

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODULE NO.: WF70D5SWAHMNN0#

General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	1024 x RGB x 600(TFT)	dots
Module dimension	169.9(W) x 103.4(H) x 5.6(D)	mm
Active area	154.2144 x 85.92	mm
Pixel pitch	0.1506 x 0.1432	mm
LCD type	TFT, Normally Black, Transmissive	
View Angle	80/80/80/80	
TFT Driver IC	JD9165BA or Equivalent	
TFT Interface	4-Lanes MIPI	
Backlight Type	LED, Normally White	
Touch Panel	Without Touch Panel	
Surface	Anti-Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-30	—	+85	°C
Storage Temperature	TST	-40	—	+90	°C

Electrical Characteristics

1. Operating conditions:

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power voltage	VDD	1.71	1.8	1.89	V
Analog Power	AVDD	-	11	-	V
TFT Gate ON Voltage	VGH	19.5	20	20	V
TFT Gate OFF Voltage	VGL	-8.5	-8	-7.5	V
TFT Common Voltage	VCOMIN	-	4.9	-	V
Power Current	IDD	-	14	22	mA
Analog Power Current	I _{AVDD}	-	18.5	-	mA
TFT Gate ON Current	I _{VGH}	-	1.5	-	mA
TFT Gate OFF Current	I _{VGL}	-	1.5	-	mA
TFT Common Current	I _{VCOMIN}	-	1	-	uA

2. LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	—	—	240	—	mA
LED voltage	VLED+	16.2	19.2	21.0	V
LED Life Time	—	50,000	—	—	Hr

Interface

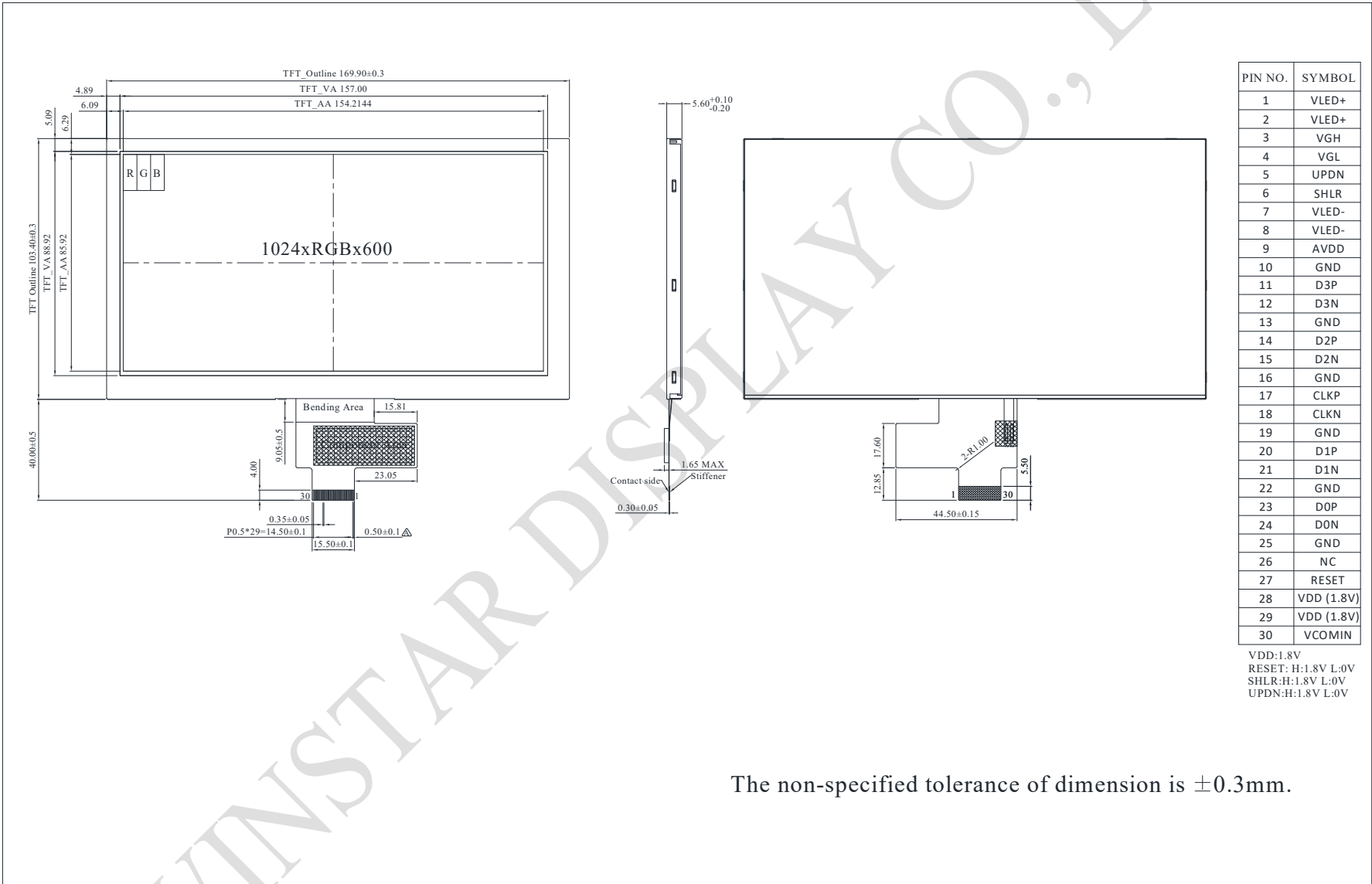
1. LCM PIN Definition

Pin No.	Symbol	Function
1	VLED+	LED Anode
2	VLED+	LED Anode
3	VGH	Positive power for TFT
4	VGL	Negative power for TFT
5	UPDN	Horizontal inversion
6	SHLR	Vertical inversion
7	VLED-	LED Cathode
8	VLED-	LED Cathode
9	AVDD	Power for Analog Circuit
10	GND	Ground
11	D3P	MIPI data input.
12	D3N	MIPI data input.
13	GND	Ground
14	D2P	MIPI data input.
15	D2N	MIPI data input.
16	GND	Ground
17	CLKP	MIPI clock input
18	CLKN	MIPI clock input
19	GND	Ground
20	D1P	MIPI data input.
21	D1N	MIPI data input.
22	GND	Ground
23	D0P	MIPI data input.
24	D0N	MIPI data input.
25	GND	Ground
26	NC	No connection
27	RESET	Global reset pin. Active Low to enter Reset State. Normally pull high. Connecting with an RC reset circuit for stability.

28	VDD(1.8V)	Digital circuit
29	VDD(1.8V)	Digital circuit
30	VCOMIN	Common voltage

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Contour Drawing



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