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

CUSTOMER : _____

MODULE NO.: WF57-320240BD#F03-FC

APPROVED BY: **(FOR CUSTOMER USE ONLY)**	**PCB VERSION:** **DATA:**

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
			葉虹蘭
ISSUED DATE: 2021/05/20			

Represented by:
FIRST Components s.r.l.
www.first-components.com
technical@first-components.com
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3.General Specifications

Item	Dimension	Unit
Size	5.7	inch
Dot Matrix	320 x RGBx240(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	
TFT Drive IC	HX8218+HX8615 or equivalent	
Aspect Ratio	4:3	
Backlight Type	LED, Normally White	
CTP FW Version	0x07.0x00.0x00.0x00.0xA1.0x01.0x57.0x00	
CTP IC	ILI2130 or equivalent	
CTP Interface	I2C	
CTP Resolution	16384*16384	
With /Without TP	With CTP	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

4.Absolute Maximum Ratings

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

Note: Device is subject to be damaged permanently if stresses beyond those absolute maximum ratings listed above

1. Temp. ≦60℃, 90% RH MAX. Temp.＞60℃, Absolute humidity shall be less than 90% RH at 60℃

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9.Interface

9.1. LCM PIN Definition

Pin	Symbol	Function	Remark
1	IF1	Input data format control	Note1
2	IF2	Input data format control	Note1
3	POL	Polarity Signal connect to VCOM driving circuit.	Note3
4	RESET	Hardware reset	
5	SPENA	Chip select	Note2
6	SPCL	Serial Clock	Note2
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	

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31	R7	Red Data bit	
32	Hsync	Horizontal synchronous signal	
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	Note 5,6
43	VGH	Gate on power	
44	LRC	Shift direction of device internal shift register control.	Note 5,6
45	GND	System ground pin of the IC. Connect to system ground.	
46	VCOM	VCOM driving input	Note3
47	VCOM	VCOM driving input	
48	ENB	Signal to settle the horizontal display position	Note4
49	GND	System ground pin of the IC. Connect to system ground.	
50	GND	System ground pin of the IC. Connect to system ground.	

Note1: Control the input data format.

IF2,IF1	Input data format
L,L(default)	Serial RGB
L,H	Parallel RGB
H,L	CCIR601
H,H	CCIR656

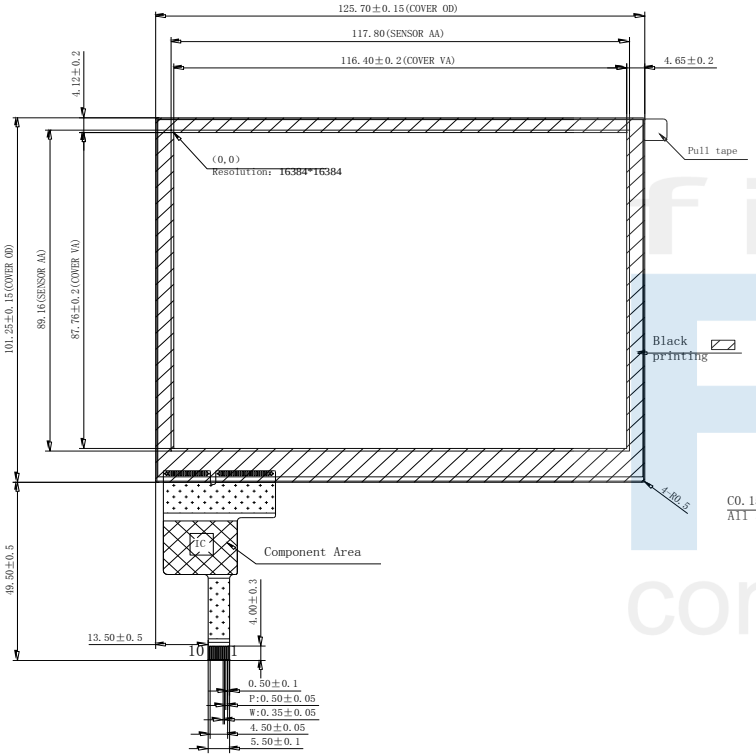
Note 2: Pin 5、Pin 6 usually pull high.

Note 3: The polarity of VCOM (Pin 46,47) should be generated from POL (Pin 3).

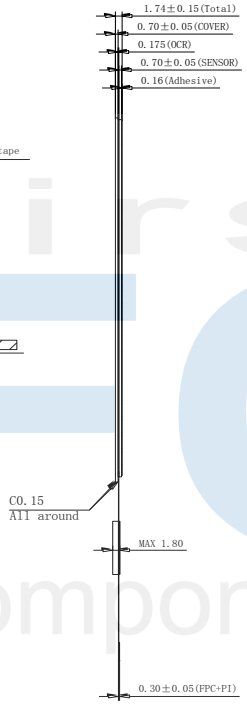
Note 4: For digital RGB input data format, both SYNC mode and DE+SYNC mode are supported. If ENB signal is fixed low, SYNC mode is used. Otherwise, DE+SYNC mode is used.

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12.Touch Panel Information

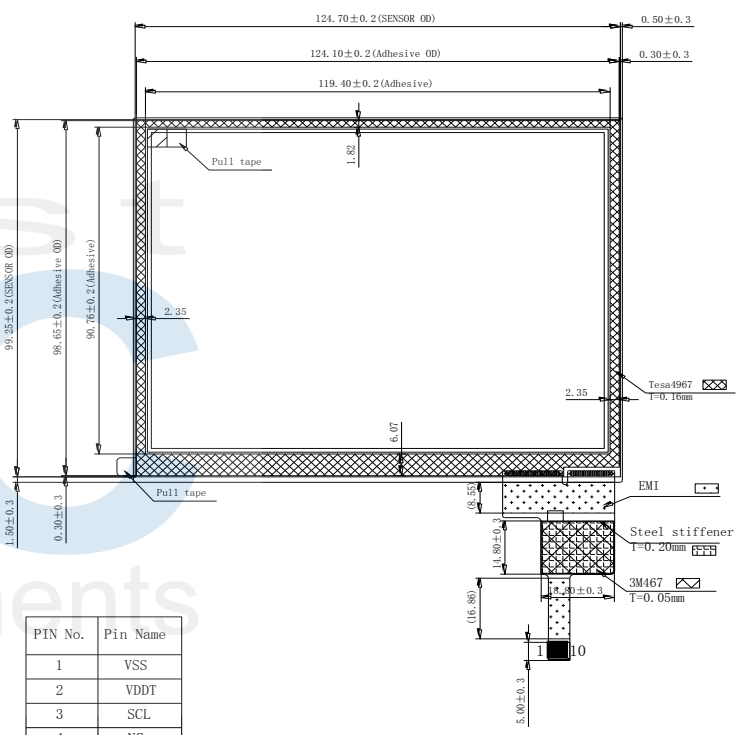


Front view



Side view

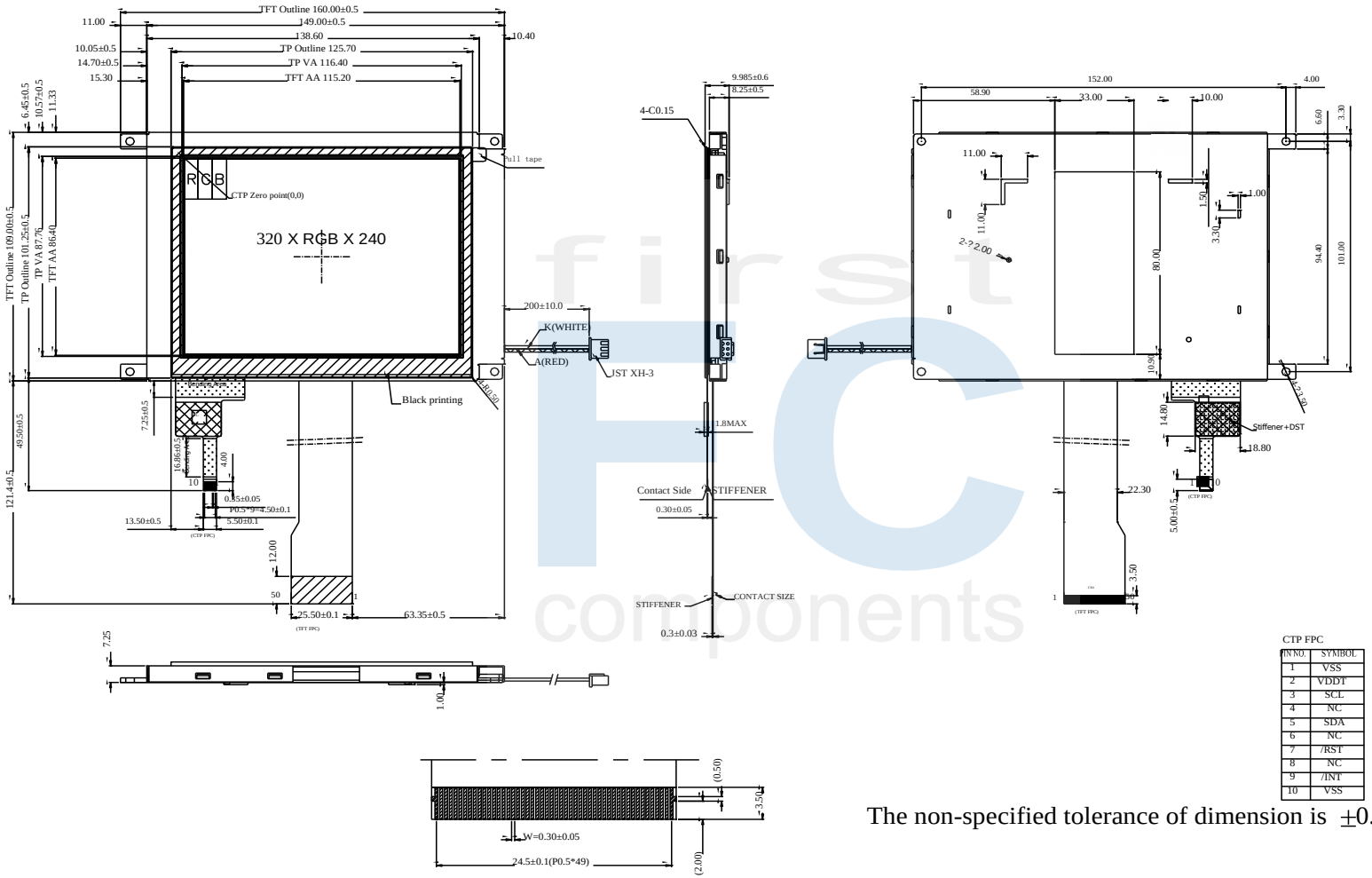
PIN No.	Pin Name
1	VSS
2	VDDT
3	SCL
4	NC
5	SDA
6	NC
7	RST
8	NC
9	INT
10	VSS



Back view

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13.Contour Drawing



TFT FPC Contact Side
SCALE 4/1

TFT FPC

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

CTP FPC

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

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

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