



**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](mailto:sales@winstar.com.tw)

## SPECIFICATION

**MODULE NO.: WF70B2SIAGDNG0#**

### General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	800 x RGB x 480 (TFT)	dots
Module dimension	165 x 100.0 x 7.42	mm
Active area	154.08 x 85.92	mm
Pixel Pitch	0.1926 x 0.179	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Aspect Ratio	16:9	
Backlight Type	LED, Normally White	
TFT Interface	24 bit RGB	
Color arrangement	RGB-STRIFE	
Driver IC	HX8264-E&HX8664-B or Equivalent	
PCAP IC	FT5426 or Equivalent	
PCAP Interface	I2C	
PCAP FW Version:	V03	
Touch Panel	Projected capacitive touch screen (PCAP)	
Surface	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	—	+80	°C

# Electrical Characteristics

## Operating conditions

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage For Logic	VCC	3.0	3.3	3.6	V
Supply Voltage For Touch Logic	VDDT	2.8	—	3.3	V
Power Supply For Current	VCC =3.3V	-	76	114	mA

## LED driving conditions

Parameter	Symbol	Min.	Typ.	Max.	Unit
LED current	-	-	270	-	mA
Power Consumption	-	2268	2430	2592	mW
LED voltage	A~K	8.4	9.0	9.6	V
LED Life Time	-	-	50,000	-	Hr

# Interface

## LCM PIN Definition

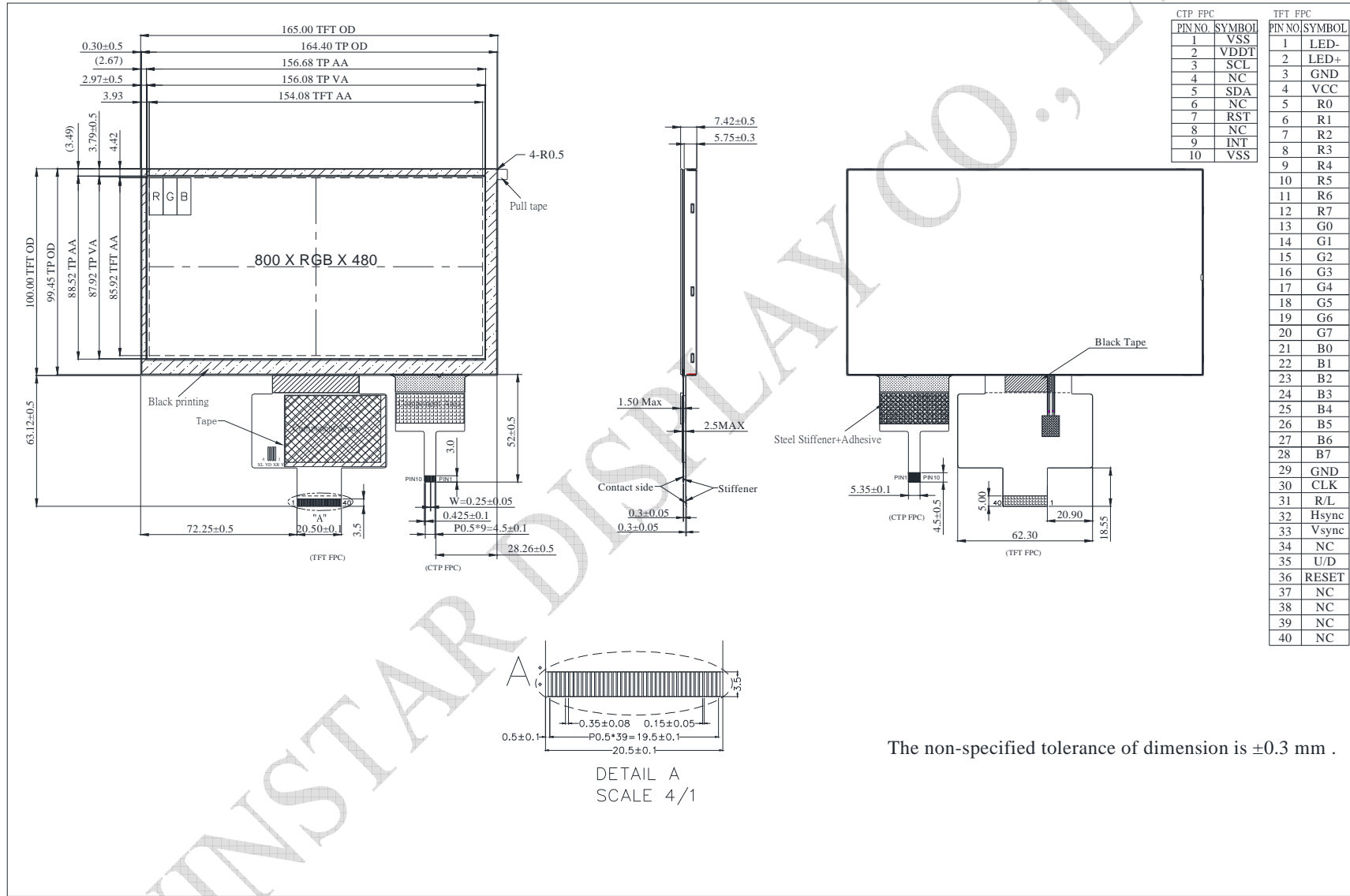
Pin	Symbol	Function
1	LED-	Backlight ground
2	LED+	Power supply for backlight
3	GND	Power ground
4	VCC	Power for Digital Circuit
5	R0	Red data(LSB)
6	R1	Red data
7	R2	Red data
8	R3	Red data
9	R4	Red data
10	R5	Red data
11	R6	Red data
12	R7	Red data(MSB)
13	G0	Green data(LSB)
14	G1	Green data
15	G2	Green data
16	G3	Green data
17	G4	Green data
18	G5	Green data
19	G6	Green data
20	G7	Green data(MSB)
21	B0	Blue data(LSB)
22	B1	Blue data
23	B2	Blue data
24	B3	Blue data
25	B4	Blue data
26	B5	Blue data
27	B6	Blue data
28	B7	Blue data(MSB)
29	GND	Power Ground
30	CLK	Sample clock
31	R/L	Right / Left selection

32	Hsync	Horizontal Sync Input
33	Vsync	Vertical Sync Input
34	NC	No connection
35	U/D	Up/down selection
36	RESET	Global reset pin.
37-40	NC	No connection

**PCAP PIN Definition**

Pin	Symbol	Function
1	VSS	Ground for analog circuit
2	VDDT	Power Supply : +3.0V
3	SCL	I2C clock input
4	NC	No connect
5	SDA	I2C data input and output
6	NC	No connect
7	RST	External Reset, Low is active
8	NC	No connect
9	INT	External interrupt to the host
10	VSS	Ground for analog circuit

# Contour Drawing



CTP FPC		TFT FPC	
PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	VSS	1	LED-
2	VDDT	2	LED+
3	SCL	3	GND
4	NC	4	VCC
5	SDA	5	R0
6	NC	6	R1
7	RST	7	R2
8	NC	8	R3
9	INT	9	R4
10	VSS	10	R5
		11	R6
		12	R7
		13	G0
		14	G1
		15	G2
		16	G3
		17	G4
		18	G5
		19	G6
		20	G7
		21	B0
		22	B1
		23	B2
		24	B3
		25	B4
		26	B5
		27	B6
		28	B7
		29	GND
		30	CLK
		31	R/L
		32	Hsync
		33	Vsync
		34	NC
		35	U/D
		36	RESET
		37	NC
		38	NC
		39	NC
		40	NC