

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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SPECIFICATION

MODULE NO.: WF70A8SYAHLNT0#

General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	1024 x RGBx600(TFT)	dots
Module dimension	169.9(W) x 103.4(H) x 7.1(D)	mm
Active area	154.2144 x 85.92	mm
Pixel 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 Panel	Resistive Touch Panel (RTP)	
Interface	LVDS	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

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

Electrical Characteristics

1. 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

2. Backlight Driving Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Voltage for LED backlight	VL	16.8	19.2	21.0	V
Current for LED backlight	IL	--	290	--	mA
LED life time	-	-	50,000	-	Hr

Interface

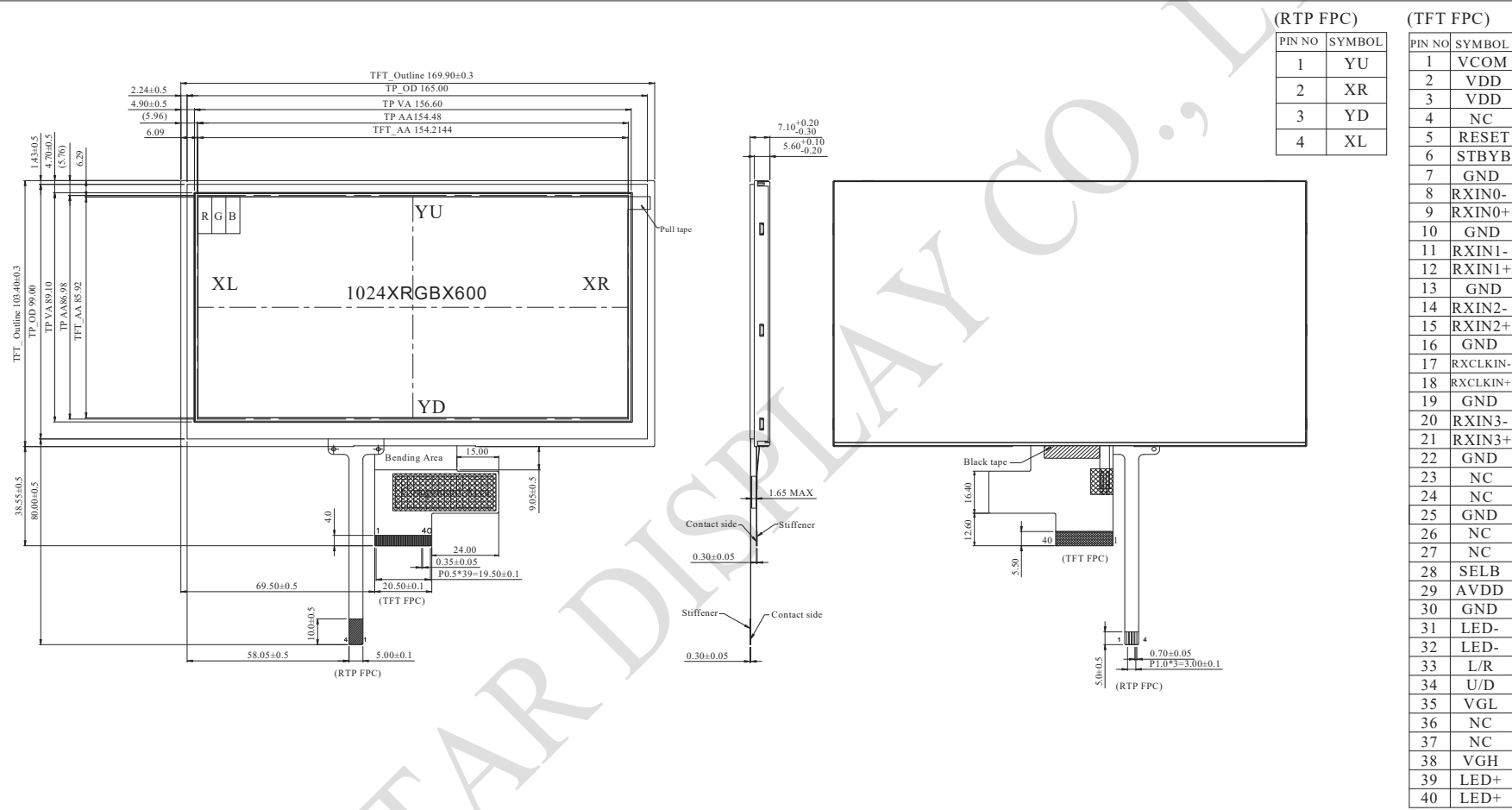
1. LCM PIN Definition

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



The non-specified tolerance of dimension is ±0.3mm.