TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
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SPECIFICATION

MODULE NO.: WF70-2801424C3M#0P14-FC

General Specification

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	280 x RGBx1424(TFT)	dots
Module dimension	43.3(H) x 201.0(V) x 5.23(D)	mm
Active area	33.60 (H) x170.88(V)	mm
Pixel pitch	0.12(H) x 0.12(V)	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing Angle	80/80/80/80	
Aspect Ratio	1：5	
Driver IC	OTA7290B or Equivalent	
Interface	4-Lanes MIPI	
PCAP Driver IC	FT5446IDQQ or equivalent	
PCAP Resolution	X：1424 , Y：280	
PCAP FW Version	V03	
Backlight Type	LED, Normally White	
Touch Panel	Projected Capacitive Touch Panel (PCAP)	
Surface	Glare	

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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

1.TFT LCD Module

Item	Symbol	Min.	Typ.	Max.	Unit
Analog Supply voltage	VCC	3.0	3.3	3.6	V
Analog supply current	ICC	-	102	120	mA
Logic input voltage	VIH	0.7*VCC	-	VCC	V
	VIL	GND	-	0.3*VCC	V

2.Touch panel

Item	Symbol	Min.	Typ.	Max.	Unit
Power supply voltage	VDD	-	3.3	-	V
Power supply current	IDD	-	15	-	mA
Logic input voltage	VIH	0.7*VDD	-	VDD	V
	VIL	GND	-	0.3*VDD	V

3.Backlight Driving Conditions

Parameter	Symbol	Min	Typ	Max	Units
LED Current	IF	--	40	--	mA
LED Voltage	VF	21.6	24	27.2	Volt
LED Life-Time	N/A	15,000	--	--	Hour

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Interface

LCM PIN Definition

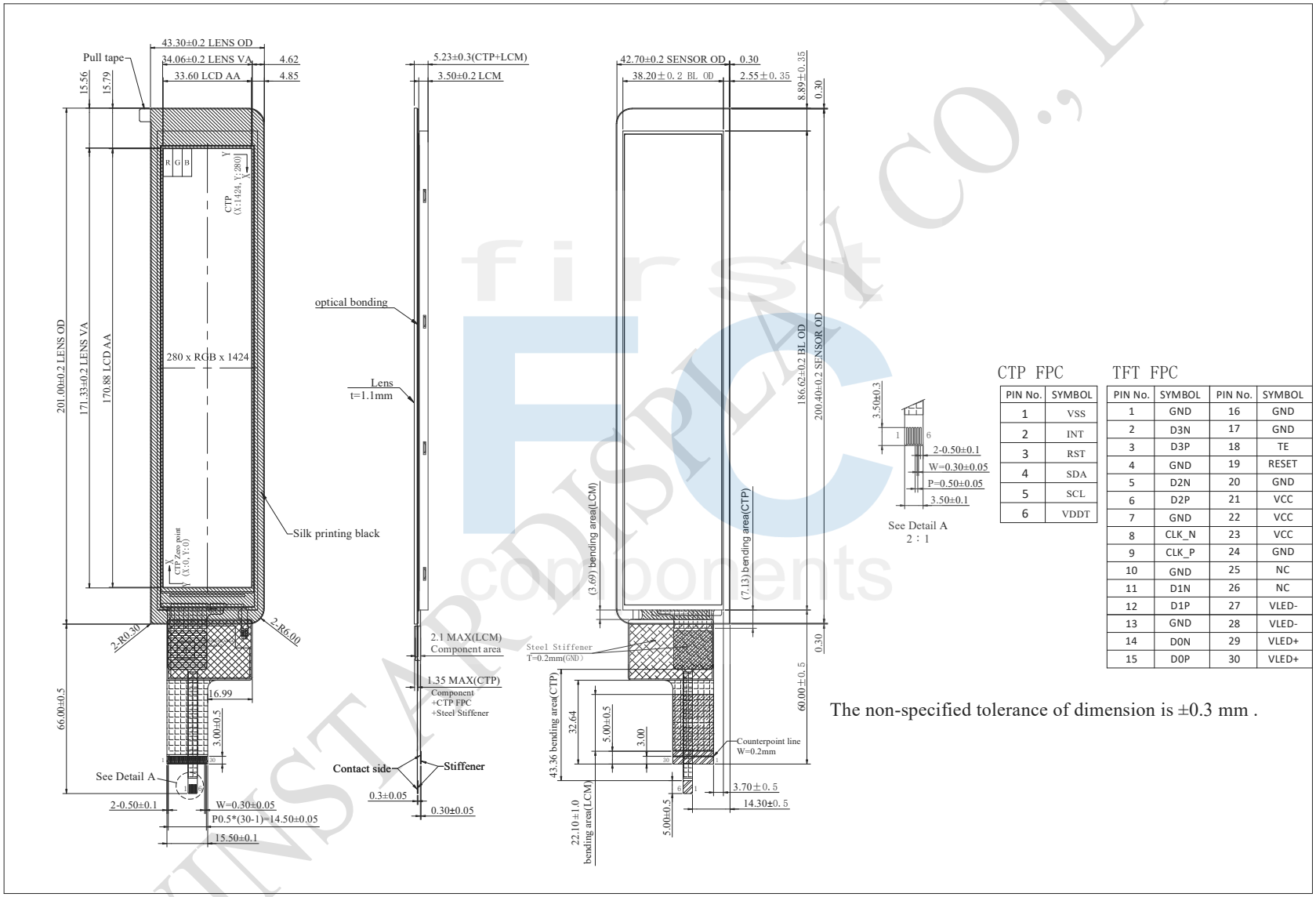
NO.	Symbol	Description
1	GND	Ground
2	D3N	Negative polarity of low voltage differential data signal
3	D3P	Positive polarity of low voltage differential data signal
4	GND	Ground
5	D2N	Negative polarity of low voltage differential data signal
6	D2P	Positive polarity of low voltage differential data signal
7	GND	Ground
8	CLKN	Negative polarity of low voltage differential clock signal
9	CLKP	Positive polarity of low voltage differential clock signal
10	GND	Ground
11	D1N	Negative polarity of low voltage differential data signal
12	D1P	Positive polarity of low voltage differential data signal
13	GND	Ground
14	D0N	Negative polarity of low voltage differential data signal
15	D0P	Positive polarity of low voltage differential data signal
16-17	GND	Ground
18	TE	Tearing effect output pin to synchronize to frame writing. If not used, open this pin
19	RESET	Reset signal pin
20	GND	Ground
21-23	VCC	Power supply
24	GND	Ground
25-26	NC	Not connect
27-28	VLED-	LED cathode
29-30	VLED+	LED anode

2.Touch FPC Pin Assignment

NO.	Symbol	Description
1	GND	Ground
2	INT	Interrupt request to the host
3	RST	Wakeup request from the host
4	SDA	I2C data input and output
5	SCL	I2C clock input
6	VDD	Power supply

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Contour Drawing



CTP FPC

PIN No.	SYMBOL
1	VSS
2	INT
3	RST
4	SDA
5	SCL
6	VDDT

TFT FPC

PIN No.	SYMBOL	PIN No.	SYMBOL
1	GND	16	GND
2	D3N	17	GND
3	D3P	18	TE
4	GND	19	RESET
5	D2N	20	GND
6	D2P	21	VCC
7	GND	22	VCC
8	CLK_N	23	VCC
9	CLK_P	24	GND
10	GND	25	NC
11	D1N	26	NC
12	D1P	27	VLED-
13	GND	28	VLED-
14	D0N	29	VLED+
15	D0P	30	VLED+

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

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