

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODULE NO.: WF1560BSYAA5ENB0#

General Specifications

Item	Dimension	Unit
Size	15.6	inch
Dot Matrix	1920 x RGB x 1080	dots
Module dimension	393.8(W) x 245.9(H)x 12.2(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	80/80/80/80	
Backlight Type	LED, Normally White	
TFT Driver IC	TC2055G or equivalent	
TFT Interface	eDP	
CTP Driver IC	ILI2511 or equivalent	
CTP Interface	USB (I2C available)	
CTP FW Version	0x06.0x00.0x00.0x00.0xFF.0xFF.0xFF.0xFF	
CTP Resolution	16384 * 16384	
Touch Panel	With PCAP	
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. TFT LCD Module

Parameter	Symbol	Min.	Typ.	Max.	Units
Logic/LCD Drive Voltage	LCD_VDD	3.0	3.3	3.6	V
LCD_VDD Current	IDD	-	200	300	mA
LCD_VDD Current	IDDMAX	-	-	400	mA
LCD_VDD Power	PDD	-	0.66	1.32	W
Inrush Current	IRush	-	-	2	A
Allowable Logic/LCD Drive Ripple Voltage	LCD_VDDrp	-	-	100	mV
Supply Voltage For Touch Logic	USB_VDD 5V	4.75	5.0	5.25	V
	I _{USB_VDD 5V}	-	95	150	mA
	VDDT 3.3	3.15	3.3	3.45	V
	I _{VDDT3.3}	-	90	150	mA

2. Backlight Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Units	Condition
LED input	VLED	29.7	33	37.4	V	Ta=25 °C
LED Forward Current	ILED	-	360	-	mA	
LED Life Time	-	-	30000	-	Hours	Ta=25 °C

Interface

1. LCM PIN Definition

Pin No.	Signal Name	Description
1	NC	Not Connect
2	H_GND	Ground
3	Lane1_N	Complement Signal Link Lane 1
4	Lane1_P	True Signal Line 1
5	H_GND	Ground
6	Lane0_N	Complement Signal Link Lane 0
7	Lane0_P	True Signal Line 0
8	H_GND	Ground
9	AUX_CH_P	True Signal Auxiliary Ch.
10	AUX_CH_N	Complement Signal Auxiliary Ch.
11	H_GND	Ground
12-13	LCD_VDD	LCD Logic and Driver Power
14	NC	Not Connect
15-16	LCD_GND	Ground
17	HPD	HPD Signal Pin
18-21	LCD_GND	Ground
22-30	NC	Not Connect

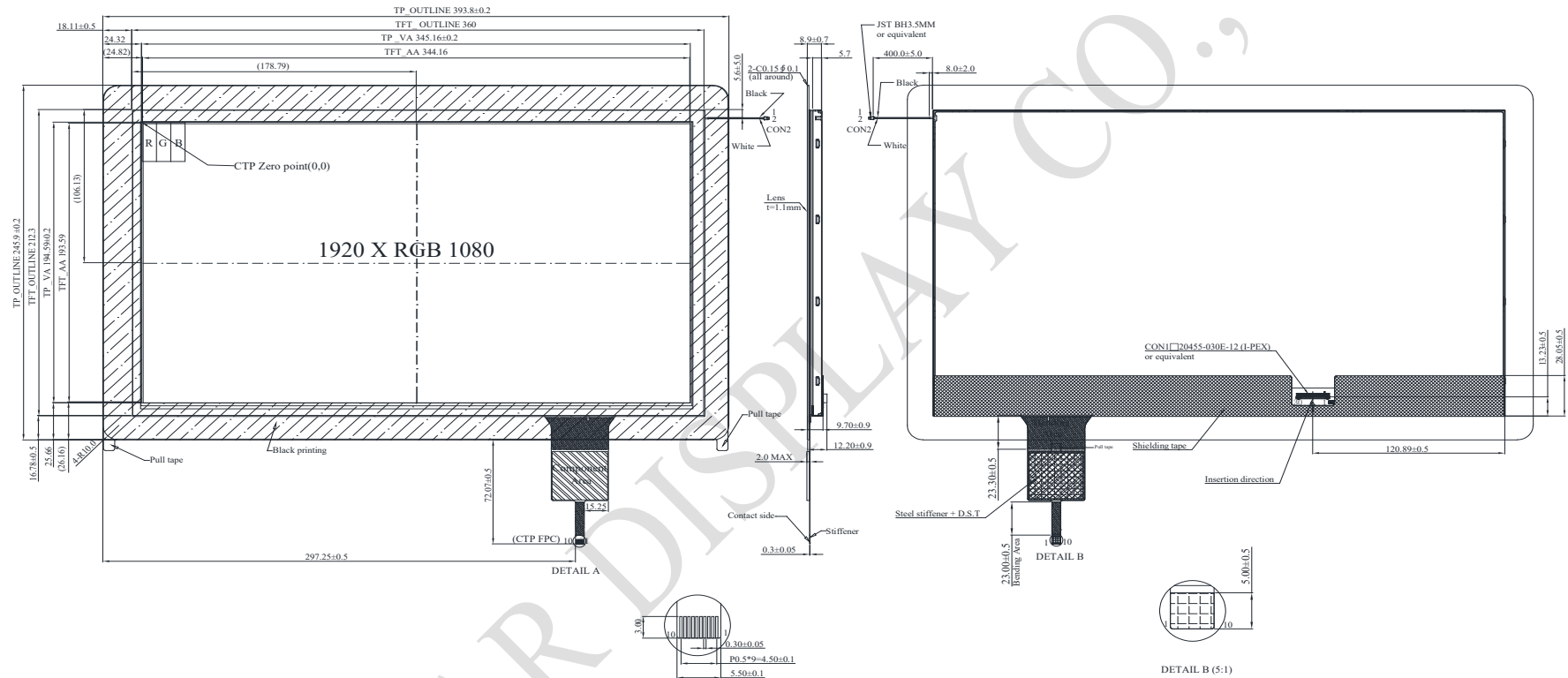
2. Backlight PIN Definition

Pin No.	Symbol	Description
1	VLED+	Black, LED_ Anode
2	VLED-	White, LED_ Cathode

3. CTP 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

Contour Drawing



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

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

CON2	
PIN NO.	SYMBOL
1	VLED+
2	VLED-

CON1	
PIN NO.	SYMBOL
1	NC
2	H_GND
3	Lane1_N
4	Lane1_P
5	H_GND
6	Lane0_N
7	Lane0_P
8	H_GND
9	AUX_CH_P
10	AUX_CH_N
11	H_GND
12	LCD_VDD
13	LCD_VDD
14	NC
15	LCD_GND
16	LCD_GND
17	HPD
18	LCD_GND
19	LCD_GND
20	LCD_GND
21	LCD_GND
22	NC
23	NC
24	NC
25	NC
26	NC
27	NC
28	NC
29	NC
30	NC