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

MODULE NO.: WF57-320240BD#003B-FC

General Specifications

Item	Dimension	Unit
Size	5.7	inch
Dot Matrix	320 x RGB x 240(TFT)	dots
Module dimension	160(W) x 109(H) x 9.985 (D)	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	
TFT Interface	24-bit RGB	
Aspect Ratio	4:3	
Backlight Type	LED, Normally White	
PCAP IC	FT5426 or Equivalent	
PCAP Interface	I2C	
PCAP FW Version	0x03	
Touch Panel	With PCAP	
Surface	Glare	

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*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

Operating conditions:

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For LCM	VCC	—	3.0	3.3	3.6	V
Supply Voltage For Touch	VDDT	—	2.8	—	3.3	V
Supply Current For LCM	ICC	—	—	17	25	mA
Input High Volt.	VIH	—	0.7 VCC	—	VCC	V
Input Low Volt.	VIL	—	0	—	0.3 VCC	V
LCD Driving Supply Voltage	VGH	—	—	15	—	V
	VGL	—	—	-10	—	V
	VCOMH	—	2.5	—	5.5	V
	VCOML	—	-2.0	—	0	V
	AVDD	—	4.5	5.0	5.5	V

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Interface

LCM PIN Definition

Pin	Symbol	Function
1	IF1	Input data format control
2	IF2	Input data format control
3	POL	Polarity Signal connect to VCOM driving circuit.
4	RESET	Hardware reset
5	SPENA	Chip select
6	SPCL	Serial Clock
7	SPDA	Serial Data
8	B0	Blue Data bit
9	B1	Blue Data bit
10	B2	Blue Data bit
11	B3	Blue Data bit
12	B4	Blue Data bit
13	B5	Blue Data bit
14	B6	Blue Data bit
15	B7	Blue Data bit
16	G0	Green Data bit
17	G1	Green Data bit
18	G2	Green Data bit
19	G3	Green Data bit
20	G4	Green Data bit
21	G5	Green Data bit
22	G6	Green Data bit
23	G7	Green Data bit
24	R0	Red Data bit
25	R1	Red Data bit
26	R2	Red Data bit
27	R3	Red Data bit
28	R4	Red Data bit
29	R5	Red Data bit
30	R6	Red Data bit
31	R7	Red Data bit
32	Hsync	Horizontal synchronous signal

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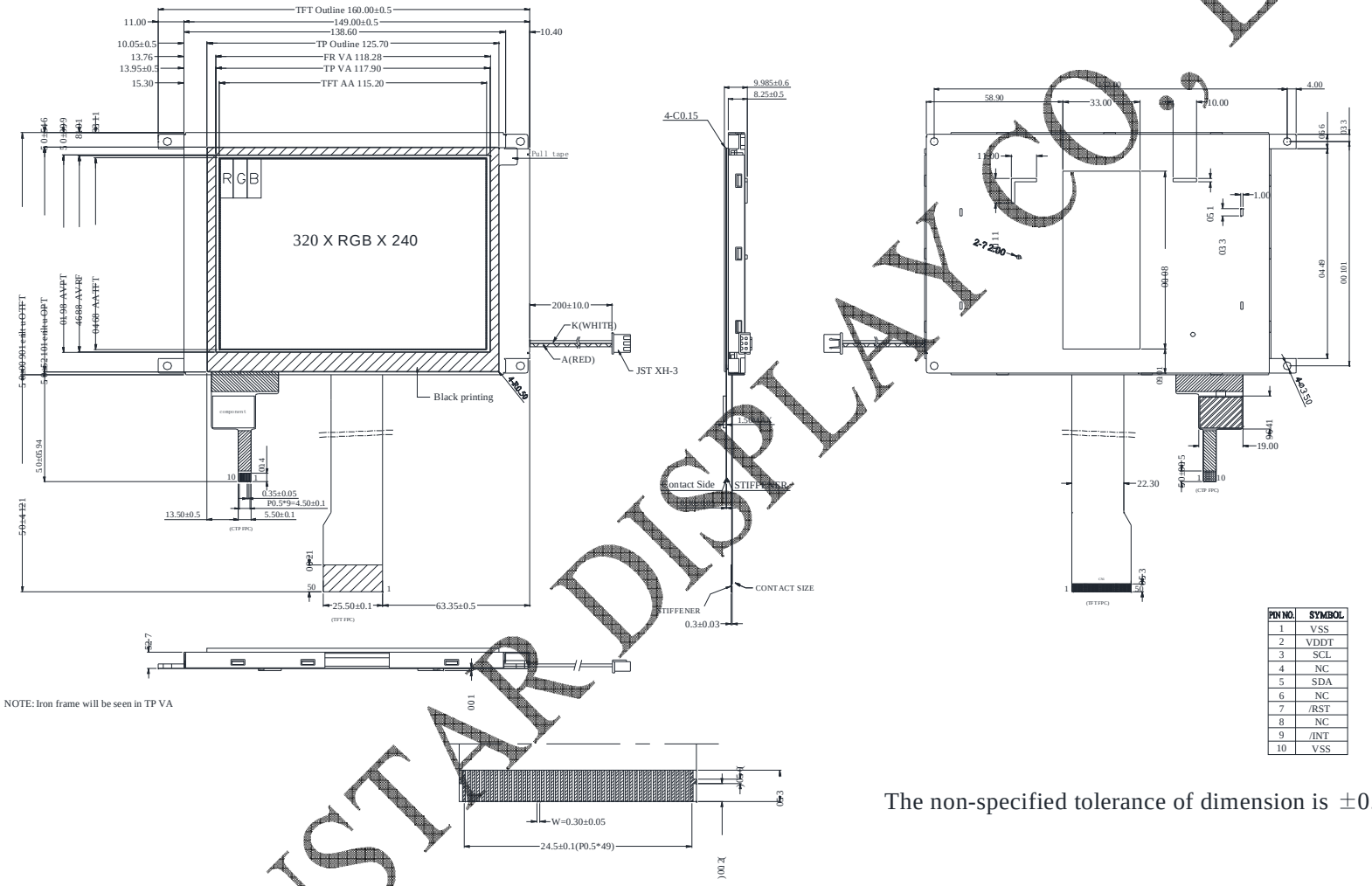
33	Vsync	Vertical synchronous signal
34	Data CLK	Dot data clock
35	AVDD(analog)	Analog power: 4.5V~5.5V
36	AVDD(analog)	Analog power: 4.5V~5.5V
37	VCC(Digital)	Digital power: 3V~3.6V
38	VCC(Digital)	Digital power: 3V~3.6V
39	NPC	NTSC/PAL mode Auto detection result H:NTSC/L:PAL
40	VGL	Gate off power
41	VGL	Gate off power
42	UD	Up/down selection
43	VGH	Gate on power
44	LRC	Shift direction of device internal shift register control.
45	GND	System ground pin of the IC. Connect to system ground.
46	VCOM	VCOM driving input
47	VCOM	VCOM driving input
48	ENB	Signal to settle the horizontal display position
49	GND	System ground pin of the IC. Connect to system ground.
50	GND	System ground pin of the IC. Connect to system ground.

2. PCAP PIN Definition

Pin	Symbol	Function
1	VSS	System ground pin of the IC. Connect to system ground.
2	VDDT	Power Supply : +3.0V
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	System ground pin of the IC. Connect to system ground.

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Contour Drawing



NOTE: Iron frame will be seen in TP VA

TFT FPC Contact Side
SCALE 4/1

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

Pin No.	Symbol
1	IF1
2	IF2
3	POL
4	RESET
5	SPENA
6	SPCL
7	SPDA
8	B0
9	B1
10	B2
11	B3
12	B4
13	B5
14	B6
15	B7
16	G0
17	G1
18	G2
19	G3
20	G4
21	G5
22	G6
23	G7
24	R0
25	R1
26	R2
27	R3
28	R4
29	R5
30	R6
31	R7
32	Hsync
33	Vsync
34	Data CLK
35	AVDD(analog)
36	AVDD(analog)
37	VCC(Digital)
38	VCC(Digital)
39	NPC
40	VGL
41	VGL
42	UD
43	VGH
44	LRC
45	GND
46	VCOM
47	VCOM
48	ENB
49	GND
50	GND

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

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