

TFT DISPLAY SPECIFICATION



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

RFN03000A3A0YWSNN00

General Specifications

- Size: 3-inch
- Dot Matrix: 320 x Mono x 120 (TFT) dots
- Module Dimension: 86.347 (W) x 35.89 (H) x 7.2 (D) Max mm
- Active Area: 72.0 (W) x 27.0 (H) mm
- Pixel Pitch: 0.225 x 0.225 mm
- LCD Type: TFT, Normally Black, Transmissive
- Viewing Angle(L/R/U/D): 80°/80°/80°/80°
- Driver IC: ST7512
- TFT Interface: SPI (3 line)
- Backlight Type: LED, Normally White
- Touch Panel: Without Touch Panel
- Surface: Anti-Glare

*Color tone slight changed by temperature and driving voltage.

Interface

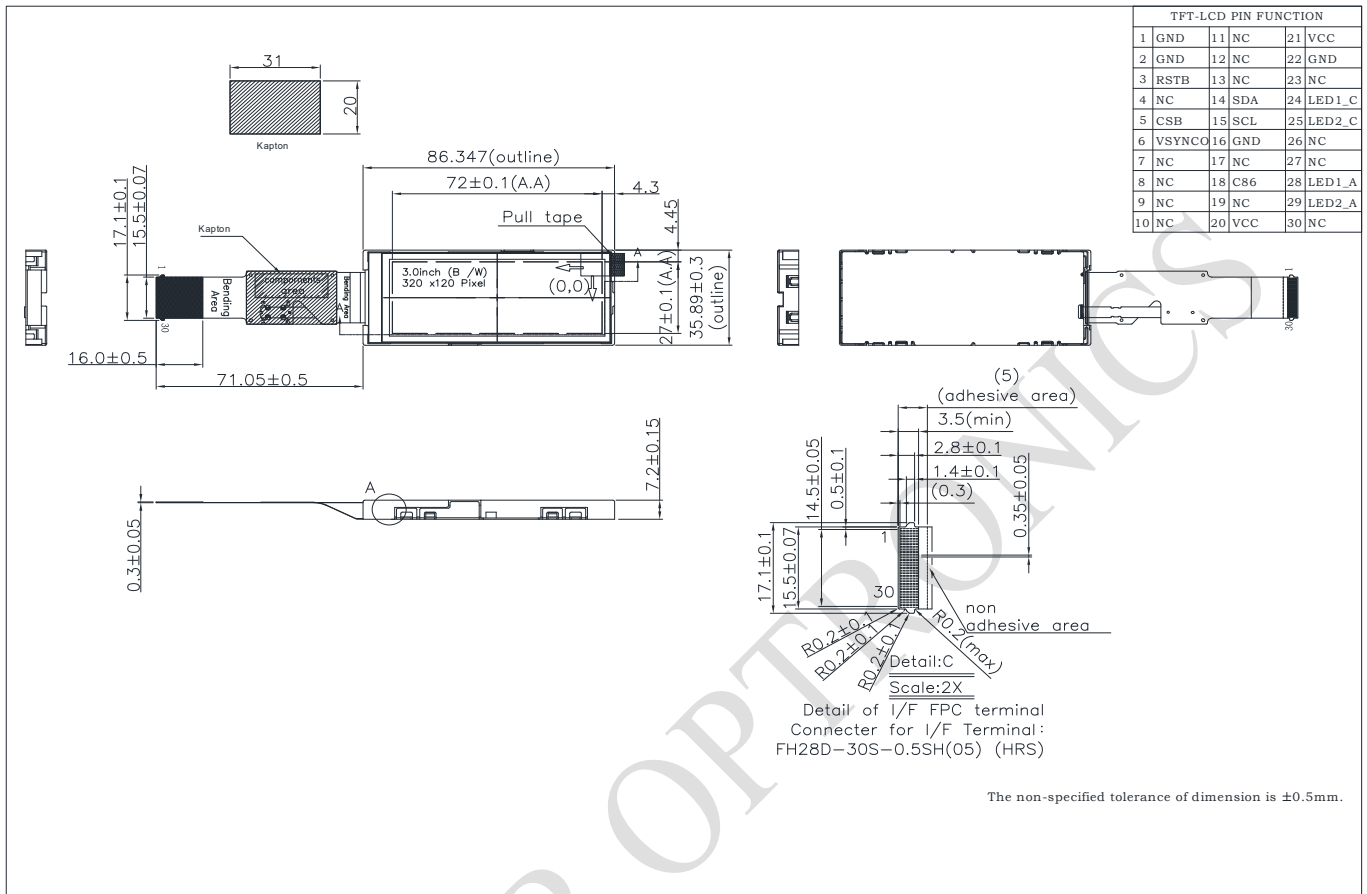
LCM PIN Definition

Pin No.	Symbol	Function	I/O
1	GND	GND	—
2	GND	GND	—
3	RSTB	Reset input pin. Active when it is low. This pin is effective when RSTEN pin is “H”. Initialization is executed when this pin is set to “L”. SWRESET command must be required after initialization.	I
4	NC	NC	—
5	CSB	Chip select input pin. Interface access is enabled when CSB is “L” in parallel, SPI interface. When CSB is non-active (CSB=“H”), D[7:0] pins are high impedance	I
6	VSYNCO	Vertical synchronization signal output pin.	O
7	NC	NC	—
8	NC	NC	—
9	NC	NC	—
10	NC	NC	—
11	NC	NC	—
12	NC	NC	—
13	NC	NC	—
14	SDA	Serial interface : Serial data input / output	I/O
15	SCL	Serial interface : connecting the SCL signal	I
16	GND	GND	—
17	NC	NC	I
18	C86	Serial interface: “L” 3wire 9bit serial interface	—

		Please do not change input level for this terminal while operating”	
19	NC	NC	—
20	VCC	Power supply	P
21	VCC	Power supply	P
22	GND	GND	—
23	NC	NC	—
24	LED1_C	LED cathode 1	P
25	LED2_C	LED cathode 2	P
26	NC	NC	—
27	NC	NC	—
28	LED1_A	LED anode 1	P
29	LED2_A	LED anode 2	P
30	NC	NC	—

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Contour Drawing



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
Power Supply Voltage	VCC	-	3.0	3.3	3.6	V
Input High Voltage	Vih	-	0.8VCC	-	VCC	V
Input Low Voltage	Vil		GND	-	0.2VCC	V
Output High Voltage	Voh	IOL=-1.0mA	0.8 VCC	-	VCC	V
Output Low Voltage	Vol	IOL =1.0mA	GND	-	0.2 VCC	V
Current Consumption	Icc	-	-	10	15	mA

This value is test for VCC=3.3V , Ta=25 °C only

LED Driving Conditions

Parameter	Symbol	Min	Typ	Max	Unit
LED Current	—	—	2*20		mA
LED Voltage	LED+	1.6	2.65	3.4	V
LED Life Time	—	50,000		—	Hr