Winstar Display Co., LTD
華凌光電股份有限公司
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SPECIFICATION

CUSTOMER :

MODULE NO.: WF50-800480BD#008-FC

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General Specifications

Item	Dimension	Unit
Size	5.0	inch
Dot Matrix	800× 3(RGB) × 480	dots
Module dimension	147.0(W) ×104.0(H) ×4.8mm	mm
Active area	108(W) ×64.8 (H) mm	mm
Dot pitch	0.135(W) ×0.135(H) mm	mm
LCD type	TFT, Normally White, Transmissive	
TFT Driver IC	ILI6122 + ILI5960	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
TFT Interface	24-bit RGB	
Aspect Ratio	16:9	
Backlight Type	LED ,Normally White	
PCAP IC	ILI2511	

PCAP Interface	USB (I2C available)
PCAP FW Version:	V 6. 0. 0. 0. 5.28.0.1
Touch Panel	Projected Capacitive Touch Screen(PCAP)
Surface	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	-20	—	+70	℃
Storage Temperature	TST	-30	—	+80	℃

Electrical Characteristics

Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power voltage	VDD	3.0	3.3	3.6	V
Current for Driver(Black)	IDD	-	110	170	mA
Input logic high voltage	VIH	0.7 VDD	-	VDD	V
Input logic low voltage	VIL	0	-	0.3 VDD	
Supply Voltage For Touch Logic	VDDT	4.4	5.0	5.5	V

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Interface

LCM PIN Definition

FPC Connector is used for the module electronics interface.

Pin	Symbol	Function
1	VLED-	Power for LED backlight (Cathode)
2	VLED+	Power for LED backlight (Anode)
3	GND	Power Ground
4	VDD	Power voltage
5	R0	Red data (LSB)
6	R1	Red data
7	R2	Red data
8	R3	Red data
9	R4	Red data
10	R5	Red data
11	R6	Red data
12	R7	Red data(MSB)
13	G0	Green data(LSB)
14	G1	Green data
15	G2	Green data
16	G3	Green data
17	G4	Green data
18	G5	Green data
19	G6	Green data
20	G7	Green data(MSB)
21	B0	Blue data(LSB)
22	B1	Blue data
23	B2	Blue data
24	B3	Blue data
25	B4	Blue data
26	B5	Blue data
27	B6	Blue data
28	B7	Blue data(MSB)
29	GND	Power Ground

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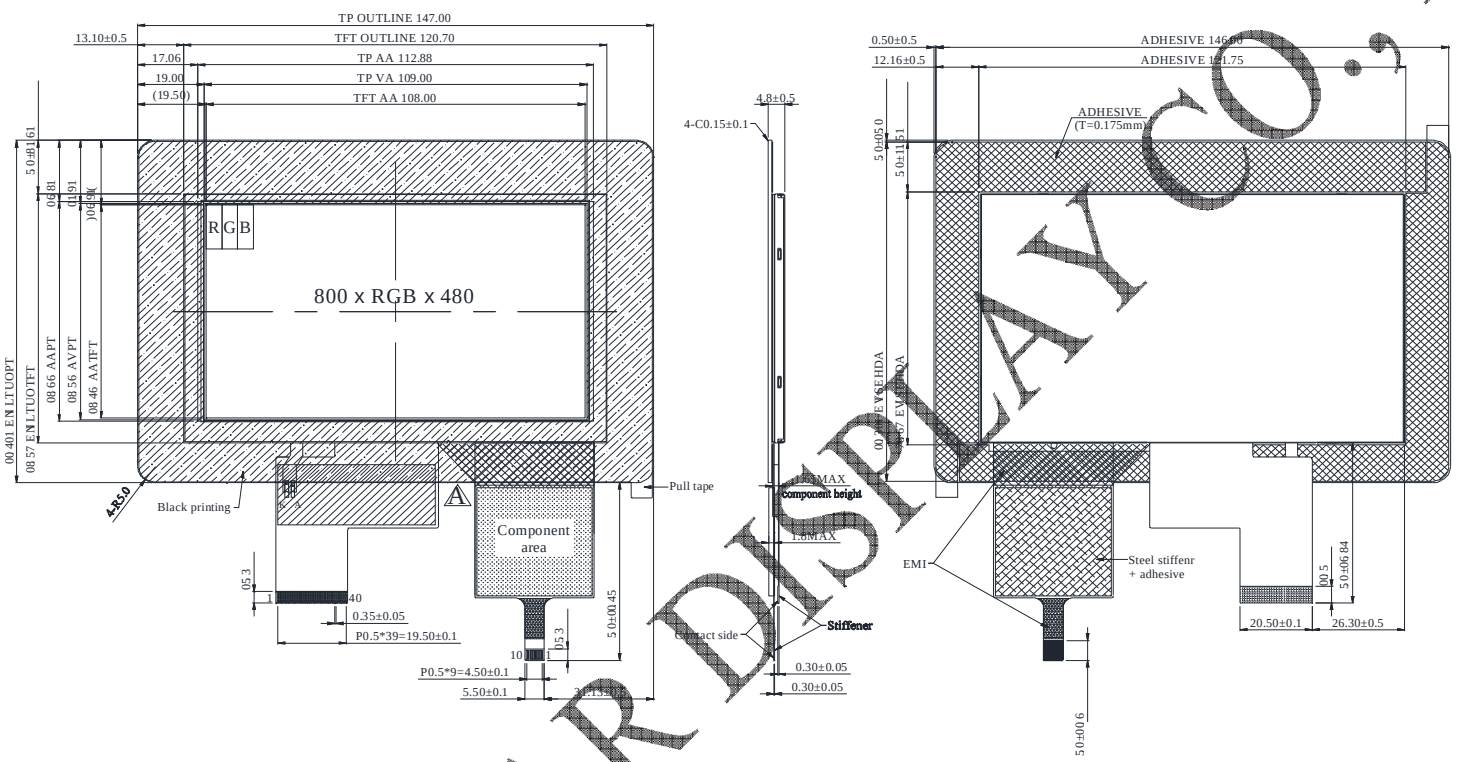
30	CLK	Sample clock
31	DISP	Display on/off
32	NC/HS	No connection /Horizontal sync input
33	NC/VS	No connection /Vertical sync input
34	DE	Data input enable
35	NC	No connection
36	GND	Power Ground
37	NC	No connection
38	NC	No connection
39	NC	No connection
40	NC	No connection

PCAP PIN Definition

Pin	Symbol	Function
1	USB_VSS	System ground
2	USB_VDD 5V	Power supply
3	USB_D+	Data +
4	USB_D-	Data -
5	VSS	System ground
6	SDA	I2C data input and output
7	SCL	I2C clock input
8	RST	External Reset, Low is active
9	INT	External interrupt to the host
10	VDDT 3.3	Power supply

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Contour Drawing



TFT INTERFACE

PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	V_{LED-}	21	B0
2	V_{LED+}	22	B1
3	GND	23	B2
4	V_{DD}	24	B3
5	R0	25	B4
6	R1	26	B5
7	R2	27	B6
8	R3	28	B7
9	R4	29	GND
10	R5	30	CLK
11	R6	31	DISP
12	R7	32	NC
13	G0	33	NC
14	G1	34	DE
15	G2	35	NC
16	G3	36	GND
17	G4	37	NC
18	G5	38	NC
19	G6	39	NC
20	G7	40	NC

CTP INTERFACE

PIN NO.	SYMBOL
1	USB_VSS
2	USB_VDD 5V
3	USB_D+
4	USB_D-
5	VSS
6	SDA
7	SCL
8	RST
9	INT
10	VDDT 3.3

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

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