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Brighten The Future

NEXT VISION DISPLAY

SPECIFICATION

CUSTOMER : _____

MODULE NO.: NT070-R002ME

Version	V0.2
Engineer	
Date	2022/03/12

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Customer:
Approved by

NEXT VISION DISPLAY CO., LTD.

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General Specifications

No.	Item	Specification	Remark
1	LCD size	7.0 inch(Diagonal)	
2	Driver element	a-Si TFT active matrix	
3	Resolution	800X3(RGB)X480	
4	Display mode	Normally Black	
5	Dot pitch	0.0635(W)X0.1905(H) mm	
6	Active area	152.4 (W)X91.44 (H) mm	
7	Module size	165(W)X104.09(H)X6.69(D) mm	Note 1
8	Surface treatment	Anti-Glare	
9	Color arrangement	RGB-stripe	
10	Interface	Digital (TTL)	
11	Backlight power consumption	1.5W (Typ.)	Note 2
12	Panel power consumption	0.66 W (Typ.)	Note 3
13	Weight	T.B.D.	

Note 1: Refer to Mechanical Drawing.
Note 2: Including LED Driver power consumption.
Note 3: Including T-con power consumption.

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Pin Assignment

Pin No.	Symbol	Description	Remark
1	GND	Power Ground	
2	GND	Power Ground	
3	NC	Not Connect	
4	Vcc	Power Supply for Digital Circuit	
5	Vcc	Power Supply for Digital Circuit	
6	Vcc	Power Supply for Digital Circuit	
7	Vcc	Power Supply for Digital Circuit	
8	NC	Not Connect	
9	DE	Data Enable	
10	GND	Power Ground	
11	GND	Power Ground	
12	GND	Power Ground	
13	B5	Blue Data 5 (MSB)	
14	B4	Blue Data 4	
15	B3	Blue Data 3	
16	GND	Power Ground	
17	B2	Blue Data 2	
18	B1	Blue Data 1	
19	B0	Blue Data 0 (LSB)	
20	GND	Power Ground	
21	G5	Green Data 5 (MSB)	
22	G4	Green Data 4	
23	G3	Green Data 3	
24	GND	Power Ground	
25	G2	Green Data 2	
26	G1	Green Data 1	
27	G0	Green Data 0 (LSB)	
28	GND	Power Ground	
29	R5	Red Data 5 (MSB)	
30	R4	Red Data 4	
31	R3	Red Data 3	
32	GND	Power Ground	
33	R2	Red Data 2	
34	R1	Red Data 1	
35	R0	Red Data 0 (LSB)	
36	GND	Power Ground	
37	GND	Power Ground	
38	DCLK	Clock Signals ; Latch Data at the Falling Edge	
39	GND	Power Ground	
40	GND	Power Ground	

Note: User's connector part number is **MT-FP430N-2FR** manufactured by UJU or equivalent.

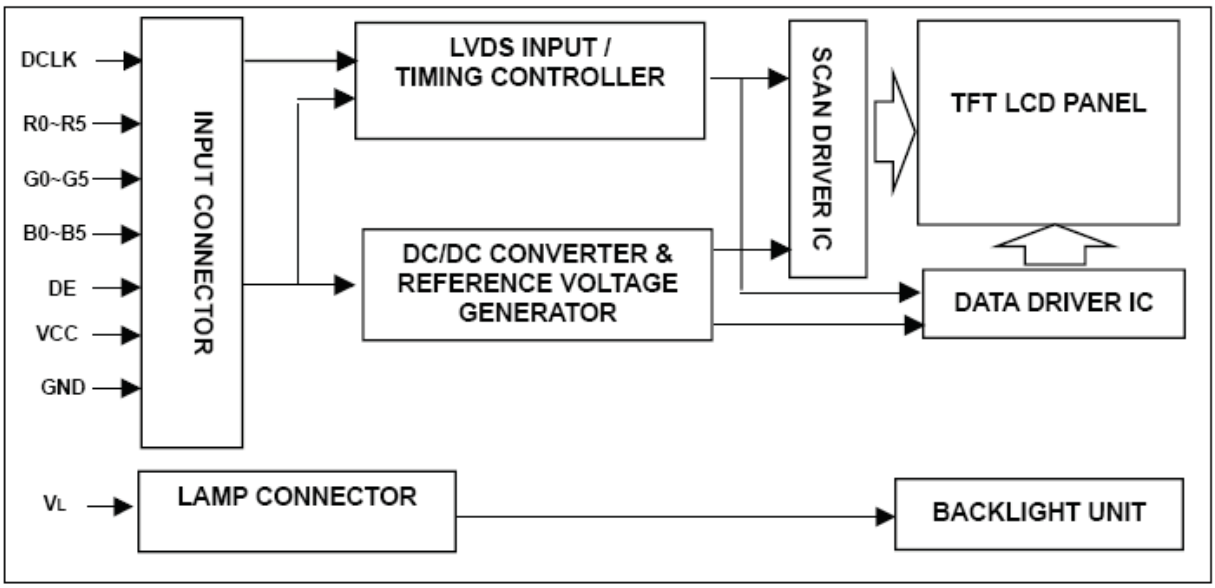
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Backlight Driving Part

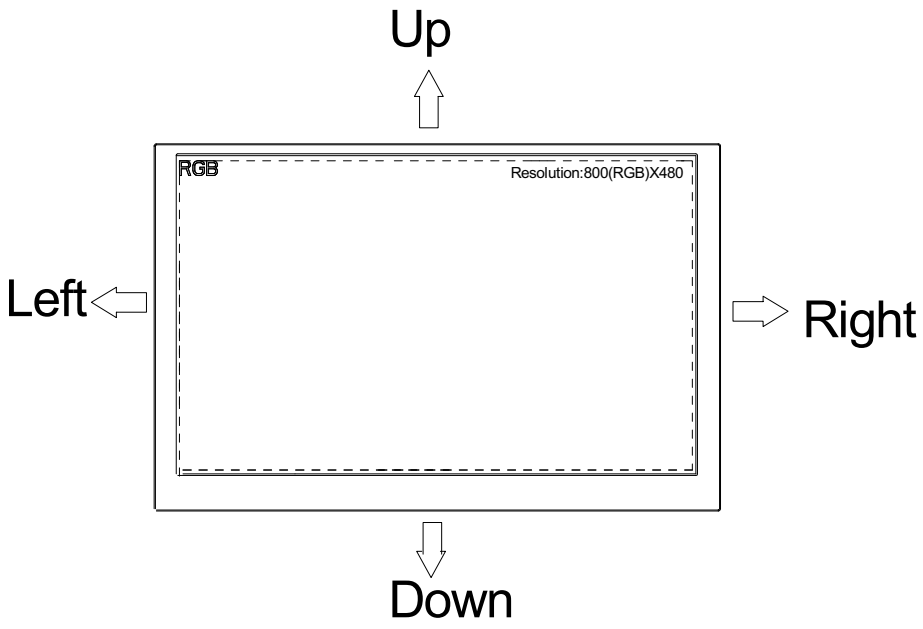
Pin No.	Symbol	Description
1	VLED+	Red, LED_ Anode
2	VLED-	White, LED_ Cathode

Note: The backlight interface connector is a model **SM02B-BHSS-1-TB** manufactured by JST or equivalent. The matching connector part number is **BHSR-20VS-1** manufactured by JST or equivalent.

BLOCK DIAGRAM



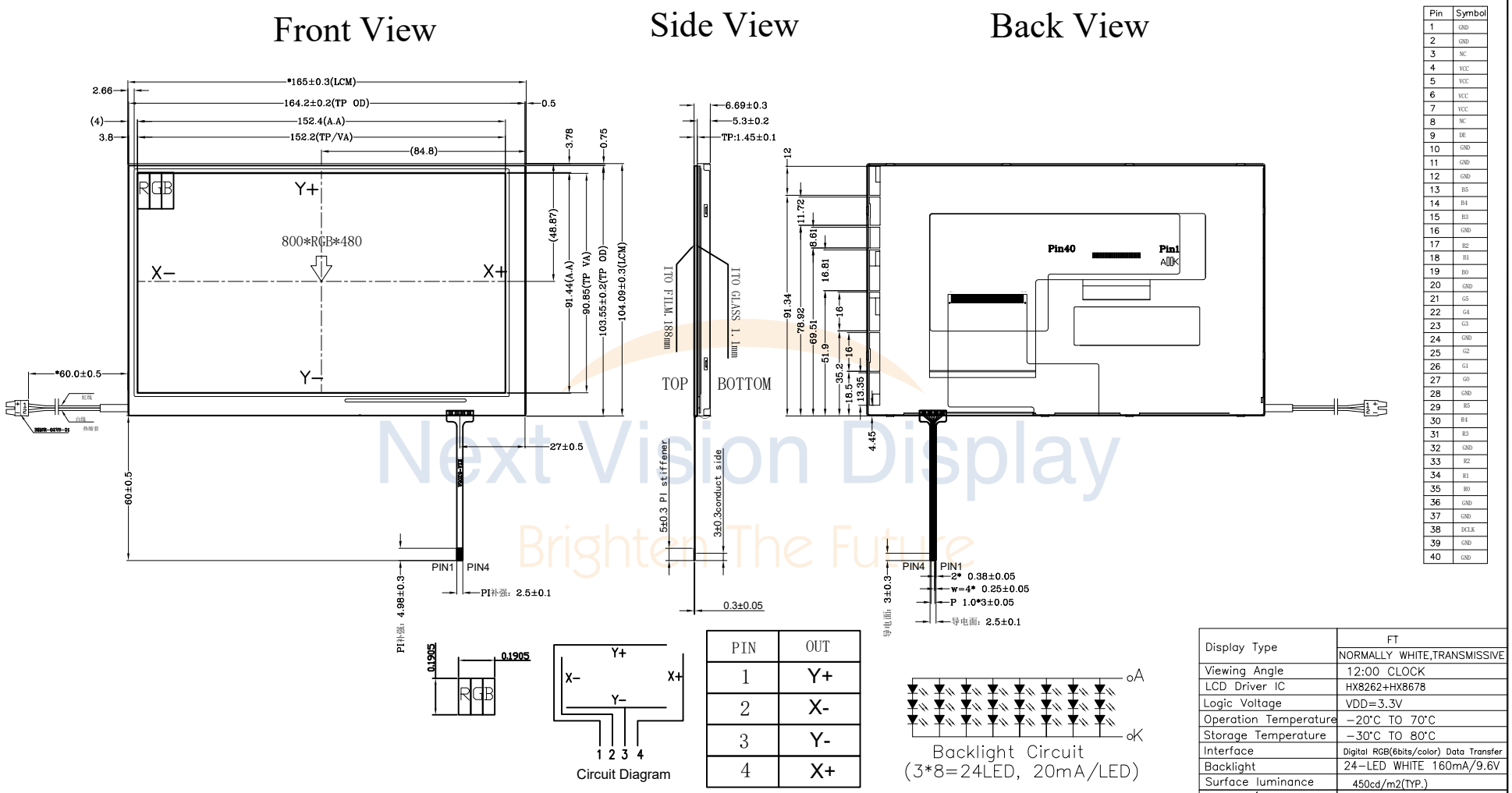
Scanning direction refer to the figure below.



Optical Specifications

Item	Symbol	Condition	Values			Unit	Remark
			Min.	Typ.	Max.		
Viewing angle (CR≥ 10)	θ_L	Φ=180°(9 o'clock)	70	80	-	degree	Note 1
	θ_R	Φ=0°(3 o'clock)	70	80	-		
	θ_T	Φ=90°(12 o'clock)	70	80	-		
	θ_B	Φ=270°(6 o'clock)	70	80	-		
Response time	T_{ON}	Normal θ=Φ=0°	-	11	-	msec	Note 3
	T_{OFF}		-	9	-	msec	Note 3
Contrast ratio	CR		800	1000	-	-	Note 4
Color chromaticity	W_X		0.270	0.0290	0.350		Note 2 Note 5 Note 6
	W_Y		0.280	0.0300	0.360		
Luminance	L		400	450	-	cd/m^2	Note 6
Luminance uniformity	Y_U		70	75	-	%	Note 7

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Pin	Symbol
1	GND
2	GND
3	NC
4	VCC
5	VCC
6	VCC
7	VCC
8	NC
9	DE
10	GND
11	GND
12	GND
13	B5
14	B4
15	B3
16	GND
17	B2
18	B1
19	B0
20	GND
21	G5
22	G4
23	G3
24	GND
25	G2
26	G1
27	G0
28	GND
29	R5
30	R4
31	R3
32	GND
33	R2
34	R1
35	R0
36	GND
37	GND
38	DCLK
39	GND
40	GND

PIN	OUT
1	Y+
2	X-
3	Y-
4	X+

Display Type	FT NORMALLY WHITE,TRANSMISSIVE
Viewing Angle	12:00 CLOCK
LCD Driver IC	HX8262+HX8678
Logic Voltage	VDD=3.3V
Operation Temperature	−20°C TO 70°C
Storage Temperature	−30°C TO 80°C
Interface	Digital RGB(6bits/color) Data Transfer
Backlight	24−LED WHITE 160mA/9.6V
Surface luminance	450cd/m2(TYP.)
White X/Y	X:0.29±0.04 Y:0.32±0.04

VER.	SYMBOL	AMENDMENT	SIGN	DATE	
V00.		First issue		2015.04.09	CUSTOMER'S APPROVAL
					APPROVED
					EE.CHECKED

TITLE: MODULE SPEC.

DRAWING NO. NT070-R002ME

UNIT mm | SCALE FIT | 3rd Angle | SHEET 1 OF 1

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