Power Supply	3.3V Power Supply
(e) Interface Timing		
DENA	Front porch & Back porch are defined.	Blanking time, Frequency & Period are defined.
HD & VD	Yes	N/A
(e) Optical Characteristics		
Viewing Angle (CR≥10)	-70~70°(H) -60~50°(V)	-80~80°(H) -60~80°(V)
Viewing Angle (CR≥5)	-80~80°(H) -80~70°(V)	Not defined

Items	Current	New
	T-51952D065J-FW-A-ABN/ACN	T-51952D065J-FW-A-ADN/AEN
Color Coordinates		
Red	Rx: 0.583±0.03, Ry: 0.333±0.03	Rx: 0.579±0.03, Ry: 0.331±0.03
Green	Gx: 0.330±0.03, Gy: 0.539±0.03	Gx: 0.332±0.03, Gy: 0.539±0.03
Blue	Bx: 0.165±0.03, By: 0.173±0.03	Bx: 0.161±0.03, By: 0.156±0.03
White	Wx: 0.322±0.03, Wy: 0.338±0.03	Wx: 0.313±0.03, Wy: 0.329±0.03