TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司

Represented by:

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

SPECIFICATION

MODULE NO.: WF40-480800CM#0P15-FC

General Specifications

Item	Dimension	Unit
Size	3.97	inch
Dot Matrix	480× 3(RGB) × 800	dots
Module dimension	67.14 (H) * 106.85 (W）*3.8	mm
Active area	51.84(H)*86.4 (V)	mm
Pixel pitch	0.108(H)*0.108(V)	mm
LCD type	TFT, Normally Black, Transmissive	
View Direction	IPS	
Aspect Ratio	Portrait	
TFT Interface	2-Lanes MIPI	
TFT Driver IC	ST7701S or Equivalent	
Backlight Type	LED ,Normally White	
CTP Driver IC	GT911 or Equivalent	
CTP Interface	I2C	
CTP FW Version	65	
CTP Resolution	480*800	
Touch Panel	Projected Capacitive Touch Panel	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-20	—	+70	℃
Storage Temperature	TST	-30	—	+80	℃

Electrical Characteristics

1. Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Interface Supply Voltage	VCI	2.8	-	3.3	V
Power voltage	IOVCC	1.65	1.8	3.3	V
Current for Driver(White)	ICI	-	65	98	mA
Supply CTP	VDDT 2.8V	2.7	2.8	3.3	V
	IDDT 2.8V	-	20	30	mA

2. Backlight Driving Conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	ILED	-	40	-	mA
LED voltage	VLED+	13.5	15	17	V
LED Life Time		50,000	-	-	Hr

first components

Interface

1. LCM PIN Definition

Pin	Symbol	Function
1	GND	Power ground
2-5	NC	No connect
6	GND	Power ground
7	D0N	MIPI DSI differential data pair (Data lane 0)
8	D0P	
9	GND	Power ground
10	CLK_N	MIPI DSI differential clock pair
11	CLK_P	
12	GND	Power ground
13	D1N	MIPI DSI differential data pair(Data lane 1)
14	D1P	
15	GND	Power ground
16	IOVCC	I/O and interface power supply (1.8V)
17	RESET	Reset input
18	TE	Tearing effect output pin.
19	VCI	Analog power supply
20	VCI	Analog power supply
21	NC	No connect
22	LEDK	Power for LED backlight cathode
23	LEDA	Power for LED backlight anode
24	GND	Power ground

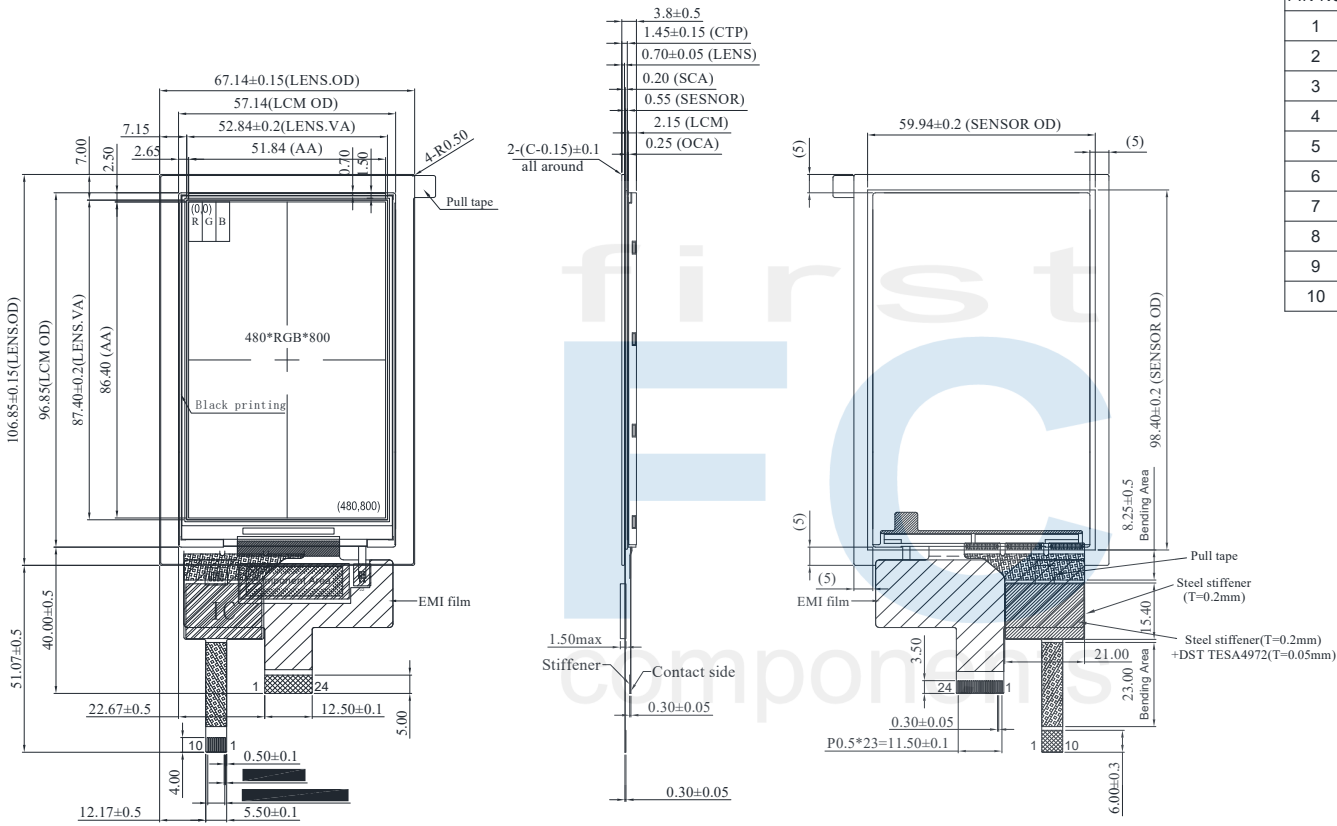
first components

2. CTP PIN Definition

Pin	Symbol	Function
1	VSS	Ground for analog circuit
2	VDDT 2.8V	Power Supply : +2.8V
3	SCL	I2C clock input
4	NC	No connect
5	SDA	I2C data input and output
6	NC	No connect
7	/RST	External Reset, Low is active
8	NC	No connect
9	/INT	External interrupt to the host
10	VSS	Ground for analog circuit

first FC components

Contour Drawing



CTP	
PIN No.	SYMBOL
1	VSS
2	VDDT 2.8V
3	SCL
4	NC
5	SDA
6	NC
7	/RST
8	NC
9	/INT
10	VSS

PIN No.	Pin Name
1	GND
2	NC
3	NC
4	NC
5	NC
6	GND
7	D0N
8	D0P
9	GND
10	CLK_N
11	CLK_P
12	GND
13	D1N
14	D1P
15	GND
16	IOVCC
17	RESET
18	TE
19	VCI
20	VCI
21	NC
22	LEDK
23	LEDA
24	GND

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

first components