TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WFN0276DA2#0P0-FC

General Specifications

Item	Dimension	Unit
Size	2.76	inch
Dot Matrix	480 x RGB x 480 (TFT)	dots
Module dimension	73.03 x 76.48 x 2.34	mm
Active area	70.128 x 70.128	mm
Pixel pitch	0.1461 x 0.1461	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing Angle	85/85/85/85	
TFT Interface	3W SPI+RGB18bit	
Backlight Type	LED ,Normally White	
TFT Controller IC	ST7701 or Equivalent	
Touch Panel	Without Touch Panel	
Surface	Anti-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

4.1. Operating conditions

Item		Symbol	Min.	Typ.	Max.	Unit
Power supply Voltage		VCI	2.7	3.0	3.3	V
Input Signal Voltage	Low Level	V_{IL}	0	-	0.3 x VCI	V
	High Level	V_{IH}	0.7 x VCI	-	VCI	V
Power supply Voltage		I_{VCI}	-	25	50	mA

LED driving conditions

Item	Symbol	Min.	Typ.	Max.	Unit
LED current	-	-	80	100	mA
LED voltage	VLED+	-	6.4	6.8	V
LED Life Time	-	30000	-	-	Hr

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Interface

1. LCM PIN Definition

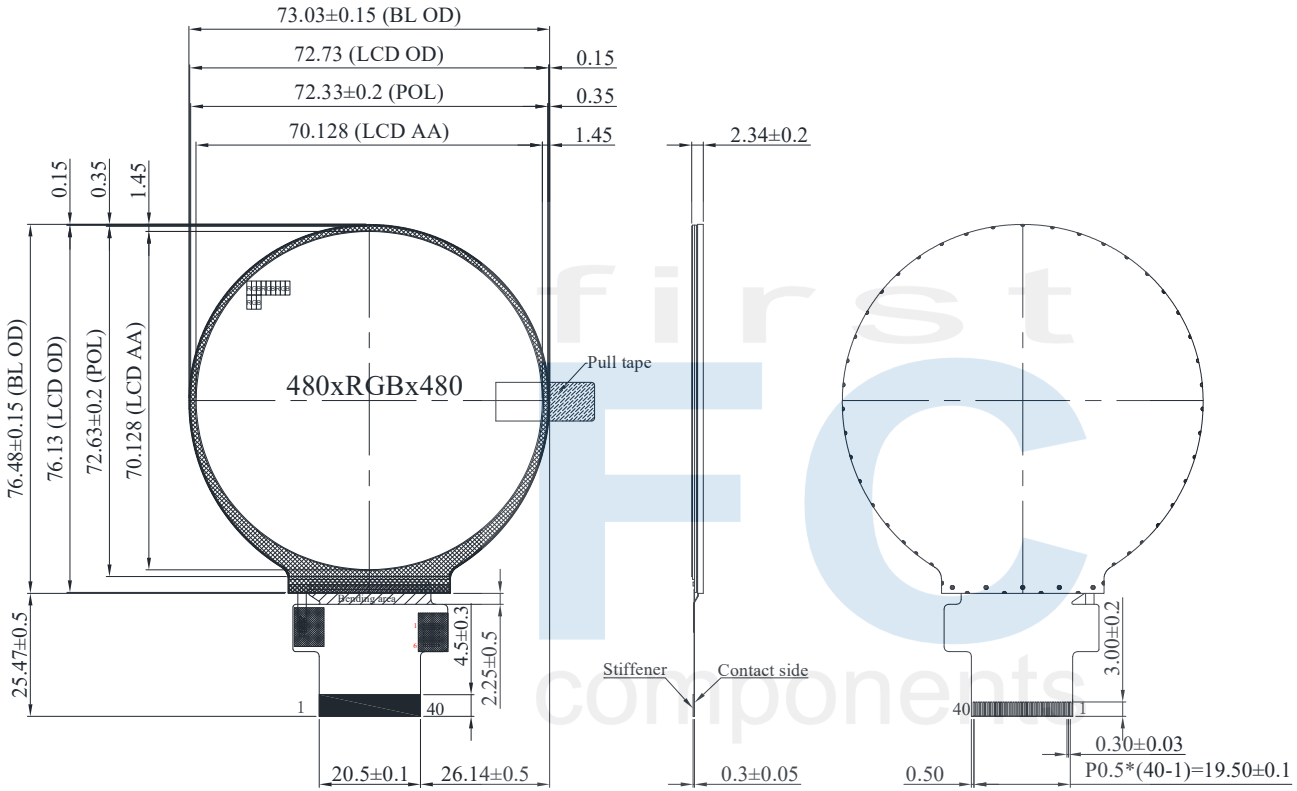
Match connector: XF2M-4015-1A（OMRON）or equivalent.

Pin No	Symbol	I/O	Description
1	VLED+	P	LED ANODE
2	VLED1-	P	LED1 CATHODE
3	VLED2-	P	LED2 CATHODE
4	GND	P	Ground
5	VCI	P	Power supply
6	RESET	I	Reset Signal ,Active Low
7	NC	-	NC
8	NC	-	NC
9	SDA	I	SPI Data signal
10	SCK	I	SPI Clock signal
11	CS	I	SPI Chip select signal
12	PCLK	I	RGB dot clock signal
13	DE	I	RGB data enable signal
14	VSYNC	I	RGB frame synchronizing signal
15	HSYNC	I	RGB line synchronizing signal
16~33	DB0~DB17	I	RGB data signal: DB0:BLUE LSB--DB5:BLUE MSB; DB6:GREEN LSB--DB11:GREEN,MSB; DB12:RED LSB--DB17:RED MSB.
34	GND	P	Ground
35	NC	-	No connection
36	NC	-	No connection
37	NC	-	No connection
38	NC	-	No connection
39	NC	-	No connection
40	GND	P	Ground

I：Input, O：Output, P：Power/Ground

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Contour Drawing



PIN NO.	SYMBOL
1	VLED+
2	VLED1-
3	VLED2-
4	GND
5	VCI
6	RESET
7	NC
8	NC
9	SDA
10	SCK
11	CS
12	PCLK
13	DE
14	VSYNC
15	HSYNC
16~33	DB0~DB17
34	GND
35	NC
36	NC
37	NC
38	NC
39	NC
40	GND

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