

# TFT DISPLAY SPECIFICATION



**WINSTAR Display Co.,Ltd.**  
**華凌光電股份有限公司**



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### SPECIFICATION

**MODULE NO.: WF57XTIACDNN0#**

### General Specifications

Item	Dimension	Unit
Size	5.7	inch
Dot Matrix	320 x RGB x 240(TFT)	dots
Module dimension	126.00(W) x 101.55(H) x 6.05(D)(MAX)	mm
Active area	115.2 x 86.40	mm
Dot pitch	0.12 x 0.36	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Aspect Ratio	4:3	
TFT Drive IC	HX8218+HX8615 or Equivalent	
Interface	24-bit RGB	
Backlight Type	LED, Normally White	
Touch Panel	Without 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	°C
Storage Temperature	TST	-30	—	+80	°C

# Electrical Characteristics

## 1. Operating conditions:

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For LCM	VCC	—	3.2	3.3	3.4	V
	AVDD		4.5	5.0	5.5	
Input High Volt.	VIH	—	0.7 VCC	—	VCC	V
Input Low Volt.	VIL	—	0	—	0.3 VCC	V
LCD Driving Supply Voltage	VGH	Ta=25°C	15	16	17	V
	VGL		-6	-5	-4	
	VcomH		—	4.5	—	
	VcomL		—	-0.5	—	
Supply Current For LCM	IVCC	VCC=3.3V	—	30	45	mA

## 2. LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current		-	140	-	mA
Power Consumption		1204	-	1470	mW
LED voltage	VBL+	8.6	9.5	10.5	V
LED Life Time		-	50,000	-	Hr

# Interface

## LCM PIN Definition

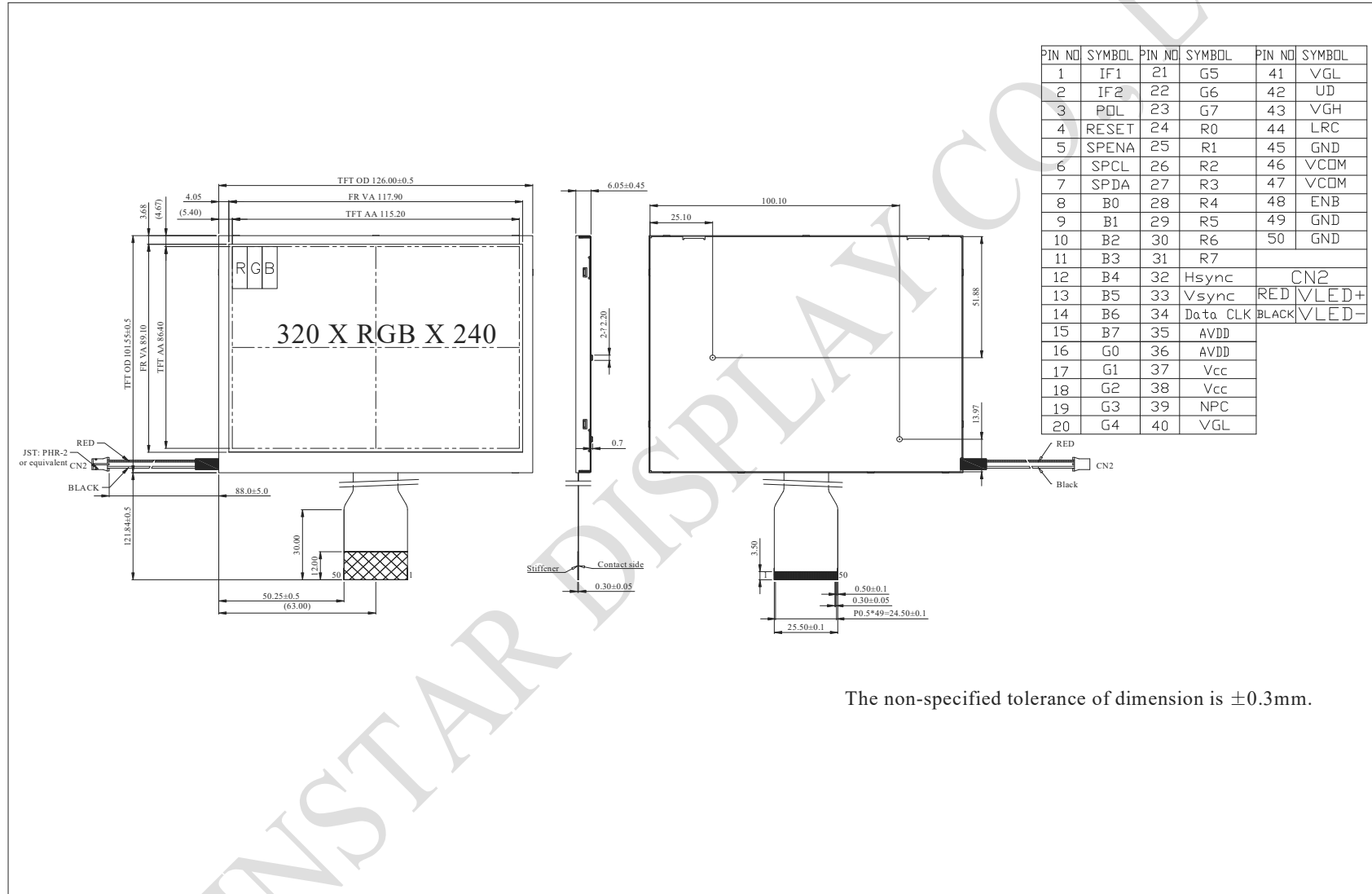
Pin No.	Symbol	I/O	Description
1	IF1	I	Input data format control
2	IF2	I	Input data format control
3	POL	O	Polarity Signal connect to VCOM driving circuit.
4	RESET	I	Hardware reset.
5	SPENA	I	Chip select
6	SPCL	I	Serial Clock
7	SPDA	I/O	Serial Data
8	B0	I	Blue Data bit (LSB)
9	B1	I	Blue Data bit
10	B2	I	Blue Data bit
11	B3	I	Blue Data bit
12	B4	I	Blue Data bit
13	B5	I	Blue Data bit
14	B6	I	Blue Data bit
15	B7	I	Blue Data bit(MSB)
16	G0	I	Green Data bit(LSB)
17	G1	I	Green Data bit
18	G2	I	Green Data bit
19	G3	I	Green Data bit
20	G4	I	Green Data bit
21	G5	I	Green Data bit
22	G6	I	Green Data bit
23	G7	I	Green Data bit(MSB)
24	R0	I	Red Data bit(LSB)
25	R1	I	Red Data bit
26	R2	I	Red Data bit
27	R3	I	Red Data bit
28	R4	I	Red Data bit
29	R5	I	Red Data bit
30	R6	I	Red Data bit

31	R7	I	Red Data bit(MSB)
32	Hsync	I	Horizontal synchronous signal
33	Vsync	I	Vertical synchronous signal
34	Data CLK	I	Dot data clock
35	AVDD	I	4.5V~5.5V
36	AVDD	I	4.5V~5.5V
37	Vcc	I	3.2V~3.4V
38	Vcc	I	3.2V~3.4V
39	NPC	O	NTSC/PAL mode Auto detection result H:NTSC/L:PAL
40	VGL	I	Gate off power
41	VGL	I	Gate off power
42	UD	I	Up/Down scan setting. H: Reverse scan / L: Normal scan
43	VGH	I	Gate on power
44	LRC	I	Shift direction of device internal shift register control.
45	GND	I	GROUND
46	VCOM	I	VCOM driving input
47	VCOM	I	VCOM driving input
48	ENB	I	Data enable input. Normally pull low.
49	GND	I	GROUND
50	GND	I	GROUND

## 2. Backlight PIN Definition

Symbol	I/O	Description
VLED+	I	Red, LED_ Anode
VLED-	I	Black, LED_ Cathode

# Contour Drawing



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