



WINSTAR Display Co.,Ltd.  
華凌光電股份有限公司



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### SPECIFICATION

**MODULE NO.: WF70A6TIAGDNG0#**

### General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	800 x RGB x 480(TFT)	dots
Module dimension	165.05(W) x 104.87 (H) x 8.4(D)	mm
Active area	152.4 x 91.44	mm
Pixel pitch	0.1905 x 0.1905	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
TFT Drive IC	HX8262+HX8678 or Equivalent	
TFT Interface	18-bit RGB	
Aspect Ratio	16:9	
PCAP IC	ILI2130 or Equivalent	
PCAP Interface	I2C	
PCAP FW Version	0x07.0x00.0x00.0x00.0x70.0x44.0x0A.0x02	
PCAP Resolution	16384*16384	
Backlight Type	LED, Normally White	
Touch Panel	With 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:

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

Item	Symbol	Min	Typ	Max	Unit
Power Supply Voltage	Vcc	3.0	3.3	3.6	V
Power Supply Current	Icc		200	260	mA
Input logic Voltage	High Level	VIH	0.7Vcc	-	V
	Low Level	VIL	0	0.3Vcc	
Supply CTP	VDDT	3.0	3.3	3.6	V
	I <sub>CTP</sub>	—	62	93	mA

# Interface

## 1. LCM PIN Definition

Pin	Symbol	Function
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 (CLK)
39	GND	Power Ground
40	GND	Power Ground

## 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.

## 3. CTP PIN Definition

Pin	Symbol	Function
1	VSS	Ground for analog circuit
2	VDDT	Power Supply : +3.3V
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

