TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司

Represented by:

first FC components
FIRST Components s.r.l.
www.first-components.com
technical@first-components.com
+39 0332 1888005

SPECIFICATION

MODULE NO.: WFN0160MA2#0P0-FC

General Specifications

Item	Dimension	Unit
Size	1.6	inch
Dot Matrix	400 x RGB x 400 (TFT)	dots
Module dimension	42.94 x 45.89 x 1.94	mm
Active area	39.84 x 39.84	mm
Pixel pitch	0.0996 x 0.0996	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing Angle	85/85/85/85	
TFT Interface	1-Lane MIPI	
Backlight Type	LED ,Normally White	
TFT Controller IC	ST7797 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

1. Operating conditions

Item	Symbol	Min.	Typ.	Max.	Unit
Digital Supply Voltage	VCI	2.5	3.3	3.6	V
Interface Operation Voltage	IOVCC	1.65	1.8	3.3	V
Normal mode Current consumption	IDD	--	10	20	mA
Level input voltage	VI_H	0.7 I_{OVCC}	--	Iovcc	V
	V_{IL}	GND	--	0.3 I_{OVCC}	V
Level output voltage	V_{OH}	0.8 I_{OVCC}	--	Iovcc	V
	V_{OL}	GND	--	0.2 I_{OVCC}	V
Differential Input High Threshold Voltage	VIT+	--	0	50	mV
Differential Input Low Threshold Voltage	VIT-	-50	0	--	mV
Single-ended Receiver Input Operation Voltage Range	VIR	0.5	-	1.2	V

2. LED driving conditions

Item	Symbol	Min.	Typ.	Max.	Unit
LED current	-	-	60	-	mA
LED voltage	VLED+	2.8	3.2	3.4	V
LED Life Time	-	50000	-	-	Hr

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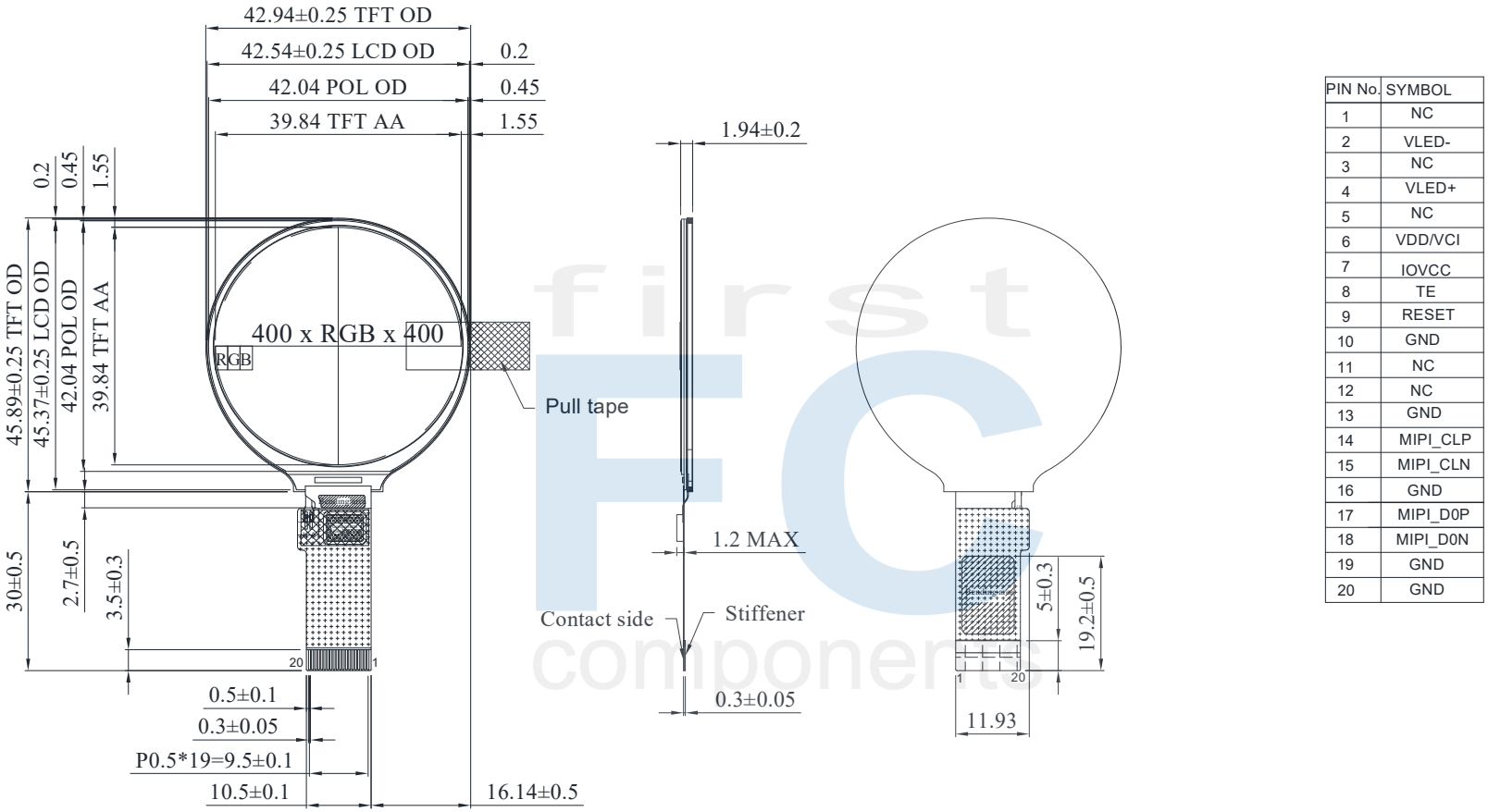
Interface

1. LCM PIN Definition

Pin No	Symbol	Function
1	NC	No connection
2	VLED-	Cathode pin of backlight.
3	NC	No connection
4	VLED+	Anode pin of backlight.
5	NC	No connection
6	VDD/VCI	Supply Voltage (3.3V).
7	IOVCC	I/O power supply voltage.
8	TE	-Tearing effect output Leave the pin to open when not in use.
9	RESET	- The external reset input. Initializes the chip with a low input. Be sure to execute a power-on reset after supplying power.
10	GND	Ground.
11	NC	No connection
12	NC	No connection
13	GND	Ground.
14	MIPI_CLP	MIPI DSI differential clock pair (DSI-CLK+/-).
15	MIPI_CLN	
16	GND	Ground.
17	MIPI_D0P	MIPI DSI differential data pair (DSI-Dn+/-).
18	MIPI_D0N	
19	GND	Ground.
20	GND	Ground.

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Contour Drawing



PIN No.	SYMBOL
1	NC
2	VLED-
3	NC
4	VLED+
5	NC
6	VDD/VCI
7	IOVCC
8	TE
9	RESET
10	GND
11	NC
12	NC
13	GND
14	MIPI_CLP
15	MIPI_CLN
16	GND
17	MIPI_D0P
18	MIPI_D0N
19	GND
20	GND

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

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