Next Vision Display

Brighten The Future

NT070-N001ML

TFT-LCD module. It is composed of a TFT-LCD panel, driver IC, FPC,a back light unit. The 7.0″ display area contains 800x 480pixels and can display up to 16.7M colors. This product accords with RoHS environmental criterion.

Item	Contents	Unit	Note
LCD Type	TFT	-	
Display color	16.7M		
Viewing Direction	12	O'Clock	
Gray scale inversion direction	6	O'Clock	
Operating temperature	-30~+85	℃	
Storage temperature	-30~+85	℃	
Module size	Refer to outline drawing	mm	
Active Area(W×H)	154.08X85.92	mm	
Number of Dots	800×480	dots	
Controller	GATE: HX8664-B SOURCE :HX8264-E	-	
Power Supply Voltage	3.3	V	
Outline Dimensions	Refer to outline drawing	-	
Backlight	3X9-LEDs (white)	pcs	
Weight	---	g	
Interface	RGB888	-	

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Absolute Maximum Ratings(Ta=25℃)

Electrical Absolute Maximum Ratings.(Vss=0V ,Ta=25℃)

Item	Symbol	Min.	Max.	Unit	Note
Power Supply Voltage	V_{DD}	-0.3	5.0	V	1，2
	AV_{DD}	6.5	13.5	V	
	V_{GH}	-0.3	42.0	V	
	V_{GL}	-20	0.3	V	
	V_{GH}-V_{GL}	-	40.0	V	

Notes:

1. If the module is above these absolute maximum ratings. It may become permanently damaged. Using the module within the following electrical characteristic conditions are also exceeded, the module will malfunction and cause poor reliability.
2. V_{CC} >V_{SS} must be maintained.

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Typical operation conditions

Item	Symbol	Values			Unit	Remark
		Min.	Typ.	Max.		
Power voltage	VDD	3.0	3.3	3.6	V	
	AVDD	10.2	10.4	10.6	V	
	VGH	-	16	-	V	
	VGL	-	-7.0	-	V	
Input signal voltage	VCOM	-	4.1	-	V	
Input logic high voltage	VIH	0.7 VDD	-	VDD	V	
Input logic low voltage	VIL	0	-	0.3VDD	V	

Environmental Absolute Maximum Ratings.

Item	Storage		Operating		Note
	MIN.	MAX.	MIN.	MAX.	
Ambient Temperature	-30℃	85℃	-30℃	85℃	1,2
Humidity	-	-	-	-	3

1. The response time will become lower when operated at low temperature.
2. Background color changes slightly depending on ambient temperature.

   The phenomenon is reversible.
3. Ta<=40℃:85%RH MAX.

   Ta>=40℃:Absolute humidity must be lower than the humidity of 85%RH at 40℃.

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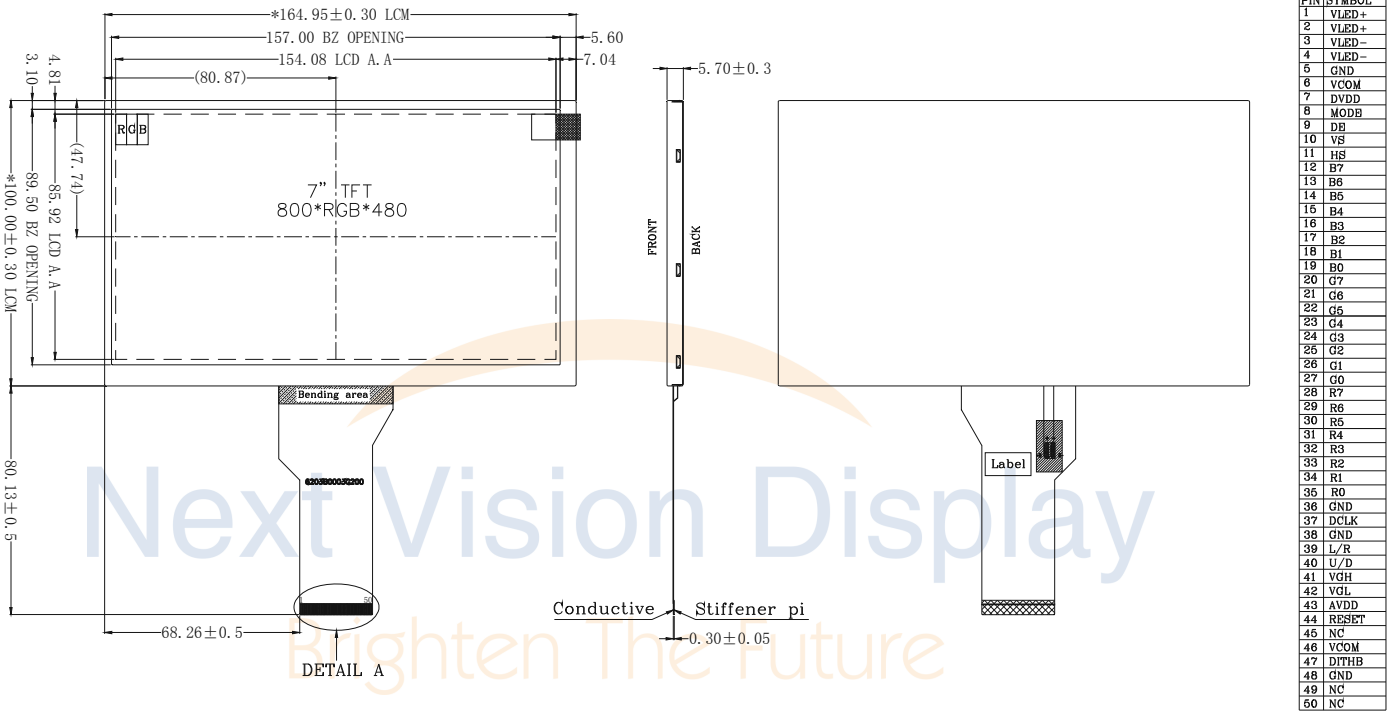
Interface signals

Pin No.	Symbol	I/O	Function
1-2	VLED+	P	LED back light(Anode)
3-4	VLED-	P	LED back light(Cathode)
5	GND	P	Ground.
6	VCOM	P	Common voltage
7	DVDD	P	Power supply
8	MODE	I	DE/YSNC mode select
9	DE	I	Data enable pin
10	VSYNC	I	Frame sync signal
11	HSYNC	I	Line sync signal
12-19	B7~B0	I	Blue data bus
20-27	G7~G0	I	Green data bus
28-35	R7~R0	I	Red data bus
36	GND		Ground.
37	DCLK	I	Data clock
38	GND	P	Ground.
39	L/R	I	Right/Left sequence control of source driver
40	U/D	I	Gate driver Up/Down scan control of gate driver
41	VGH	I	Gate on voltage
42	VGL	P	Gate off voltage
43	AVDD	P	power for analog circuit
44	RESET	I	Chip reset pin
45	NC	-	No connection.
46	VCOM	P	Common voltage
47	DITHB	I	Dithering function
48	GND	P	Ground
49-50	NC	-	No connection.

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Outline Drawing

ALL PAGES OF THIS VERSION APPROVED			
SIGNATURE:		DATE:	

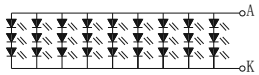


PIN	SYMBOL
1	VLED+
2	VLED+
3	VLED-
4	VLED-
5	GND
6	VCOM
7	DVDD
8	MODB
9	DE
10	VS
11	HS
12	B7
13	B6
14	B5
15	B4
16	B3
17	B2
18	B1
19	B0
20	G7
21	G6
22	G5
23	G4
24	G3
25	G2
26	G1
27	G0
28	R7
29	R6
30	R5
31	R4
32	R3
33	R2
34	R1
35	R0
36	GND
37	DCLK
38	GND
39	L/R
40	U/D
41	VGH
42	VGL
43	AVDD
44	RESET
45	NC
46	VCOM
47	DITHB
48	GND
49	NC
50	NC

NOTES:

1. DISPLAY TYPE: 7.0 TFT, TRANSMISSIVE
2. VIEWING DIRECTION : U/L/D/R 65/65/55/65
3. Driver IC :GATE HX8664-B & SOURCE HX8264-E
4. Top : -30° C ~ 85° C, Tst : -30° C ~ 85° C
5. GENERAL TOLERANCE: ±0.2
6. LCM Luminance:LED/450cd/m²(Typical)

Backlight LED Circuit



9*3=27EA If=180mA

特殊工艺:

GENERAL TOL 0.30	ALL UNITS: MM	DATE	NT070-N001ML		SHEET: 1 OF 1
DWN:					
CHK:					DATE:
APP:			DO NOT SCALE THIS DRAWING.	PROJECTION	

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