



RAYSTAR

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Raystar Optronics, Inc.

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RFH700A8-AYH-LNS

SPECIFICATION

General Specifications

- Size: 7.0 inch
 - Dot Matrix: 1024 x RGB x 600(TFT) dots
 - Module dimension: 169.9(W) x 103.4(H) x 7.1(D) mm
 - Active area: 154.2144 x 85.92 mm
 - Dot pitch: 0.1506 x 0.1432 mm
 - LCD type: TFT, Normally Black, Transmissive
 - Viewing Angle: 85/85/85/85
 - Aspect Ratio: 16:9
 - Driver IC: ST5021 + ST5651 or equivalent
 - Backlight Type: LED, Normally White
 - Touch Screen: Resistive touch screen
 - Interface: LVDS
 - Surface: Anti-Glare
- *Color tone slight changed by temperature and driving voltage.

Interface

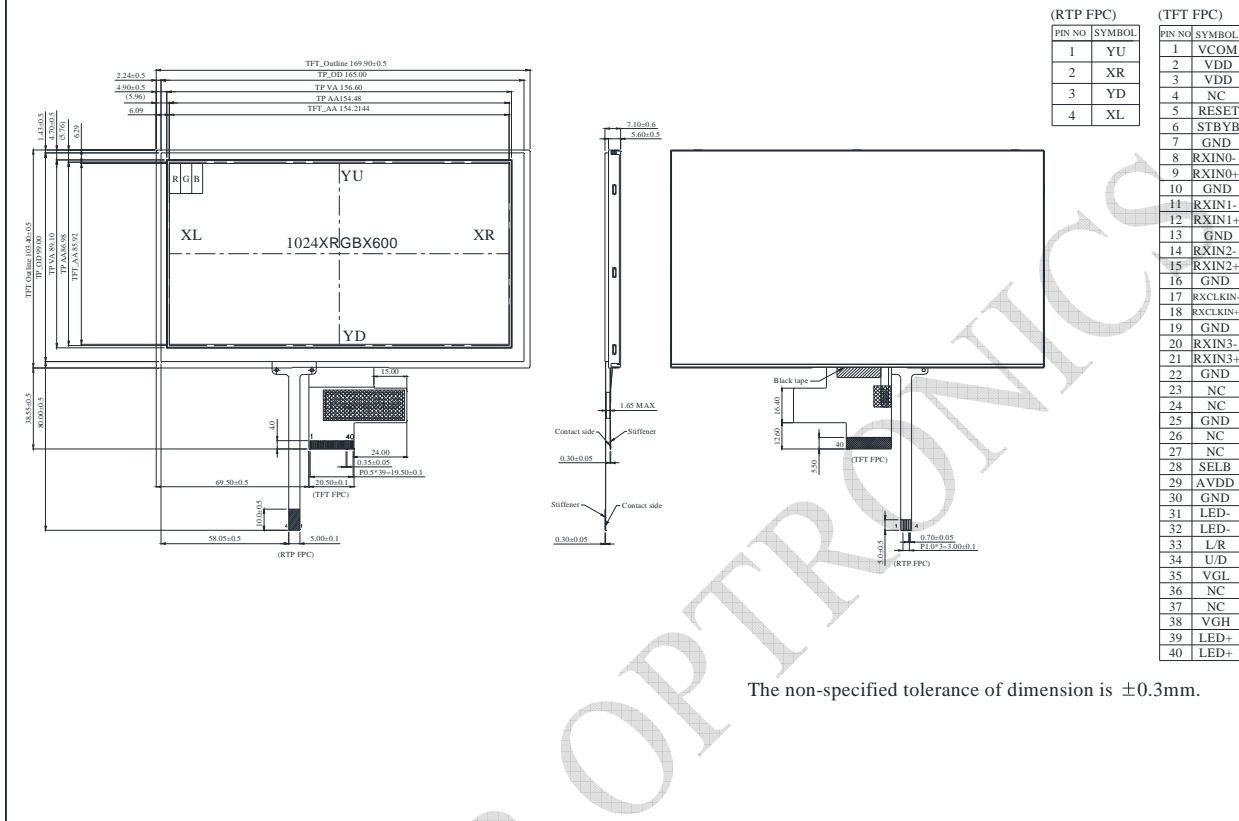
LCM PIN Definition

Pin No.	Symbol	I/O	Function
1	VCOM	P	Common Voltage
2	VDD	P	Digital circuit
3	VDD	P	Digital circuit
4	NC	---	No connection
5	RESET	I	Global reset pin
6	STBYB	I	Standby mode, Normally pulled high STBYB = "1", normal operation STBYB = "0", timing controller, source driver will turn off, all output are High-Z
7	GND	P	Ground
8	RXIN0-	I	Negative LVDS differential data input
9	RXIN0+	I	Positive LVDS differential data input
10	GND	P	Ground
11	RXIN1-	I	Negative LVDS differential data input
12	RXIN1+	I	Positive LVDS differential data input
13	GND	P	Ground
14	RXIN2-	I	Negative LVDS differential data input
15	RXIN2+	I	Positive LVDS differential data input
16	GND	P	Ground
17	RXCLKIN-	I	Negative LVDS differential clock input
18	RXCLKIN+	I	Positive LVDS differential clock input
19	GND	P	Ground
20	RXIN3-	I	Negative LVDS differential data input
21	RXIN3+	I	Positive LVDS differential data input
22	GND	P	Ground
23	NC	---	No connection
24	NC	---	No connection

25	GND	P	Ground
26	NC	---	No connection
27	NC	---	No connection
28	SELB	I	6bit/8bit mode select H:6bit / L:8bit
29	AVDD	P	Power for Analog Circuit
30	GND	P	Ground
31	LED-	P	LED Cathode
32	LED-	P	LED Cathode
33	L/R	I	Horizontal inversion
34	U/D	I	Vertical inversion
35	VGL	P	Negative power for TFT
36	NC	---	No connection
37	NC	---	No connection
38	VGH	P	Positive power for TFT
39	LED+	P	LED Anode
40	LED+	P	LED Anode

I:input ,O:output,P:power

Contour Drawing



RAYSTAR OPTROINCS

Absolute Maximum Ratings

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

Electrical Characteristics

Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power voltage	VDD	3.0	3.3	3.6	V
Analog Power	AVDD	8.9	9.0	9.1	V
TFT Gate ON Voltage	VGH	17	18	19	V
TFT Gate OFF Voltage	VGL	-6.5	-6.0	-5.5	V
TFT Common Voltage	Vcom	3.0	3.15	3.3	V
Current for Driver	IDD	-	14	21	mA
Power Current	IAVDD	-	25	-	mA
TFT Gate ON Current	IVGH	-	1	-	mA
TFT Gate OFF Current	IVGL	-	1	-	mA
TFT Common Current	IVCOM	-	1	-	mA