

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODULE NO.: WF150ATYAMLNN0#

General Specifications

Item	Dimension	Unit
Size	15.0	inch
Dot Matrix	1024 x RGB x 768 (TFT)	dots
Module dimension	326.5 x 253.5 x9.1	mm
Active area	304.1 x 228.1	mm
Pixel Pitch	0.297 x 0.297	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing Angle	88/88/88/88	
Backlight Type	LED, Normally White	
Interface	LVDS	
Touch Panel	Without Touch Panel	
Surface	Anti-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	—	+70	°C

Electrical Characteristics

1. TFT LCD MODULE

Parameter		Symbol	Value			Unit
			Min.	Typ.	Max.	
Power Supply Voltage		V_{CC}	3.0	3.3	3.6	V
Ripple Voltage		V_{RP}	-	-	100	mVp-p
Inrush Current		I_{INRUSH}	-	-	2.0	A
Power Supply Current	White	I_{CC}	-	550	660	mA
	Black		-	440	530	mA
LVDS differential input voltage		V_{id}	200	-	600	mV
LVDS common input voltage		V_{ic}	1.0	1.2	1.4	V
Differential Input Voltage for LVDS Receiver Threshold	“H” Level	V_{IH}	-	-	100	mV
	“L” Level	V_{IL}	-100	-	-	mV
Terminating Resistor		R_T	-	100	-	Ohm

Interface

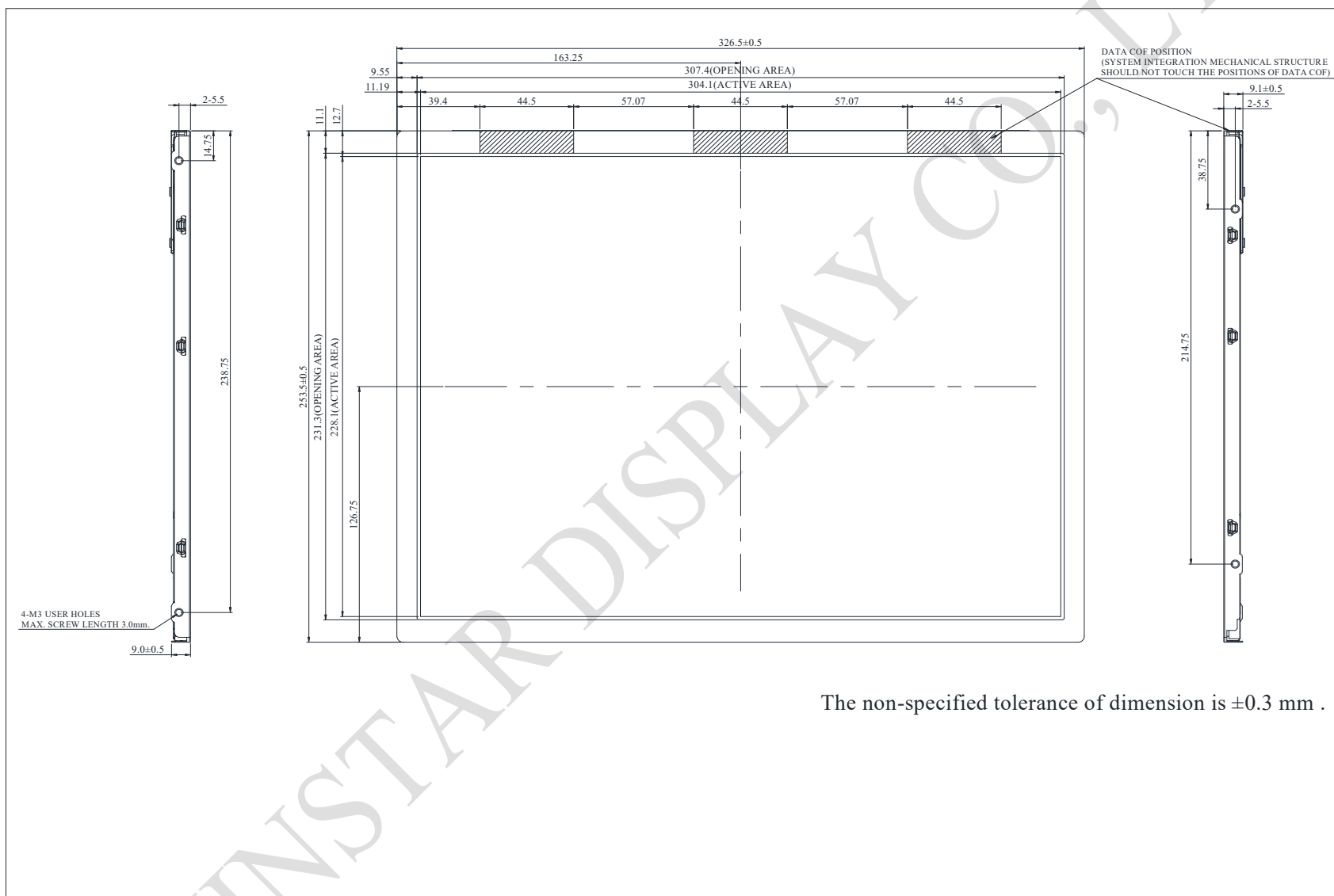
1. LCM PIN Definition

Pin No.	Symbol	Function	Polarity
1	VCC	Power Supply +3.3V(typical)	
2	VCC	Power Supply +3.3V(typical)	
3	NC	No Connection (Reserve for INX test)	
4	LR/UD	Reverse Scan Control H or NC = Normal Mode. L = Horizontal / Vertical Reverse Scan.	
5	RX0-	LVDS Differential Data Input	Negative
6	RX0+	LVDS Differential Data Input	Positive
7	GND	Ground	
8	RX1-	LVDS Differential Data Input	Negative
9	RX1+	LVDS Differential Data Input	Positive
10	NC	No Connection (Reserve for INX test)	
11	RX2-	LVDS Differential Data Input	Negative
12	RX2+	LVDS Differential Data Input	Positive
13	GND	Ground	
14	RXCLK-	LVDS Differential Data Input	Negative
15	RXCLK+	LVDS Differential Data Input	Positive
16	GND	Ground	
17	RX3-	LVDS Differential Data Input	Negative
18	RX3+	LVDS Differential Data Input	Positive
19	NC	No Connection (Reserve for INX test)	
20	SEL68	LVDS 6/8 bit select function control, High → 6bit Input Mode Low or NC → 8bit Input Mode	

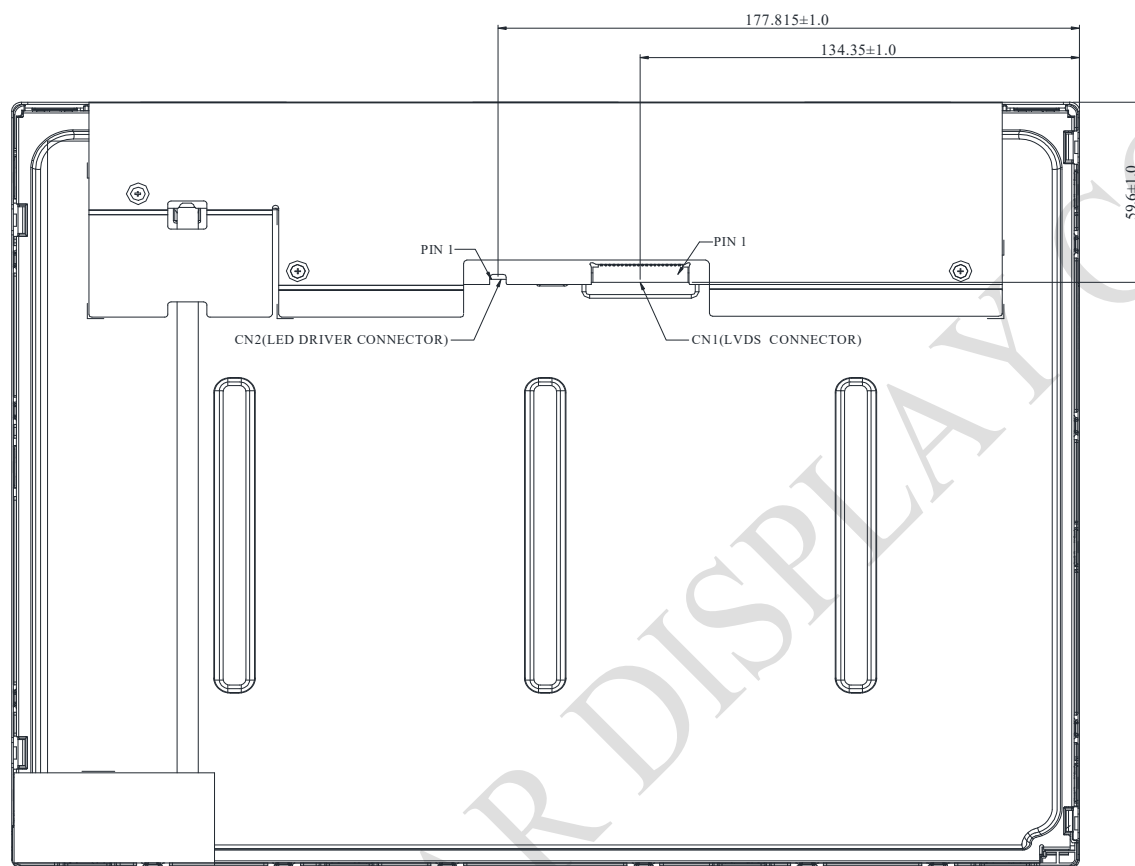
2. Backlight unit Converter connector pin

Pin	Symbol	Description	Remark
1	Vi	Converter input voltage	12V
2	VGND	Converter ground	Ground
3	EN	Enable pin	3.3V
4	Dimming	Backlight Adjust	PWM Dimming (Hi: 3.3VDC, Lo: 0VDC)
5	NC	Not Connect	

Contour Drawing



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



CN2	
PIN NO.	SYMBOL
1	Vi
2	VGND
3	EN
4	Dimming
5	NC

CN1	
PIN NO.	SYMBOL
1	VCC
2	VCC
3	NC
4	LR/UD
5	RX0-
6	RX0+
7	GND
8	RX1-
9	RX1+
10	NC
11	RX2-
12	RX2+
13	GND
14	RXCLK-
15	RXCLK+
16	GND
17	RX3-
18	RX3+
19	NC
20	SEL68

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