

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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WEB: <https://www.winstar.com.tw> E-mail: sales@winstar.com.tw

SPECIFICATION

MODULE NO.: WF121BTXAPLNN#

General Specifications

Item	Dimension	Unit
Size	12.1	inch
Dot Matrix	1280 x R.G.B. x 800	dots
Module dimension	278.0*184.0*10.0	mm
Active area	261.12*163.2	mm
Pixel pitch	0.204 x 0.204	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing Angle	89/89/89/89	
TFT Interface	LVDS	
TFT Driver IC	EK77526AHI205A	
Aspect Ratio	16:9	
Backlight Type	LED, Normally White	
Touch Panel	Without Touch Panel	
Surface Treatment	AG type, 3H hard coating	

*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	-20	—	+70	°C

Electrical Characteristics

LCD Electronics Specification

Parameter		Symbol	Value			Unit
			Min.	Typ.	Max.	
Power Supply Voltage		V _{CC}	3.0	3.3	3.6	V
Permissive Ripple Voltage		V _{RP}	-	50	-	mV
Rush Current		I _{RUSH}	1.5			A
Initial Stage Current		I _{IS}	-	-	1.0	A
Power Supply Current	White	-	-	530	675	mA
	Black	-	-	350	430	mA
LVDS Differential Input High Threshold		V _{TH(LVDS)}	+100	-	-	mV
LVDS Differential Input Low Threshold		V _{TL(LVDS)}	-	-	-100	mV
LVDS Common Mode Voltage		V _{CM}	1.125	1.2	1.375	V
LVDS Differential Input Voltage		V _{ID}	100	-	600	mV
Terminating Resistor		R _T	-	100	-	Ohm

Interface

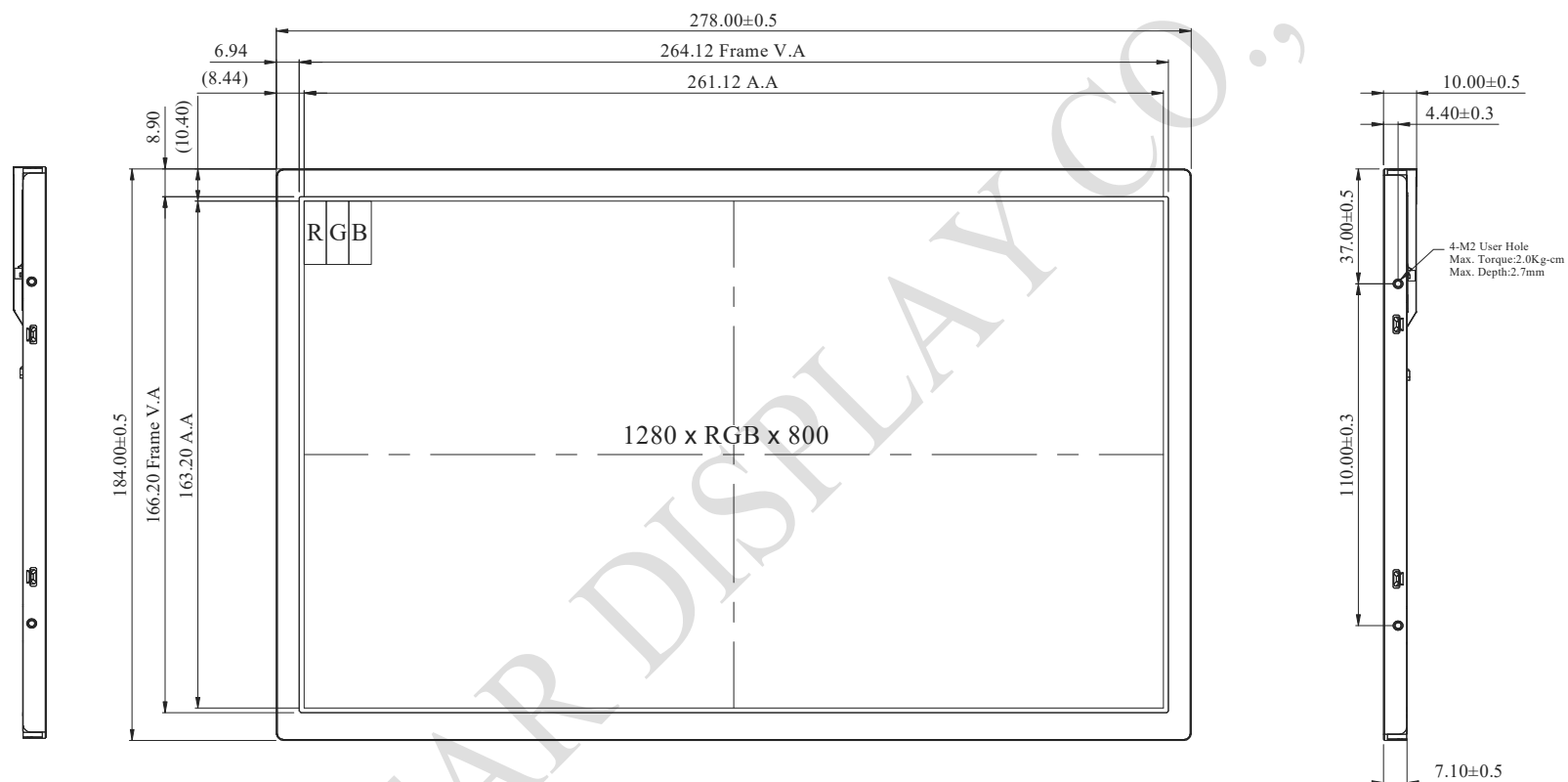
1. LCM PIN Definition

Pin No.	Symbol	Description
1	12V	LED power
2	12V	LED power
3	12V	LED power
4	12V	LED power
5	ENLED	Enable pin
6	Dimming	Backlight Adjust
7	GND	Ground
8	GND	Ground
9	VCC	Power supply: +3.3V
10	VCC	Power supply: +3.3V
11	GND	Ground
12	GND	Ground
13	RX0-	Negative transmission data of pixel 0
14	RX0+	Positive transmission data of pixel 0
15	GND	Ground
16	RX1-	Negative transmission data of pixel 1
17	RX1+	Positive transmission data of pixel 1
18	GND	Ground
19	RX2-	Negative transmission data of pixel 2
20	RX2+	Positive transmission data of pixel 2
21	GND	Ground
22	RXCLK-	Negative of clock
23	RXCLK+	Positive of clock
24	GND	Ground
25	RX3-	Negative transmission data of pixel 3
26	RX3+	Positive transmission data of pixel 3
27	GND	Ground
28	SEL6/8	LVDS 6/8 bit select function control,
		Low or NC → 6 bit Input Mode
		High → 8bit Input Mode

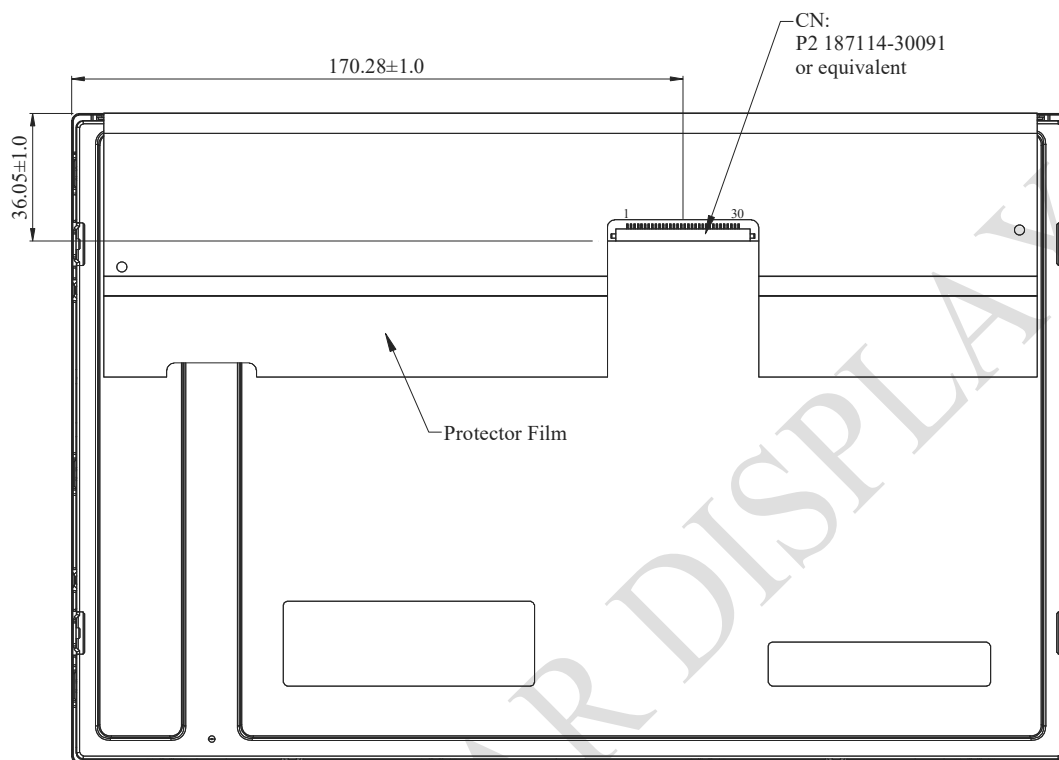
29	GND	Ground
30	GND	Ground

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Contour Drawing



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



PIN NO.	SYMBOL
1	12V
2	12V
3	12V
4	12V
5	ENLED
6	Dimming
7	NC
8	NC
9	VCC
10	VCC
11	GND
12	GND
13	RX0-
14	RX0+
15	GND
16	RX1-
17	RX1+
18	GND
19	RX2-
20	RX2+
21	GND
22	RXCLK-
23	RXCLK+
24	GND
25	RX3-
26	RX3+
27	GND
28	SEL6/8
29	GND
30	NC

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