

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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SPECIFICATION

MODULE NO.: WF35XTYBCDBG0#

General Specifications

Item	Dimension	Unit
Size	3.5	inch
Dot Matrix	320 x RGB x 240(TFT)	dots
Module dimension	93.5 x 66.44 x 9.26	mm
Active area	70.08 x 52.56	mm
Pixel pitch	0.219 x 0.219	mm
LCD type	TFT, normally black, Transmissive	
Viewing Angle	80/80/80/80	
Aspect Ratio	4:3	
Controller IC	SSD1963	
TFT Interface	Digital 8080 family MPU 8bit/16bit	
Backlight Type	LED, Normally White	
PCAP Driver IC	ILI2130 or equivalent	
PCAP Interface	I2C	
PCAP FW Version	0x07.0x00.0x00.0x00.0x00.0x35.0x5A.0x01	
PCAP Resolution	16384 * 16384	
Touch Panel	Projected Capacitive Touch Panel (PACP)	
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	°C
Storage Temperature	TST	-30	—	+80	°C

Electrical Characteristics

1. Operating conditions: (CON2.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	-	176	265	mA

2. Backlight driving conditions (CON2.Pin33,34=VLED-, Pin35,36=VLED+)

Parameter	Symbol	Min.	Typ.	Max.	Unit
Operation Current For LED Driver	VLED=3.3V	-	150	225	mA
Power Consumption	VLED=3.3V	-	495	742.5	mW
Supply Voltage For LED Driver	VLED+	3.3	-	5	V
LED Life Time		50,000	-	-	Hr

Interface

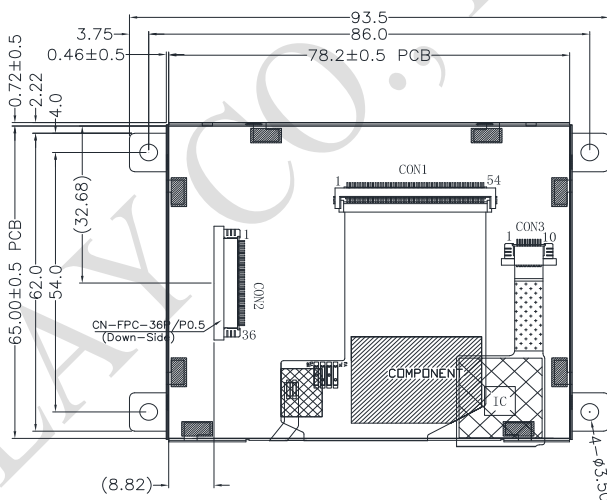
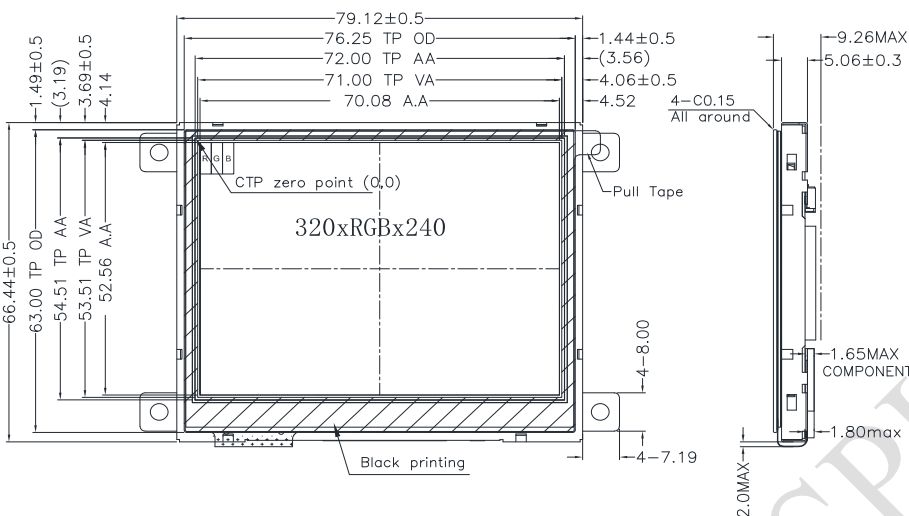
1. LCM PIN Definition (CON2)

Pin	Symbol	Function
1	GND	System ground 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	CTP_INT	CTP_External interrupt to the host
25	CS	Chip select
26	RESET	Hardware reset
27-28	NC	No connect
29	CTP_SCL	CTP_I2C clock input
30	CTP_SDA	CTP_I2C data input and output
31	CTP_RST	CTP_External Reset, Low is active

32	NC	No connect
33-34	VLED-	VLED- for B/L LED inverter (GND)
35-36	VLED+	VLED+ for B/L LED inverter (+3.3V)

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Contour Drawing



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		DB8
16		DB9
17		DB10
18		DB11
19		DB12
20		DB13
21		DB14
22		DB15
23		NC
24		CTP_INT
25		CS
26		RESET
27		NC
28		NC
29		CTP_SCL
30		CTP_SDA
31		CTP_RST
32		NC
33		VLED-
34		VLED-
35		VLED+
36		VLED+

The non-specified tolerance of dimension is $\pm 0.3\text{mm}$.