



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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SPECIFICATION

MODULE NO.: WF57DTIACDNGD#

General Specifications

Item	Dimension	Unit
Size	5.7	inch
Dot Matrix	320×RGB×240(TFT)	dots
Module dimension	126.00(W) ×101.55(H) ×8.235(D)(MAX)	mm
Active area	115.2×86.40	mm
Dot pitch	0.12×0.36	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Interface	24-bit RGB	
Aspect Ratio	4:3	
Backlight Type	LED, Normally White	
PCAP FW Version	FT5426	
PCAP Interface:	I2C	
PCAP IC	FN058A001_FT5426_V02_20180604_all.bin	
Touch Panel	PCAP	
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

Operating conditions

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For LCM	VCC	—	3.0	3.3	3.6	V
Supply Voltage For CTP	VDDT	—	2.8	—	3.3	V
Input High Volt.	V _{IH}	—	0.7 VCC	—	VCC	V
Input Low Volt.	V _{IL}	—	0	—	0.3 VCC	V
LCD Driving Supply Voltage	V _{GH} *1	Ta=25°C		15		V*3
	V _{GL} *2			-10		
	VcomH		2.5		5.5	
	VcomL		-2.0		0	
Supply Current For LCM	I _{VCC}	VCC=3.3V	—	5	8	mA

Interface

1. LCM PIN Definition

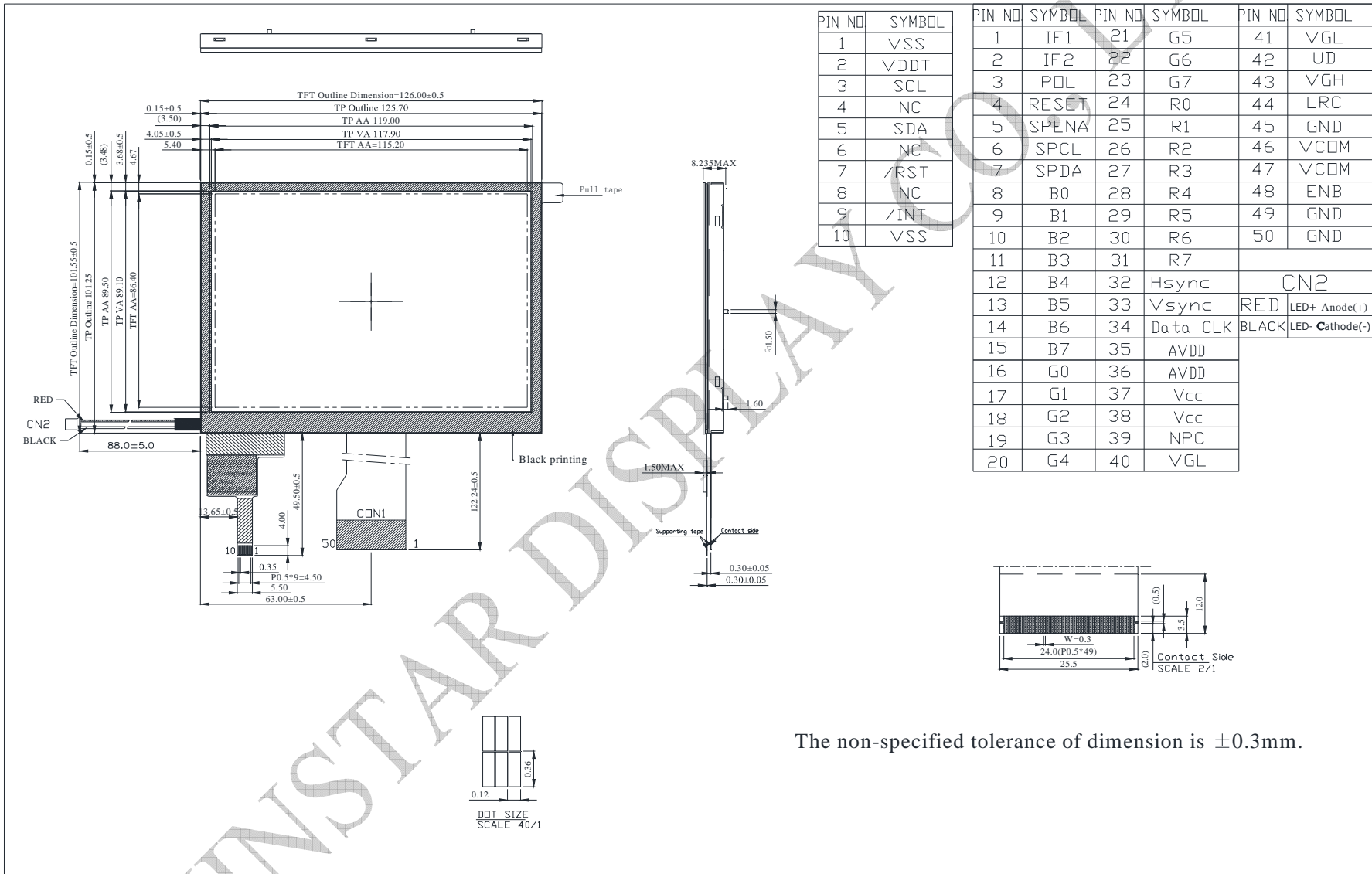
Pin No.	Symbol	I/O	Description
1	IF1	I	Input data format control (Note1)
2	IF2	I	Input data format control (Note1)
3	POL	O	Polarity Signal connect to VCOM driving circuit.
4	RESET	I	Hardware reset.
5	SPENA	I	Chip select
6	SPCL	I	Serial Clock
7	SPDA	I/O	Serial Data
8	B0	I	Blue Data bit (LSB)
9	B1	I	Blue 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	3V~3.6V
38	Vcc	I	3V~3.6V
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

PCAP PIN Definition

Pin	Symbol	Function
1	VSS	Ground for analog circuit
2	VDDT	Power Supply : +3.3V
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	Ground for analog circuit

Contour Drawing



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	PIN NO	SYMBOL	PIN NO	SYMBOL
1	IF1	21	G5	41	VGL
2	IF2	22	G6	42	UD
3	POL	23	G7	43	VGH
4	RESET	24	R0	44	LRC
5	SPENA	25	R1	45	GND
6	SPCL	26	R2	46	VCOM
7	SPDA	27	R3	47	VCOM
8	B0	28	R4	48	ENB
9	B1	29	R5	49	GND
10	B2	30	R6	50	GND
11	B3	31	R7		
12	B4	32	Hsync		CN2
13	B5	33	Vsync	RED	LED+ Anode(+)
14	B6	34	Data CLK	BLACK	LED- Cathode(-)
15	B7	35	AVDD		
16	G0	36	AVDD		
17	G1	37	Vcc		
18	G2	38	Vcc		
19	G3	39	NPC		
20	G4	40	VGL		

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