Winstar Display Co., LTD

華凌光電股份有限公司

SPECIFICATION

MODULE NO.:   WF90BTWAHLNN0#

General Specifications

Item	Dimension	Unit
Size	9.0	inch
Dot Matrix	1024 x RGB x 600(TFT)	dots
Module dimension	211.1(W) x 126.5(H) x5.7(D)	mm
Active area	196.608 x 114.15	mm
Dot pitch	0.192 x 0.19025	mm
LCD type	TFT, Normally White, Transmissive	
Backlight Type	LED,Normally White	
With /Without TP	Without TP	
Surface	Anti-Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-30	—	+85	℃
Storage Temperature	TST	-30	—	+85	℃

Electrical Characteristics

Item	Symbol	Min.	Typ.	Max.	Unit	Note
Supply Voltage	VDD	3.0	3.3	3.6	V	
	VGH	22	23	24	V	Note (1)
	VGL	-9	-10	-11	V	Note (2)
	AVDD	12.3	12.6	12.9	V	
	VCOM	5.6	5.8	6	V	Note (3)
Input signal voltage	ViH	0.7 VDD	-	VDD	V	
	ViL	0	-	0.3 VDD	V	
Current of power supply	IDD	-	23	-	mA	VDD =3.3V / Note (4)
	IADD	-	40	-	mA	AVDD=12.5V / Note (4)
	IGH	-	0.5	-	mA	VGH=23V / Note (4)
	IGL	-	1.2	-	mA	VGL=-10V / Note (4)
	Ivcom		0.7	--	mA	VCOM=5.8V / Note (4)

Note：
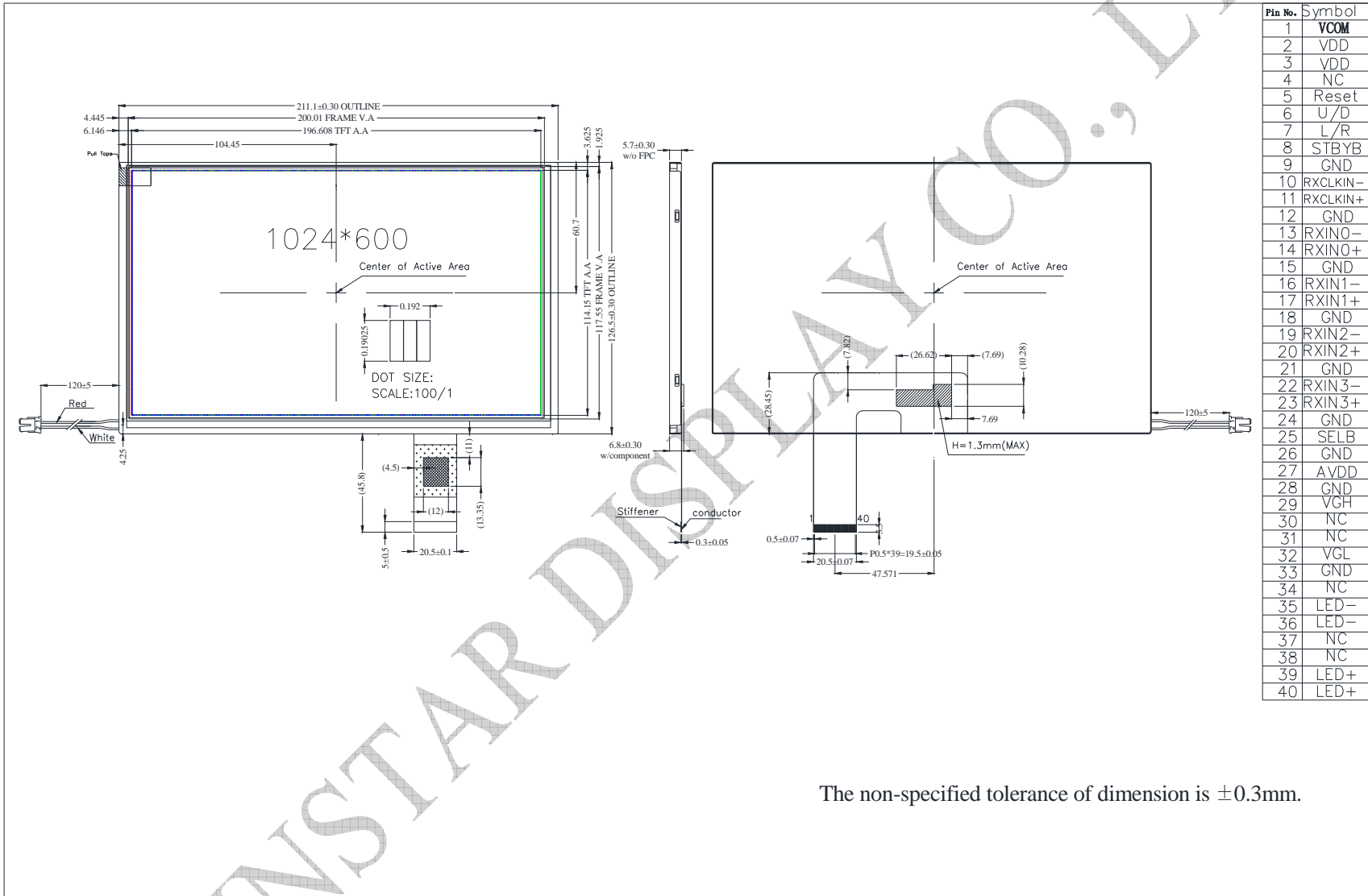
(1)：VGH is TFT Gate operating Voltage.

(2)：VGL is TFT Gate operating Voltage.

(3)：VCOM must be adjusted to optimize display quality _ Flicker Pattern。

(4)：@ White Pattern & 60Hz。

Interface

I: input   O: Output P: Power

Pin No.	Symbol	I/O	Function
1	VCOM	P	Common Voltage
2	VDD	P	Power Voltage for digital circuit
3	VDD	P	Power Voltage for digital circuit
4	NC	—	No connection
5	Reset	I	Global reset pin
6	U/D	I	Vertical inversion
7	L/R	I	Horizontal inversion
8	STBYB	I	Standby mode, Normally pulled high STBYB = "1", normal operation STBYB = "0", timing controller, source driver will turn off, all output are High-Z
9	GND	P	Ground
10	RXCLKIN-	I	- LVDS differential data input
11	RXCLKIN+	I	+ LVDS differential data input
12	GND	P	Ground
13	RXIN0-	I	- LVDS differential data input
14	RXIN0+	I	+ LVDS differential data input
15	GND	P	Ground
16	RXIN1-	I	- LVDS differential data input
17	RXIN1+	I	+ LVDS differential data input
18	GND	P	Ground
19	RXIN2-	I	- LVDS differential clock input
20	RXIN2+	I	+ LVDS differential clock input
21	GND	P	Ground
22	RXIN3-	I	- LVDS differential data input
23	RXIN3+	I	+ LVDS differential data input
24	GND	P	Ground
25	SELB	I	6bit/8bit mode selection
26	GND	P	Ground
27	AVDD	P	Power for Analog Circuit
28	GND	P	Ground
29	VGH	P	Gate ON Voltage
30	NC	—	No connection
31	NC	—	No connection
32	VGL	P	Gate off Voltage
33	GND	P	Ground
34	NC	—	No connection
35	LED-	P	LED Cathode
36	LED-	P	LED Cathode
37	NC	—	No connection
38	NC	—	No connection
39	LED+	P	LED Anode
40	LED+	P	LED Anode

Contour Drawing

Pin No.	Symbol
1	VCOM
2	VDD
3	VDD
4	NC
5	Reset
6	U/D
7	L/R
8	STBYB
9	GND
10	RXCLKIN−
11	RXCLKIN+
12	GND
13	RXIN0−
14	RXIN0+
15	GND
16	RXIN1−
17	RXIN1+
18	GND
19	RXIN2−
20	RXIN2+
21	GND
22	RXIN3−
23	RXIN3+
24	GND
25	SELB
26	GND
27	AVDD
28	GND
29	VGH
30	NC
31	NC
32	VGL
33	GND
34	NC
35	LED−
36	LED−
37	NC
38	NC
39	LED+
40	LED+

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