TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WFN0400MA2#0P15-FC

General Specifications

Item	Dimension	Unit
Size	4.0	inch
Dot Matrix	720 x RGB x 720 (TFT)	dots
Module dimension	125.0 x 125.0 x 3.86	mm
Active area	101.52 x 101.52	mm
Pixel pitch	0.141 x 0.141	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing Angle	85/85/85/85	
TFT Interface	4-Lanes MIPI	
Backlight Type	LED, Normally White	
TFT Driver IC	FL7703 or Equivalent	
CTP Driver IC	FT3269 or equivalent	
CTP Interface	I2C	
CTP FW Version	0x21	
CTP Resolution	720*720	
Touch Panel	Projected Capacitive Touch Panel	
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

1. Operating conditions

VCI=3.3V， GND=0V， Ta = 25 ℃

Item		Symbol	Min.	Typ.	Max.	Unit
Digital supply Voltage		IOVCC	1.65	1.8	3.3	V
Analog supply Voltage		VCI	2.8	3.0	3.3	V
TP Power		TP_VCI	2.8	3.0	3.3	V
Input Signal Voltage	Low Level	VIL	0	-	0.3 x IOVCC	V
	High Level	VIH	0.7 x IOVCC	-	IOVCC	V
Current of digital supply voltage		IIOVCC	-	15	20	mA
Current of analog supply voltage		IVCI	-	35	50	mA

2. LED driving conditions

Item	Symbol	Min.	Typ.	Max.	Unit
LED current	-	-	40	45	mA
LED voltage	VLED+		15.5	16.0	V
Backlight Power Consumption	WBL	-	600	720	mW
LED Life Time	-	30,000	-	-	Hr

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Interface

1. LCM PIN Definition

Match connector: XF2M-3015-1A（ OMRON ）or equivalent.

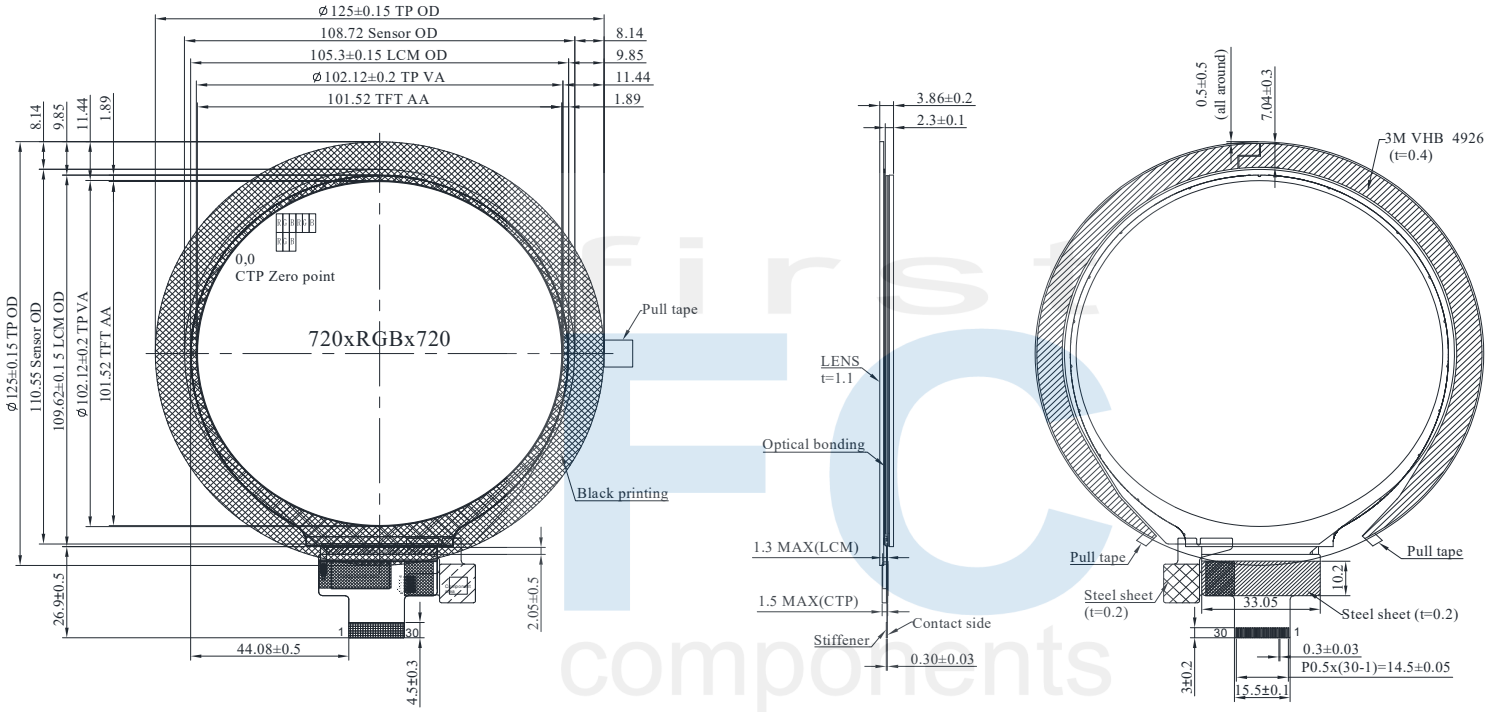
Pin No	Symbol	Description
1	VLED+	LED Anode
2	VLED-	LED Cathode1
3	VLED-	LED Cathode2
4	VCI	Power Supply 2.8V
5	IOVCC	LCD I/O power supply(1.8V)
6	RESET	Reset pin
7	TE	Tearing effect(1.8V)
8	NC	No connection.
9	GND	Ground
10	D0P	MIPI DSI differential data pair (Data lane 0)
11	D0N	MIPI DSI differential data pair (Data lane 0)
12	GND	Ground
13	D1P	MIPI DSI differential data pair (Data lane 1)
14	D1N	MIPI DSI differential data pair (Data lane 1)
15	GND	Ground
16	CLKP	MIPI DSI differential clock pair
17	CLKN	MIPI DSI differential clock pair
18	GND	Ground
19	D2P	MIPI DSI differential data pair (Data lane 2)
20	D2N	MIPI DSI differential data pair (Data lane 2)
21	GND	Ground
22	D3P	MIPI DSI differential data pair (Data lane 3)
23	D3N	MIPI DSI differential data pair (Data lane 3)

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24	GND	Ground
25	TP_INT	Touch Interrupt
26	TP_SDA	Touch IIC Data signal
27	TP_SCL	Touch IIC Clock signal
28	TP_RESET	Touch Reset Signal
29	TP_VCI	Touch Power supply
30	NC	No connection.

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Contour Drawing



PIN	SYMBLE
1	VLED+
2	VLED-
3	VLED-
4	VCI
5	IOVCC
6	RESET
7	TE
8	NC
9	GND
10	D0P
11	D0N
12	GND
13	D1P
14	D1N
15	GND
16	CLKP
17	CLKN
18	GND
19	D2P
20	D2N
21	GND
22	D3P
23	D3N
24	GND
25	TP_INT
26	TP_SDA
27	TP_SCL
28	TP_RESET
29	TP_VCI
30	NC

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

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