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

CUSTOMER : _____

MODULE NO.: WG320240C0-TMITZ#000

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

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
first FC components			

VERSION	DATE	REVISED PAGE NO.	SUMMARY
D	2021/04/14		Remove IC information Modify Response Time ,Contour drawing & B/L information

General Specification

Item	Dimension	Unit
Number of dots	320 x 240	—
Module dimension	148.02 x 120.24 x 17.7 (MAX)	mm
View area	120.14 x 92.14	mm
Active area	115.18 x 86.38	mm
Dot size	0.34 x 0.34	mm
Dot pitch	0.36 x 0.36	mm
LCD type	STN Negative, Blue Transmissive (In LCD production, It will occur slightly color difference. We can only guarantee the same color in the same batch.)	
Duty	1/240	
View direction	6 o'clock	
Backlight Type	LED White	
IC	RA8835	
Interface	6800 family	

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	–	+70	℃
Storage Temperature	T_{ST}	-30	–	+80	℃
Input Voltage	V_{IN}	-0.3	–	$V_{DD+0.3}$	V
Supply Voltage For Logic	V_{DD}-V_{SS}	-0.3	–	7.0	V
Supply Voltage For LCD	V_{DD} -V_0	0	–	32	V

Electrical Characteristics

ITEM	SYMBOL	CONDITION	MIN.	TYP.	MAX.	UNIT
Supply Voltage For Logic	V_{DD}-V_{SS}	–	4.5	5.0	5.5	V
Supply Voltage For LCD	V_{DD}-V_O	Ta=-20℃	–	–	–	V
		Ta=25℃	–	–	–	V
* Note		Ta=70℃	–	–	–	V
Input High Volt.	V_{IH}	–	0.5V_{DD}	–	V_{DD}	V
Input Low Volt.	V_{IL}	–	V_{SS}	–	0.2V_{DD}	V
Output High Volt.	V_{OH}	–	V_{DD} -0.4	–	–	V
Output Low Volt.	V_{OL}	–	–	–	V_{SS} +0.4	V
Supply Current	I_{DD}	V_{DD}=5.0V	90.0	100.0	105.0	mA

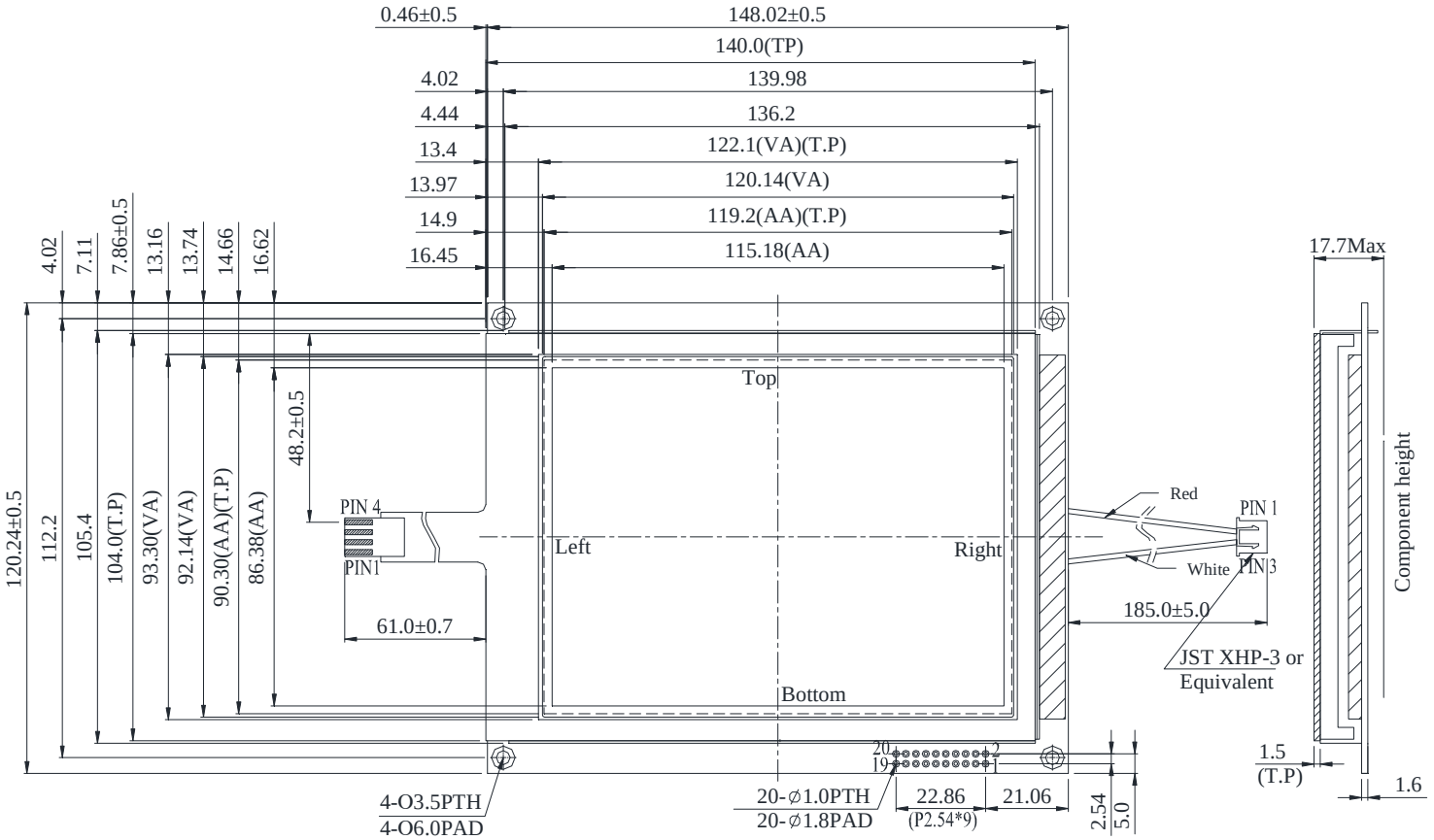
* Note: The VOP of best contrast adjust via VR resistor

Interface Pin Function

For 68 Family

Pin No.	Symbol	Level	Description
1	VSS	0V	GND
2	VDD	5.0V	Power supply for Logic
3	VO		No connection
4	E	H/L	8080 family: Read signal,**6800 family :Enable Clock**
5	R/W	H/L	8080 family: Write signal,**6800 family :R/W signal**
6	A0		RD =L,WR=H A0=L: Data Read A0=H: Status read RD =H,WR=L A0=L: Data Write A0=H: Command write For80 Family
			RD =L,WR=H A0=L: Command write A0=H: Data read **RD =H,WR=L A0=L: Status read A0=H: Data write** **For68 Family**
7~14	DB0~DB7	H/L	Data bus line
15	/CS	H/L	Chip select ,Active L
16	/RES	H/L	Controller reset signal, Active L
17	Vee		Negative voltage output
18	FGND		Frame Ground
19	NC		No connection
20	NC		No connection

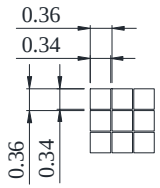
Contour Drawing &Block Diagram



PIN NO.	SYMBOL
1	Vss
2	Vdd
3	Vo
4	$\overline{RD}$
5	$\overline{WR}$
6	A0
7	DB0
8	DB1
9	DB2
10	DB3
11	DB4
12	DB5
13	DB6
14	DB7
15	$\overline{CS}$
16	$\overline{RES}$
17	Vee
18	FGND
19	NC
20	NC

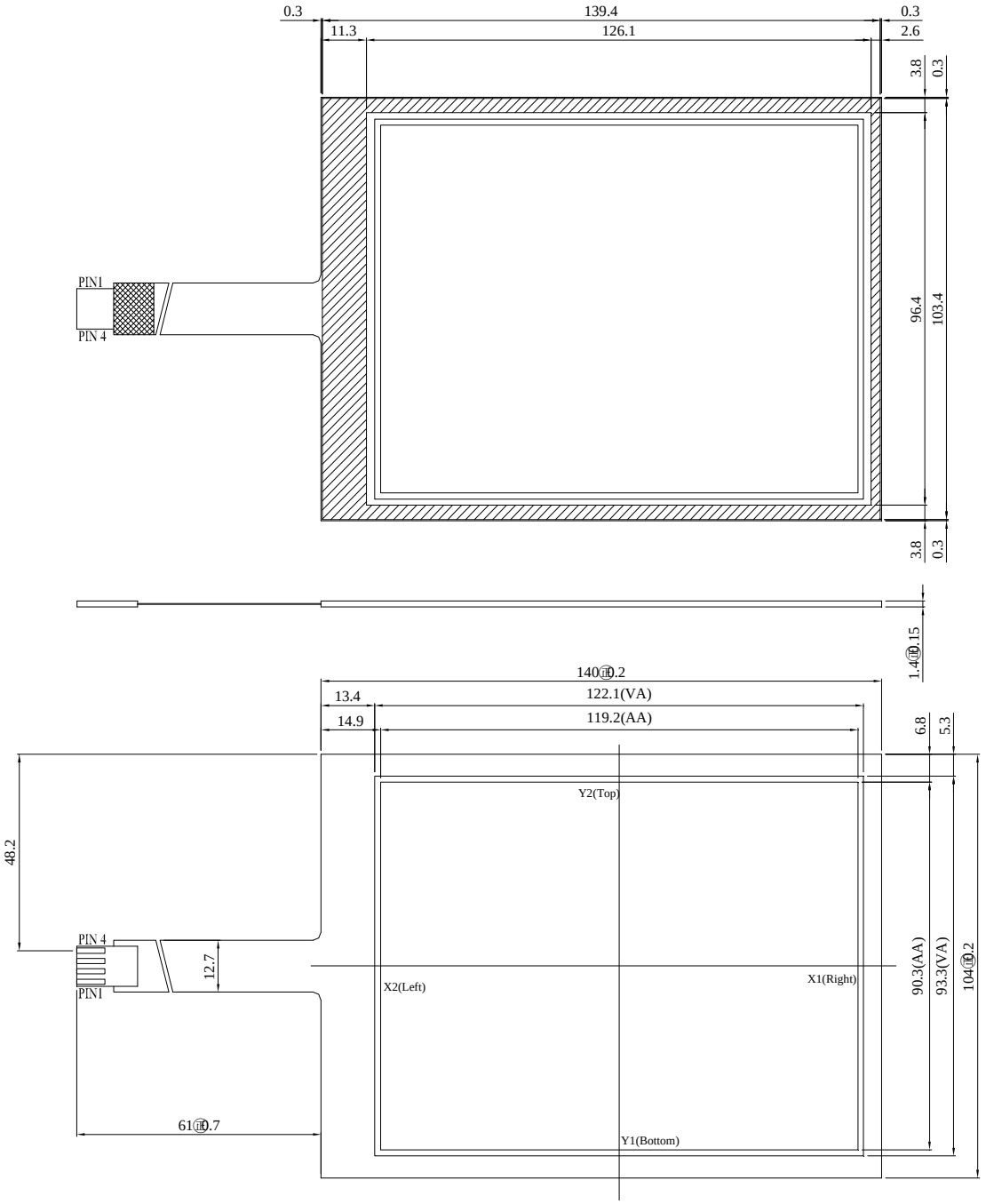
PIN NO.	Assignment
1	Right
2	Left
3	Bottom
4	Top

TOUCH PANEL PIN ASSIGENMENT



DOT SIZE
SCALE 10/1

Touch panel Information



PIN NO.	Assignment
1	X1(Right)
2	X2(Left)
3	Y1(Bottom)
4	Y2(Top)

TOUCH PANEL PIN ASSIGENMENT

Non-Proper Ways to handle the touch screen

1. Do not pull or crease the tail of the touch screen.

2. Tails, unless the drawing calls out for a bend, are to be free of permanent creases in the polyester, slight crease lines in the adhesive tail cover are allowed.