



RAYSTAR

RAYSTAR Optronics, Inc.
曜凌光電股份有限公司



曜凌光電股份有限公司 Raystar Optronics, Inc.

T: +886-4-2565-0761 | F: +886-4-2565-0760

salescontact@raystar-optronics.com | www.raystar-optronics.com

RFC570A3-6IW-DNN

General Specifications

- Size: 5.7 inch
- Dot Matrix: 320 x RGB x 240(TFT) dots
- Module dimension: 141.12(W) x 101.55(H) x 6.05(D) mm
- Active area: 115.2 x 86.40 mm
- Dot pitch: 0.12 x 0.36 mm
- LCD type: TFT, Normally White, Transmissive
- Driver IC: HX8218 +HX8615
- Interface: 24-bit RGB
- View Direction: 12 o'clock
- Gray Scale Inversion Direction: 6 o'clock
- Aspect Ratio: 4:3
- Backlight Type: LED, Normally White
- Touch Panel: Without Touch Panel
- Surface: Glare

Interface

LCM PIN Definition

Pin	Symbol	Function
1	NC	No connection
2	NC	No connection
3	GND	System ground pin of the IC. Connect to system ground.
4	VCC	Power Supply
5	R0	Red Data bit(LSB)
6	R1	Red Data bit
7	R2	Red Data bit
8	R3	Red Data bit
9	R4	Red Data bit
10	R5	Red Data bit
11	R6	Red Data bit
12	R7	Red Data bit (MSB)
13	G0	Green Data bit(LSB)
14	G1	Green Data bit
15	G2	Green Data bit
16	G3	Green Data bit
17	G4	Green Data bit
18	G5	Green Data bit
19	G6	Green Data bit
20	G7	Green Data bit (MSB)
21	B0	Blue Data bit(LSB)
22	B1	Blue Data bit
23	B2	Blue Data bit
24	B3	Blue Data bit
25	B4	Blue Data bit
26	B5	Blue Data bit
27	B6	Blue Data bit
28	B7	Blue Data bit (MSB)
29	GND	System ground pin of the IC. Connect to system ground.
30	CLK	Dot data clock

31	R/L	Shift direction of device internal shift register control.
32	Hsync	Horizontal sync signal
33	Vsync	Vertical sync signal
34	DE	Data Enable signal
35	U/D	Up/down selection
36	RESET	Hardware reset
37-40	NC	No connection

Technical drawing of a flexible PCB assembly for a TFT module. The drawing includes a top view of the TFT module with dimensions (TFT OD 141.12±0.5, FR VA 117.90, TFT AA 115.20, 320 X RGB X 240), a side view showing the bending area and stiffener, and a detail view of the connector area. A pinout table is provided for the CN2 and CON1 connectors.

Pinout Table:

CN2		CON1			
RED	VLED+	PIN NO.	SYMBOL	PIN NO.	SYMBOL
BLACK	VLED-				
		1	NC	21	B0
		2	NC	22	B1
		3	GND	23	B2
		4	VCC	24	B3
		5	R0	25	B4
		6	R1	26	B5
		7	R2	27	B6
		8	R3	28	B7
		9	R4	29	GND
		10	R5	30	CLK
		11	R6	31	R/L
		12	R7	32	Hsync
		13	G0	33	Vsync
		14	G1	34	DE
		15	G2	35	U/D
		16	G3	36	RESET
		17	G4	37	NC
		18	G5	38	NC
		19	G6	39	NC
		20	G7	40	NC

DETAIL A
SCALE 1:4

The non-specified tolerance of dimension is $\pm 0.3\text{mm}$.

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-20	—	+70	°C
Storage Temperature	TST	-30	—	+80	°C

Electrical Characteristics

Operating conditions:

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Logic	VCC	—	3.0	3.3	3.6	V
Supply Current	ICC	VCC=3.3V	—	230	345	mA

LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	—	—	140	—	mA
Power Consumption	—	1204	—	1470	mW
LED voltage	VBL+	8.6	—	10.5	V
LED Life Time	—	—	50,000	—	Hr