Winstar Display Co., LTD
華凌光電股份有限公司
WEB: http://www.winstar.com.tw *E-mail: winstar@winstar.com.tw*

SPECIFICATION

CUSTOMER : _____

MODULE NO.: WF70-800480HD#0S5-FC

General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	800 x RGBx480(TFT)	dots
Module dimension	181.2(W) x 105.24(H) x 7.4(D)	mm
Active area	152.4 x 91.44	mm
Dot pitch	0.0635 x 0.1905	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Backlight Type	LED,Normally White	
With /Without TP	With RTP	
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	℃
Storage Temperature	TST	-30	—	+80	℃

Note: Device is subject to be damaged permanently if stresses beyond those absolute maximum ratings listed above

1. Temp. ≦60℃, 90% RH MAX. Temp.＞60℃, Absolute humidity shall be less than 90% RH at 60℃

Electrical Characteristics

Operating conditions:

Absolute Maximum Ratings (GND=0V)

Item	Symbol	Min	Typ	Max	Unit	Remark
Power Voltage	Vcc	-0.3	-	6	V	
Input Signal Voltage	Vi	-0.3	-	Vcc+0.3	V	Note 1

Note 1: DCLK, DE, R0~ R5, G0~ G5, B0~ B5.

Recommended Operation condition (GND=0V，Ta=25℃)

Item		Symbol	Min	Typ	Max	Unit	Remark
Power Supply Voltage		Vcc	3.0	3.3	3.6	V	-
Supply current For LCM		Icc	-	160	270	mA	Note2
Power Consumption		-	-	530	970	mW	Vcc=3.3V
Supply Voltage For CTP		VDDT	2.8	-	3.3	V	-
Input logic Voltage	High Level	V_{IH}	0.7Vcc	-	Vcc	V	Note 1
	Low Level	V_{IL}	0	-	0.3Vcc		

Note 1: DCLK, DE, R0~ R5, G0~ G5, B0~ B5.

Note 2 : This value is test for Vcc=3.3V , Ta=25 ℃ only

LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit	Remark
LED current	-	-	160	200	mA	-
Power Consumption	VBL+=9.8V		1568	2200	mW	-
LED voltage	VBL+	8.4	9.8	11	V	Note 1
LED Life Time	-	-	50,000	-	Hr	Note 2,3,4

Note 1 : There are 1 Groups LED

Note 2 : Ta = 25 ℃

Note 3 : Brightness to be decreased to 50% of the initial value

Note 4 : The single LED lamp case

Interface

LCM PIN Definition

Pin	Symbol	Function	Remark
1	GND	Power Ground	
2	GND	Power Ground	
3	NC	Not Connect	
4	Vcc	Power Supply for Digital Circuit	
5	Vcc	Power Supply for Digital Circuit	
6	Vcc	Power Supply for Digital Circuit	
7	Vcc	Power Supply for Digital Circuit	
8	NC	Not Connect	
9	DE	Data Enable	
10	GND	Power Ground	
11	GND	Power Ground	
12	GND	Power Ground	
13	B5	Blue Data 5 (MSB)	
14	B4	Blue Data 4	
15	B3	Blue Data 3	
16	GND	Power Ground	
17	B2	Blue Data 2	
18	B1	Blue Data 1	
19	B0	Blue Data 0 (LSB)	
20	GND	Power Ground	
21	G5	Green Data 5 (MSB)	
22	G4	Green Data 4	
23	G3	Green Data 3	
24	GND	Power Ground	
25	G2	Green Data 2	
26	G1	Green Data 1	
27	G0	Green Data 0(LSB)	
28	GND	Power Ground	
29	R5	Red Data 5 (MSB)	

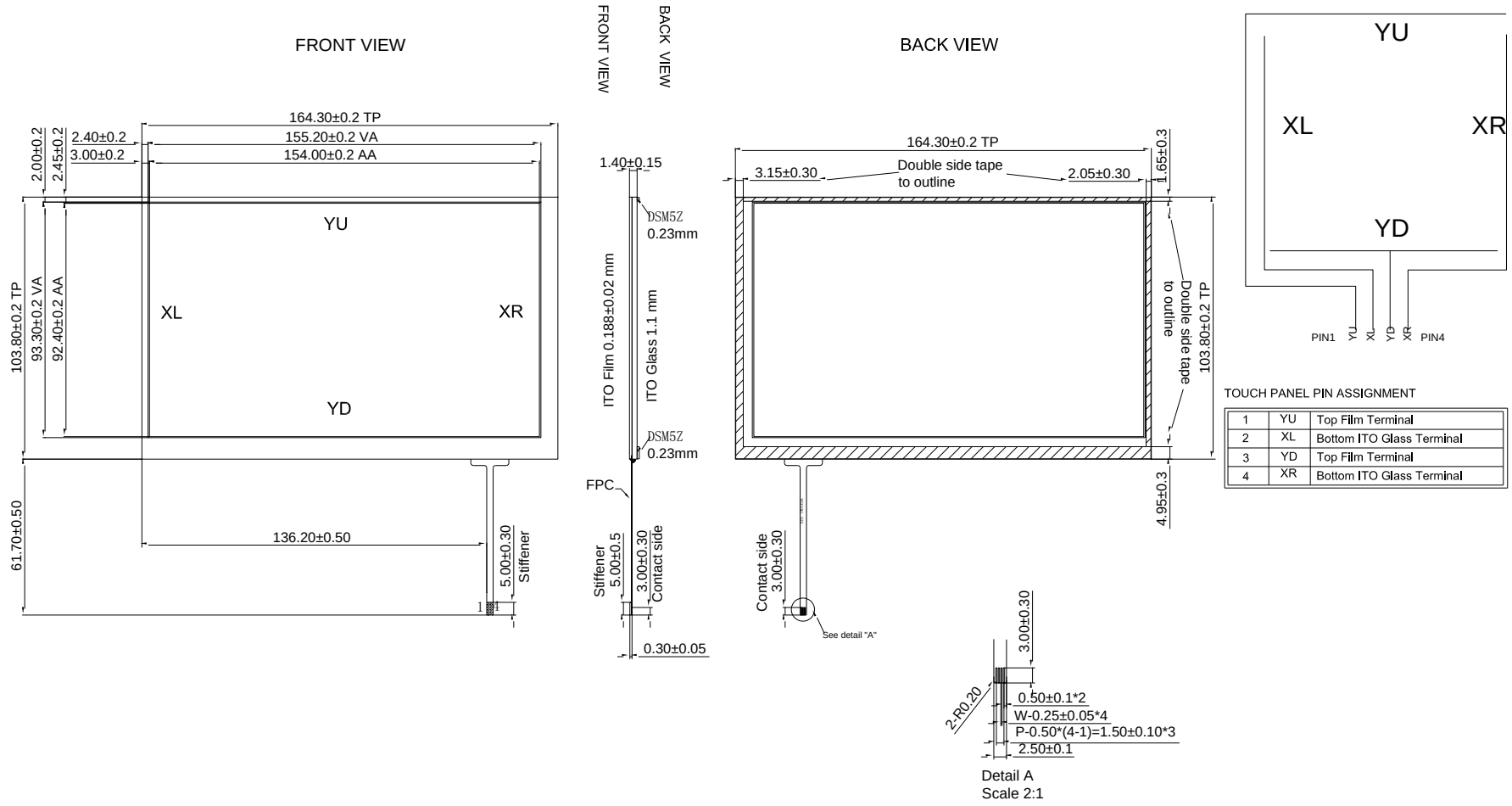
30	R4	Red Data 4	
31	R3	Red Data 3	
32	GND	Power Ground	
33	R2	Red Data 2	
34	R1	Red Data 1	
35	R0	Red Data 0(LSB)	
36	GND	Power Ground	
37	GND	Power Ground	
38	DCLK	Clock Signals ; Latch Data at the Falling Edge	
39	GND	Power Ground	
40	GND	Power Ground	

8.2. Backlight Driving Part

Pin No.	Symbol	Description
1	VLED+	Red, LED_ Anode
2	VLED-	White, LED_ Cathode

Note: The backlight interface connector is a model SM02B-BHSS-1-TB manufactured by JST or equivalent. The matching connector part number is BHSR-20VS-1 manufactured by JST or equivalent.

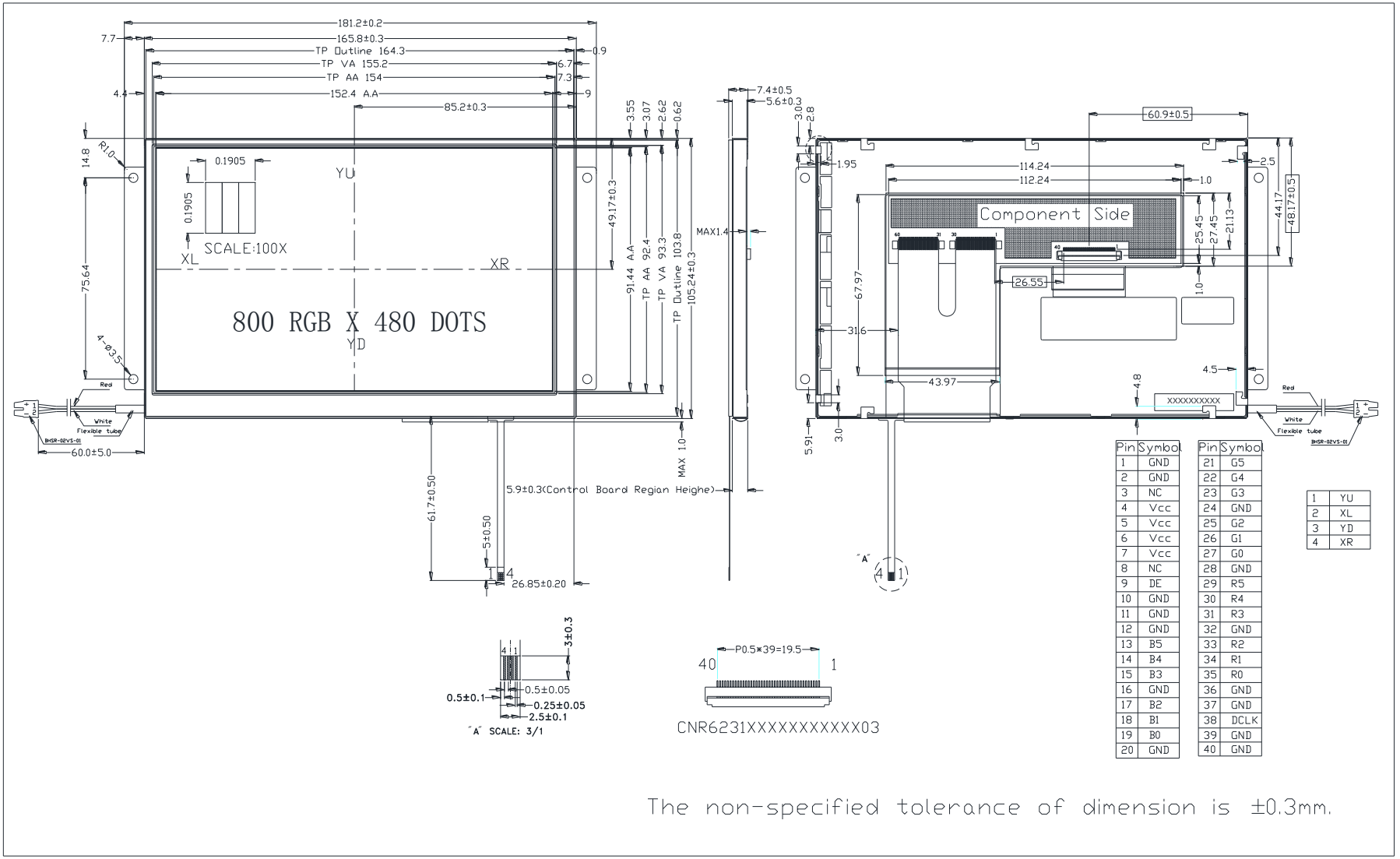
Touch Panel Information



TOUCH PANEL PIN ASSIGNMENT

1	YU	Top Film Terminal
2	XL	Bottom ITO Glass Terminal
3	YD	Top Film Terminal
4	XR	Bottom ITO Glass Terminal

Contour Drawing



Pin	Symbol	Pin	Symbol
1	GND	21	G5
2	GND	22	G4
3	NC	23	G3
4	Vcc	24	GND
5	Vcc	25	G2
6	Vcc	26	G1
7	Vcc	27	G0
8	NC	28	GND
9	DE	29	R5
10	GND	30	R4
11	GND	31	R3
12	GND	32	GND
13	B5	33	R2
14	B4	34	R1
15	B3	35	R0
16	GND	36	GND
17	B2	37	GND
18	B1	38	DCLK
19	B0	39	GND
20	GND	40	GND

1	YU
2	XL
3	YD
4	XR