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SPEC. NUMBER

PRODUCT GROUP
TFT-LCD

Rev. P2

ISSUE DATE
2023.11.8

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DCE080X0B-N83-1000 Product Specification

SUPPLIER	
Model	DCE080X0B-N83-1000

ITEM	BUYER SIGNATURE	DATE
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ITEM	SUPPLIER SIGNATURE	DATE
Prepared	Jian Shi	2023.11.8
Reviewed	_____	_____
	_____	_____
Approved	_____	_____

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REVISION HISTORY				
REV.	ECN No.	DESCRIPTION OF CHANGES	DATE	PREPARED
P0	-	Initial Release	2023.7.17	Jian Shi
P1	-	1pin Vcom Description modify to NC	2023.9.25	Jian Shi
P2	-	Update electrical parameter	2023.11.8	Jian Shi



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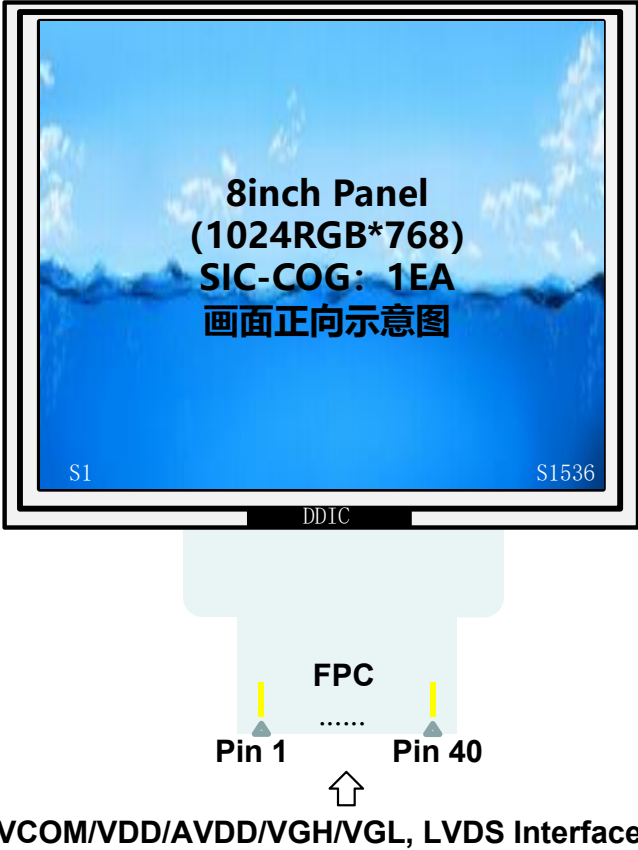
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1.0 GENERAL DESCRIPTION

1.1 Introduction

DCE080X0B-N83-1000 is a color active matrix TFT LCD open cell using amorphous silico TFT's(Thin Film Transistors) as an active switching devices. This OC has a 8 inch diagonally measured active area with resolutions (1024 horizontal by 768 vertical pixel array). Each pixel is divided into RED, GREEN, BLUE dots which are arranged in vertical stripe and this OC can display 16.7M colors. The TFT-LCD panel used for this OC is adapted for a low reflection and higher color type.



1.2 Features

- LVDS interface(OLB compatible with RGB/MIPI)
- High-speed response
- Low color shift image quality
- 8-bit color depth, display 16.7M colors
- High luminance and contrast ratio, low reflection and wide viewing angle
- RoHS compliant



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1.3 Application

- Industrial Control Display

1.4 General Specification

< Table 1. General Specifications >

Parameter	Specification	Unit	Remarks
Active area	162.048 (H) *121.536 (V)	mm	
CF size	167.248(H)*128.336(V)	mm	
Panel size	167.248(H)*131.336 (V)	mm	
Number of pixels	1024(H) ×768(V)	pixels	
Pixel pitch	158.25*158.25	um	
Pixel arrangement	Pixels RGB Vertical stripe		
Display mode	Normally Black		
Display colors	16.7M (8bits)	colors	
Dimensional outline	167.248(H) × 131.336(V) × 1.04 (B)	mm	W/O FPC
Weight	Max 55g	g	
Power Consumption	404mW	Watt	
Open Cell Transmittance	Typ. 4.9% , Min 3.9%	%	At center point with DCEBLU
Surface Treatment	HC/Clear (CF /TFT POL)		
Seal Area (L/R/U/D)	2.6/2.6/2.6/4.2	mm	



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2.0 ABSOLUTE MAXIMUM RATINGS

The followings are maximum values which, if exceed, may cause faulty operation or damage to the unit. The operational and non-operational maximum voltage and current values are listed in Table 2.

< Table 2. Open Cell Electrical Specifications >

Parameter	Symbol	Min.	Max.	Unit	Remark
Power Supply Voltage	VDD	-0.3	3.96	V	Ta = 25 °C
	AVDD	-0.3	12	V	
	VGH	-0.3	20	V	
	VGL	-8	0.3	V	
Operating Temperature	T _{OP}	-30	+80	°C	Note 1
Storage Temperature	T _{ST}	-30	+80	°C	
Operating Ambient Humidity	Hop	10	90	%RH	
Storage Humidity	Hst	10	90	%RH	
Panel Surface Temperature	PST	-	65	°C	Note 2

Note 1 : Wet bulb temperature should be 39 °C max. and no condensation of water.

Note 2 : Surface temperature is measure at 50°C Dry condition