

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODULE NO.: WF123ETWAYLNN0#

General Specifications

Item	Dimension	Unit
Size	12.3	inch
Pixel Number	1920 x RGB x 720	pixel
Module dimension	310.0(H) x 128.0(V) x11.0	mm
Active Area	292.032(H) x 109.512(V)	mm
Pixel Pitch	0.1521(H) x 0.1521 (V)	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing Angle	88/88/88/88	
Backlight Type	LED, Normally White	
TFT Interface	8 bits-D-LVDS interface	
TFT Driver IC	FL5894+ST5086 or Equivalent	
Touch Panel	Without Touch Panel	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-30	—	+85	°C
Storage Temperature	TST	-40	—	+90	°C

Electrical Characteristics

1. TFT LCD Module

Item	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage/current	VDD	3.0	3.3	3.6	V
	IDD	-	-	550	mA
Logic Low input voltage	VIL	0	-	0.3*VDD	V
Logic High input voltage	VIH	0.7*VDD	-	VDD	V

2. Backlight Driving Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Voltage for LED backlight	VLED	21.0	—	26.0	V
Current for LED backlight	IL	—	360	—	mA
LED life time	—	30,000	—	—	Hr

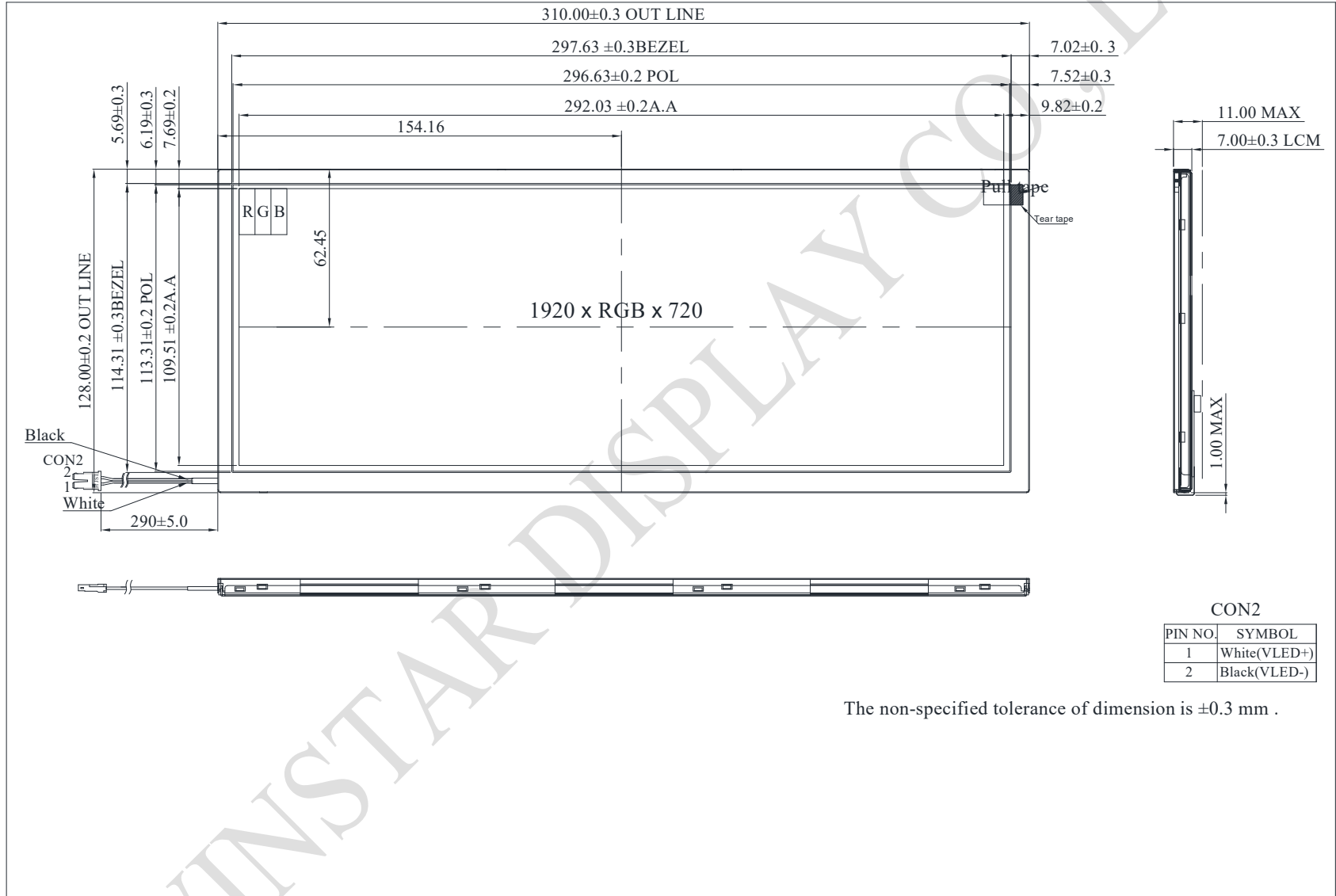
Interface

1. TFT LCD MODULE

Pin no.	Symbol	Function
1	NC	No connection
2	GND	Ground
3	GND	Ground
4	GND	Ground
5	NC	No connection
6	VDD	Power Supply: +3.3V
7	VDD	Power Supply: +3.3V
8	VDD	Power Supply: +3.3V
9	NC	No connection
10	NC	No connection
11	GND	Ground
12	GND	Ground
13	ORXIN0-	LVDS Receiver Signal(-)
14	ORXIN0+	LVDS Receiver Signal(+)
15	GND	Ground
16	ORXIN1-	LVDS Receiver Signal(-)
17	ORXIN1+	LVDS Receiver Signal(+)
18	GND	Ground
19	ORXIN2-	LVDS Receiver Signal(-)
20	ORXIN2+	LVDS Receiver Signal(+)
21	GND	Ground
22	ORXCLKIN-	LVDS Receiver Signal(-)
23	ORXCLKIN+	LVDS Receiver Signal(+)
24	GND	Ground
25	ORXIN3-	LVDS Receiver Signal(-)
26	ORXIN3+	LVDS Receiver Signal(+)
27	GND	Ground
28	ERXIN0-	LVDS Receiver Signal(-)
29	ERXIN0+	LVDS Receiver Signal(+)
30	GND	Ground
31	ERXIN1-	LVDS Receiver Signal(-)

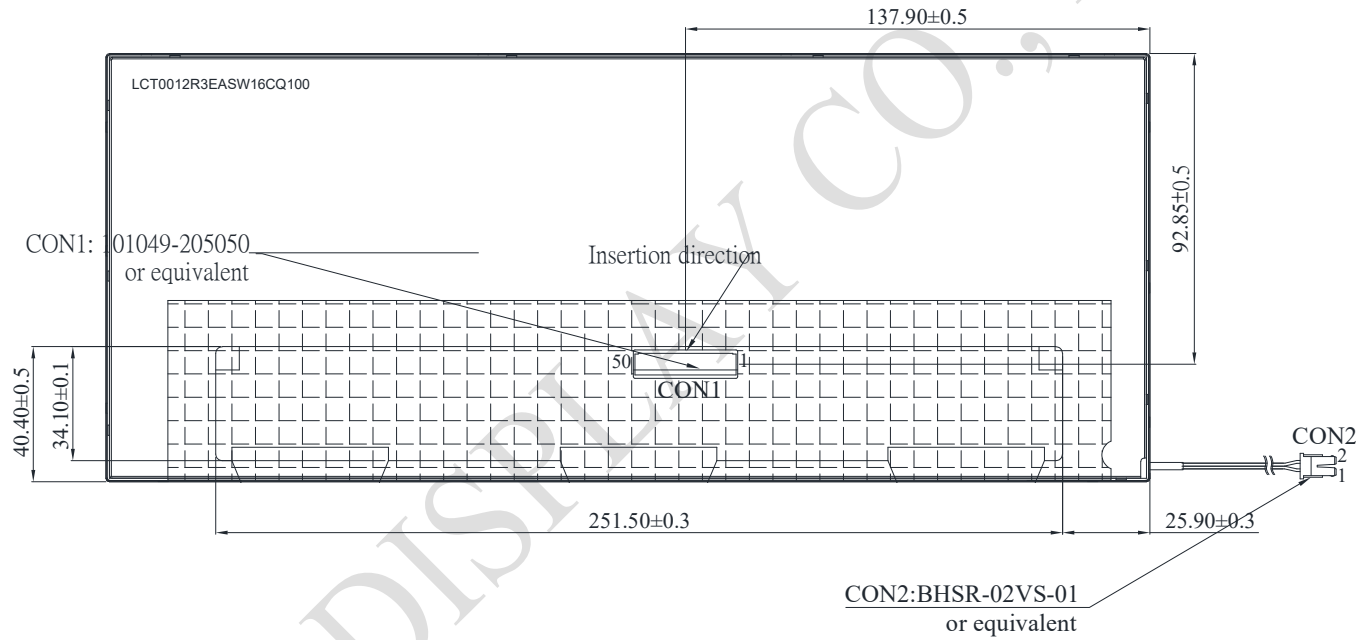
32	ERXIN1+	LVDS Receiver Signal(+)
33	GND	Ground
34	ERXIN2-	LVDS Receiver Signal(-)
35	ERXIN2+	LVDS Receiver Signal(+)
36	GND	Ground
37	ERXCLKIN-	LVDS Receiver Signal(-)
38	ERXCLKIN+	LVDS Receiver Signal(+)
39	GND	Ground
40	ERXIN3-	LVDS Receiver Signal(-)
41	ERXIN3+	LVDS Receiver Signal(+)
42	GND	Ground
43	STBYB	STBYB Signal
44	RESET	RESET Signal
45	CSB	SPI signal
46	NC	No connection
47	SCL	SPI signal
48	SDA	SPI signal
49	NC	No connection
50	GND	Ground

Contour Drawing



CON1

PIN NO	SYMBOL	PIN NO	SYMBOL
1	NC	29	ERXIN0+
2	GND	30	GND
3	GND	31	ERXIN1-
4	GND	32	ERXIN1+
5	NC	33	GND
6	VDD	34	ERXIN2-
7	VDD	35	ERXIN2+
8	VDD	36	GND
9	NC	37	ERXCLKIN-
10	NC	38	ERXCLKIN+
11	GND	39	GND
12	GND	40	ERXIN3-
13	ORXIN0-	41	ERXIN3+
14	ORXIN0+	42	GND
15	GND	43	STBYB
16	ORXIN1-	44	RESET
17	ORXIN1+	45	CSB
18	GND	46	NC
19	ORXIN2-	47	SCL
20	ORXIN2+	48	SDA
21	GND	49	NC
22	ORXCLKIN-	50	GND
23	ORXCLKIN+		
24	GND		
25	ORXIN3-		
26	ORXIN3+		
27	GND		
28	ERXIN0-		



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