

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODULE NO.: WF0840ATWAMLNB0#

General Specifications

Item	Dimension	Unit
Screen Diagonal	8.4	inch
Number of Pixels	1024 x 3(BGR) x 768	dots
Module dimension	199.5 x 149.0 x 14.3	mm
Active area	170.8032 (H) x 128.1024(V)	mm
Pixel pitch	0.1668 × 0.1668	mm
Display Mode	Normally Black , Transmissive	
Viewing Angle	80/80/80/80	
TFT Drive IC	ST5821AH+ST5084AA or Equivalent	
TFT Interface	LVDS	
Backlight Type	LED, Normally White	
Aspect Ratio	4:3	
Side screw torque	Typ:0.9 Max:1.3 (Unit,Kgf-cm)	
CTP IC	EXC81W32 or equivalent	
CTP Interface	USB (I2C available)	
CTP FW Version	00_T1_M03	
CTP Resolution	16384x16384	
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	-30	—	+80	°C
Storage Temperature	TST	-30	—	+80	°C

Electrical Characteristics

1. Operating conditions:

Item		Symbol	Min	Typ	Max	Unit
Supply Voltage For Logic		V _{DD}	3.0	3.3	3.6	V
Power Supply For Current		V _{DD} =3.3V	—	330	495	mA
Input Voltage	H level	V _{IH}	0.7V _{DD}	—	V _{DD}	V
	L Level	V _{IL}	GND	—	0.3V _{DD}	V
Supply CTP		USB_VDD 5V	4.4	5.0	5.5	V
		I _{VDD 5V}	—	45	68	mA
		VDDT	2.8	3.3	3.5	V
		I _{VDDT}	—	45	68	mA

2. Backlight Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit
Supply voltage of white LED backlight	VLED	32.4	36	40.8	V
Current for LED backlight	ILED	—	70*2	—	mA
LED life time	-	—	100,000	—	Hr

Interface

1. LCM PIN Definition

Pin No.	Symbol	Function
1	VDD	Power supply
2	VDD	Power supply
3	GND	Ground
4	GND	Ground
5	Link0-	0- LVDS differential data input (D0N)
6	Link0+	0+ LVDS differential data input (D0P)
7	GND	Ground
8	Link1-	1- LVDS differential data input (D1N)
9	Link1+	1+ LVDS differential data input (D1P)
10	GND	Ground
11	Link2-	2- LVDS differential data input (D2N)
12	Link2+	2+ LVDS differential data input (D2P)
13	GND	Ground
14	CLKIN-	- LVDS differential clock input (CLKN)
15	CLKIN+	+ LVDS differential clock input (CLKP)
16	GND	Ground
17	Link3-	3- LVDS differential data input (D3N)
18	Link3+	3+ LVDS differential data input (D3P)
19	MODE	Bit 6/8:Low(6 Bit);High(8 Bit)
20	SC	Scan direction selector (Low: Normal ;High: Reverse)

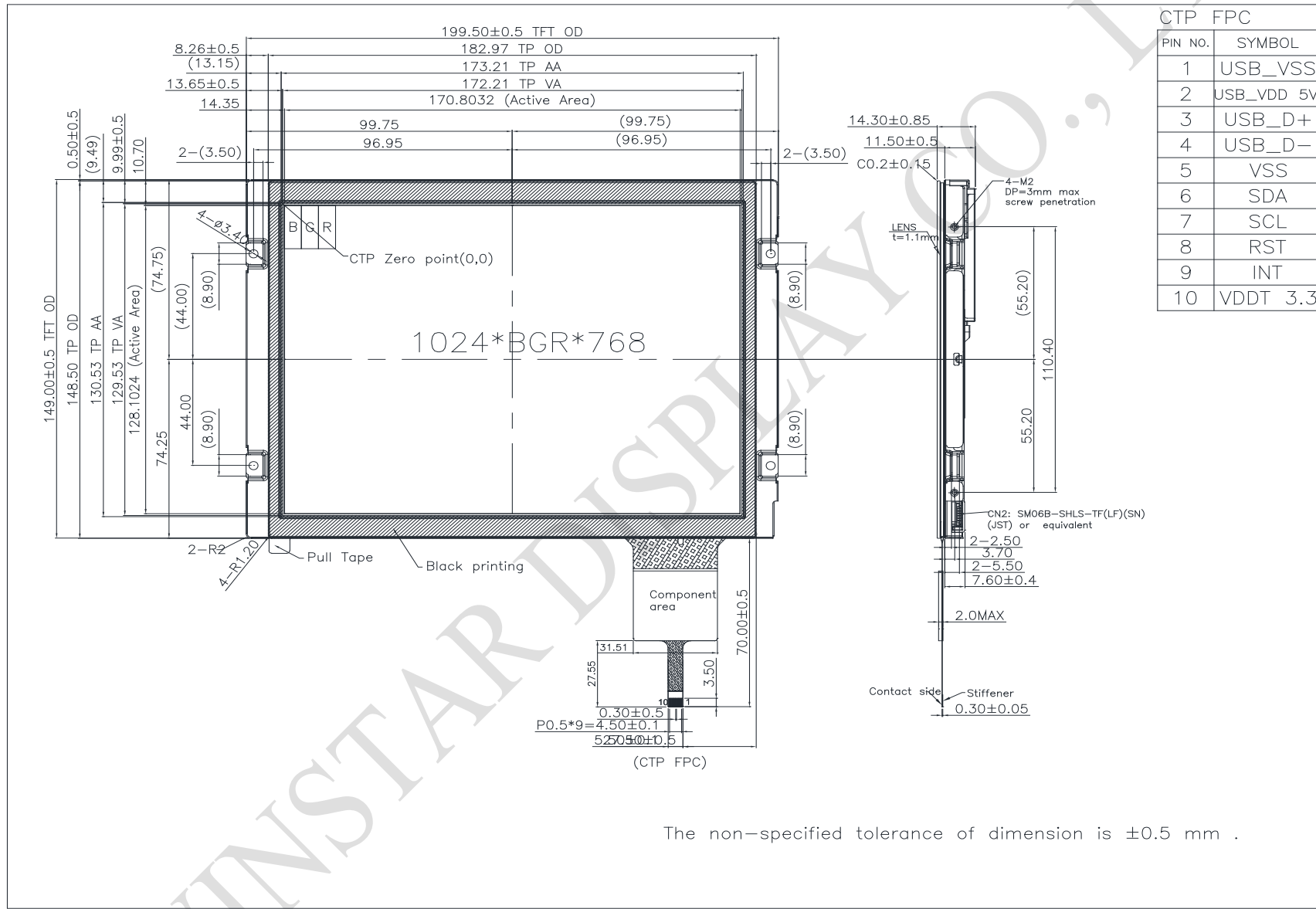
2. CN2

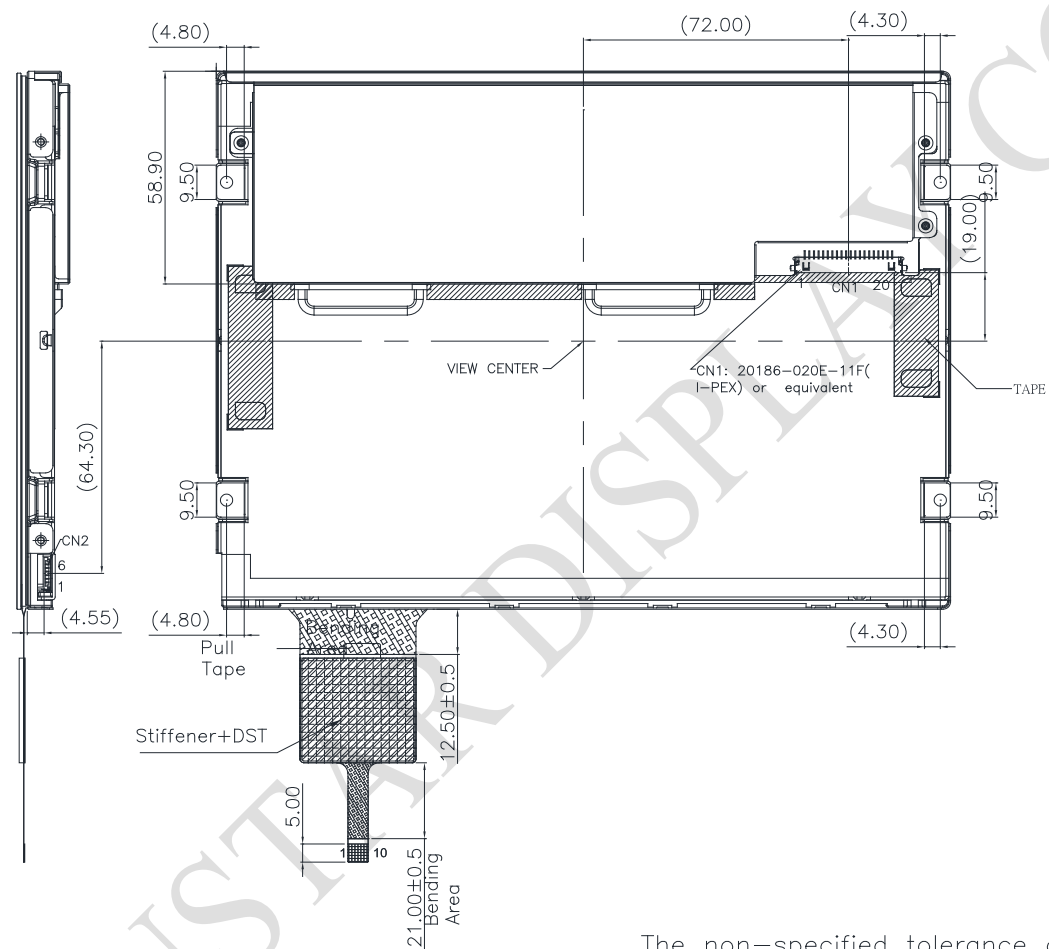
Pin No.	Symbol	Function
1	NC	No connection
2	NC	No connection
3	LED C1	LED_ Cathode 1
4	LED A1	LED_ Anode 1
5	LED A2	LED_ Anode 2
6	LED C2	LED_ Cathode 2

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 (Must be pulled high.)
7	SCL	I2C clock input (Must be pulled high.)
8	RST	External Reset, Low is active
9	INT	External interrupt to the host
10	VDDT 3.3	Power supply

Contour Drawing





CN2

Pin	Symbol
1	NC
2	NC
3	LED C1
4	LED A1
5	LED A2
6	LED C2

CN1

Pin	Symbol
1	VDD
2	VDD
3	GND
4	GND
5	Link0-
6	Link0+
7	GND
8	Link1-
9	Link1+
10	GND
11	Link2-
12	Link2+
13	GND
14	CLKIN-
15	CLKIN+
16	GND
17	Link3-
18	Link3+
19	MODE
20	SC

The non-specified tolerance of dimension is ± 0.5 mm .