TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WF1560-19201080AL#0PW0-FC

General Specifications

Item	Dimension	Unit
Size	15.6	inch
Dot Matrix	1920 x RGB x 1080	dots
Module dimension	363.8(W) x 215.9(H) x 9.3 (D)	mm
Active area	344.16 x 193.59	mm
Pixel pitch	0.17925 (H) x 0.17925 (V)	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing Angle	89/89/89/89	
Backlight Type	LED, Normally White	
TFT Interface	2ch-LVDS	
Touch Panel	Without Touch Panel	
Surface	Anti-Glare	

*Color tone slight changed by temperature and driving voltage.

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Absolute Maximum Ratings

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

Electrical Characteristics

1. Operating conditions:

Parameter		Symbol	Value			Unit
			Min.	Typ.	Max.	
Power Supply Voltage		Vcc	3.15	3.3	3.6	V
Ripple Voltage		V_{RP}	-	-	150	mV
Rush Current		I_{RUSH}	-	-	3	A
Power Supply Current	White	-	-	1.22	1.5	A
	Black	-	-	0.51	0.7	A
	Vertical Stripe	-	-	0.82	1	A
Power Consumption		PLCD	-	4	5	Watt
LVDS differential input voltage		Vid	200		600	mV
LVDS common input voltage		Vic	1.0	1.2	1.4	V
Differential Input Voltage for LVDS Receiver Threshold	“H” Level	V_{IH}	-	-	100	mV
	“L” Level	V_{IL}	-100	-	-	mV
LVDS terminating resistor		R_T		100		ohm

2. Backlight conditions:

Parameter		Symbol	Value			Unit
			Min.	Typ.	Max.	
Converter Power Supply Voltage		LED_Vin	10.8	12.0	13.2	V
Converter Power Supply Current		Ii	0.8	1.0	1.2	A
Converter Input Rush Current		Iirsh			3	A
Power Consumption		P_{LED}		12		W
EN Control Level	Backlight on	LED_EN	2.0	5	5.5	V
	Backlight off		0	0	0.15	
PWM Control Level	PWM High Level	LED_PWM	2.0	3.3	5.0	V
	PWM Low Level		0	0	0.15	
PWM Control Duty Ratio			10	--	100	%
PWM Control Frequency		f_{PWM}	190	200	20k	Hz
LED Life Time		L_L	50,000			Hrs

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Interface

1. CON2：LCM PIN Definition

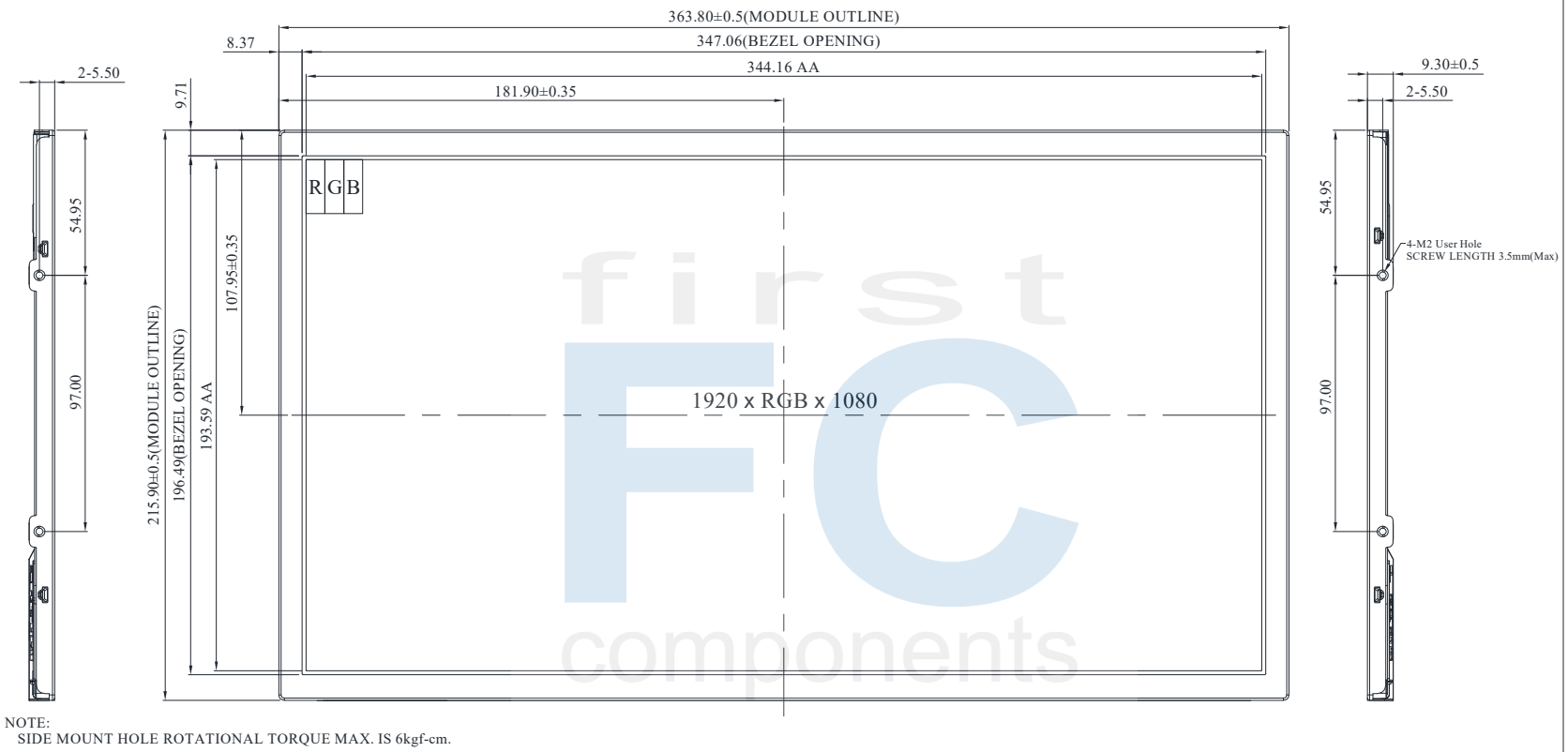
Pin	Name	Description
1~4	LED _Vcc	+12V Vi power supply
5~8	GND	Ground
9	LED_EN	Enable pin
10	LED_PWM	Backlight Adjust
11~13	LCD_VCC	LCD logic and driver power 3.3V
14~16	NC	Not connection, this pin should be open
17	REV_SCAN	Low → Normal Mode. High → Horizontal & Vertical Reverse Scan
18	RXO0-	Negative LVDS differential data input. Channel O0 (odd)
19	RXO0+	Positive LVDS differential data input. Channel O0 (odd)
20	RXO1-	Negative LVDS differential data input. Channel O1 (odd)
21	RXO1+	Positive LVDS differential data input. Channel O1 (odd)
22	RXO2-	Negative LVDS differential data input. Channel O2 (odd)
23	RXO2+	Positive LVDS differential data input. Channel O2 (odd)
24	LCD GND	LCD logic and driver ground
25	RXOC-	Negative LVDS differential clock input. (odd)
26	RXOC+	Positive LVDS differential clock input. (odd)
27	LCD GND	LCD logic and driver ground
28	RXO3-	Negative LVDS differential data input. Channel O3(odd)
29	RXO3+	Positive LVDS differential data input. Channel O3 (odd)
30	RXE0-	Negative LVDS differential data input. Channel E0 (even)
31	RXE0+	Positive LVDS differential data input. Channel E0 (even)
32	RXE1-	Negative LVDS differential data input. Channel E1 (even)
33	RXE1+	Positive LVDS differential data input. Channel E1 (even)
34	LCD GND	LCD logic and driver ground
35	RXE2-	Negative LVDS differential data input. Channel E2 (even)
36	RXE2+	Positive LVDS differential data input. Channel E2 (even)
37	RXEC-	Negative LVDS differential clock input. (even)
38	RXEC+	Positive LVDS differential clock input. (even)
39	RXE3-	Negative LVDS differential data input. Channel E3 (even)

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40	RXE3+	Positive LVDS differential data input. Channel E3 (even)

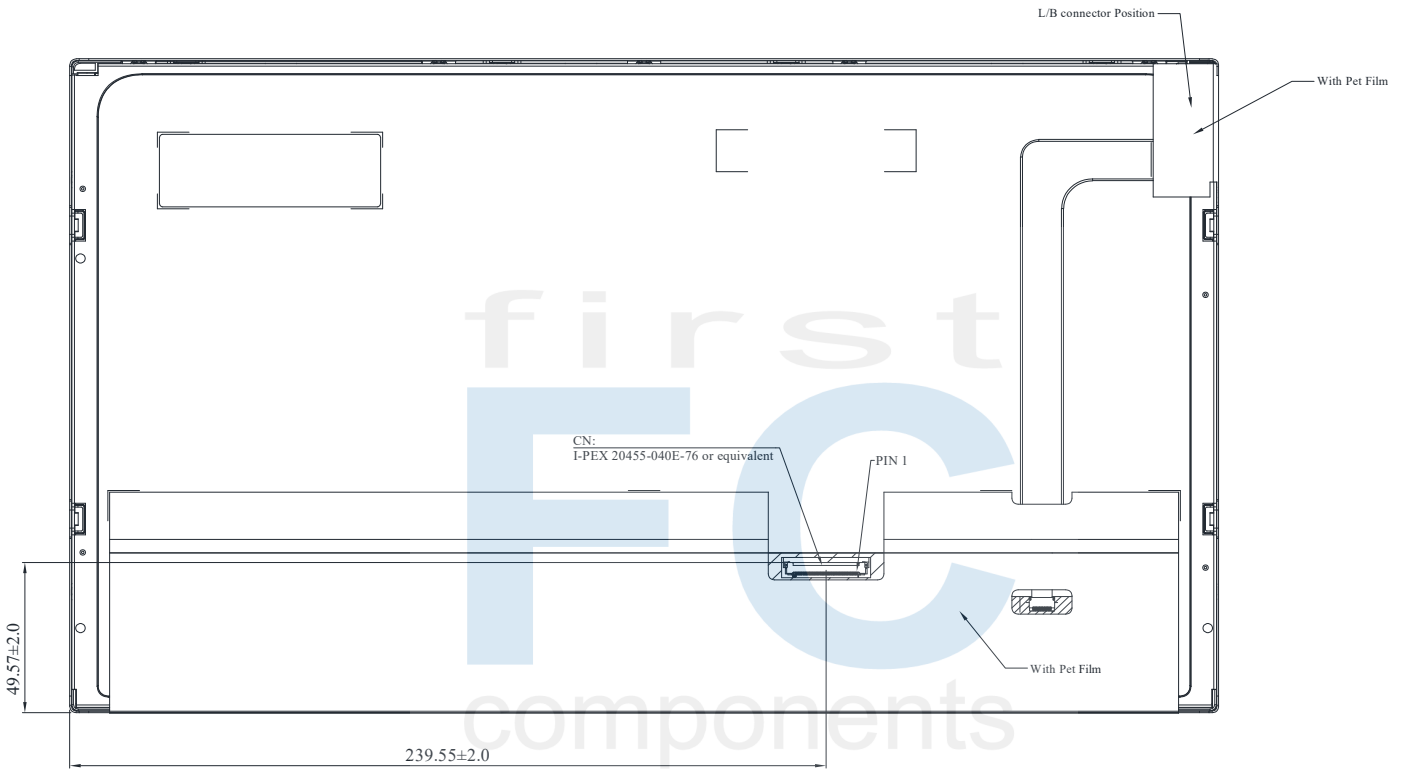
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Contour Drawing



NOTE:
SIDE MOUNT HOLE ROTATIONAL TORQUE MAX. IS 6kgf-cm.

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



CN

PinNo.	Symbol
1~4	LED_VCC
5~8	GND
9	LED_EN
10	LED_PWM
11~13	LCD_VCC
14~16	NC
17	REV_SCAN
18	RXO0-
19	RXO0+
20	RXO1-
21	RXO1+
22	RXO2-
23	RXO2+
24	LCD GND
25	RXOC-
26	RXOC+
27	LCD GND
28	RXO3-
29	RXO3+
30	RXE0-
31	RXE0+
32	RXE1-
33	RXE1+
34	LCD GND
35	RXE2-
36	RXE2+
37	RXEC-
38	RXEC+
39	RXE3-
40	RXE3+

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

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