Winstar Display Co., LTD
華凌光電股份有限公司
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SPECIFICATION

MODULE NO.: WF39-480128QD#007-FC

General Specifications

Item	Dimension	Unit
Size	3.9	inch
Dot Matrix	480 x 128 x RGB (TFT)	dots
Module dimension	122.0 x 44.0 x 9.8(max)	mm
Active area	95.04 x 25.34	mm
Dot pitch	0.066(W) x 0.198(H)	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12o'clock	
Gray Scale Inversion Direction	6 o'clock	
Aspect Ratio	Bar Type	
TFT Driver IC	SSD1963	
TFT Interface	Digital 8080 family MPU 8bit/16bit	
CTP IC	CYTMA568 Or Equal	
CTP FW Version	TBD	
Backlight Type	LED, Normally White	
Color arrangement	RGB-STRIPE	
Touch Panel	PCAP	
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

Operating conditions: (CON3.Pin1=GND, Pin2=VDD)

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage For LCM	VDD	3.0	3.1	3.3	V
Supply Current For LCM	IDD	—	200	—	mA
Supply Voltage For CTP	VDDT	2.8		3.3	V
Supply Current For CTP	IDDT	—	35	—	mA

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Interface

LCM PIN Definition

Pin	Symbol	Function
1	GND	System round pin of the IC. Connect to system ground.
2	VDD	Power Supply : +3.3V
3	BL_E	Backlight control signal , H: On \ L: Off
4	D/C	Data/Command select
5	WR	Write strobe signal
6	RD	Read strobe signal
7	DB0	Data bus
8	DB1	Data bus
9	DB2	Data bus
10	DB3	Data bus
11	DB4	Data bus
12	DB5	Data bus
13	DB6	Data bus
14	DB7	Data bus
15	DB8	Data bus (When select 8bits mode, this pin is NC)
16	DB9	Data bus (When select 8bits mode, this pin is NC)
17	DB10	Data bus (When select 8bits mode, this pin is NC)
18	DB11	Data bus (When select 8bits mode, this pin is NC)
19	DB12	Data bus (When select 8bits mode, this pin is NC)
20	DB13	Data bus (When select 8bits mode, this pin is NC)
21	DB14	Data bus (When select 8bits mode, this pin is NC)
22	DB15	Data bus (When select 8bits mode, this pin is NC)
23	NC	No connect
24	NC	No connect
25	CS	Chip select
26	RESET	Hardware reset
27	DISP_ON	Display on/off control
28	NC	No connect
29	NC	No connect
30	NC	No connect

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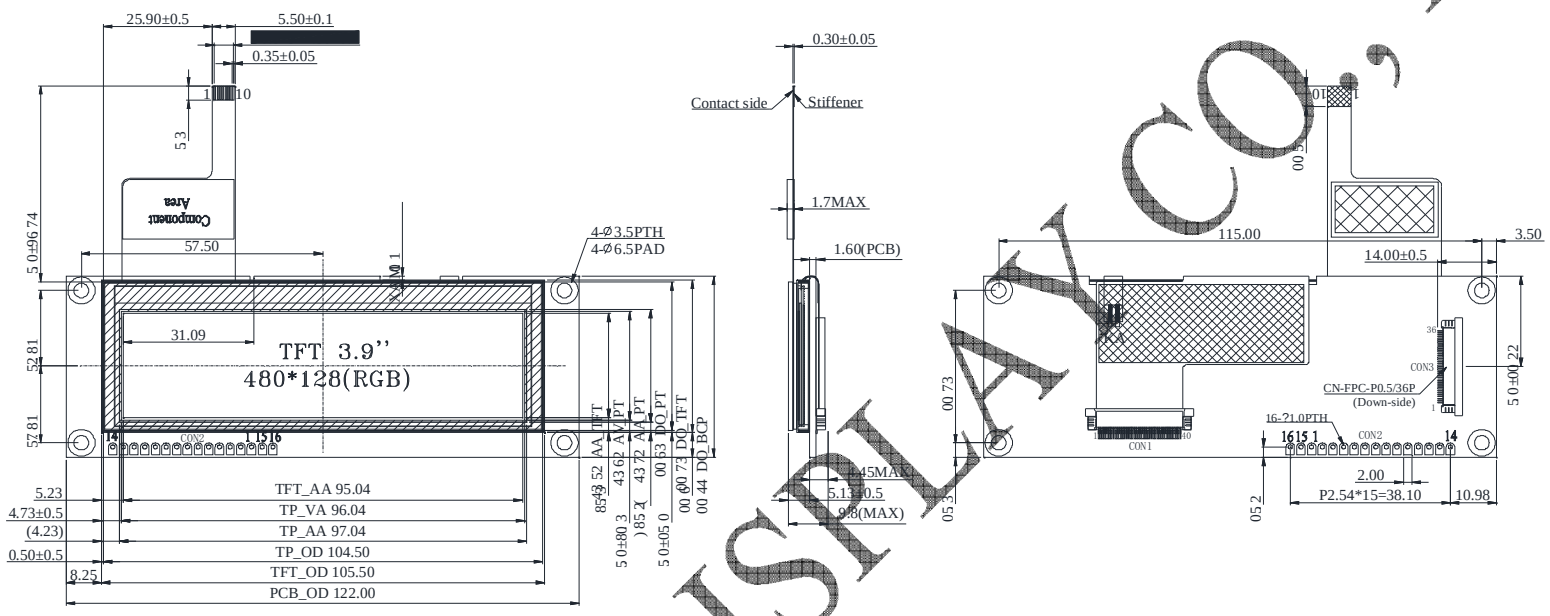
31	NC	No connect
32	NC	No connect
33	VLED-	VLED- for B/L LED inverter (GND)
34	VLED-	VLED- for B/L LED inverter (GND)
35	VLED+	VLED+ for B/L LED inverter (+5V)
36	VLED+	VLED+ for B/L LED inverter (+5V)

2. PCAP PIN Definition

Pin	Symbol	Function
1	VSS	Ground for analog circuit
2	VDDT	Power Supply : +3.0V
3	SCL	I2C clock inputI2C 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

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Contour Drawing



CON3	
PIN NO.	SYMBOL
1	GND
2	VDD
3	BL_E
4	D/C
5	WR
6	RD
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7
15	DB8
16	DB9
17	DB10
18	DB11
19	DB12
20	DB13
21	DB14
22	DB15
23	NC
24	NC
25	CS
26	RESET
27	DISP_ON
28	NC
29	NC
30	NC
31	NC
32	NC
33	VLED-
34	VLED-
35	VLED+
36	VLED+

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

CON2	
PIN NO.	SYMBOL
1	GND
2	VDD
3	BL_E
4	D/C
5	WR
6	RD
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7
15	VLED+
16	VLED-

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

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