

TFT DISPLAY SPECIFICATION



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華凌光電股份有限公司



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SPECIFICATION

MODULE NO.: WF70B2SIAGDNGA#

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 7.45	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	
TFT Driver IC	HX8264-E&HX8664-B or Equivalent	
PCAP IC	ILI2130 or Equivalent	
PCAP Interface	I2C	
PCAP FW Version	0x07.0x00.0x00.0x00.0x65.0x90.0x00.0x01	
PCAP Resolution	16384*16384	
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
Power Supply For Current	VCC =3.3V	-	76	114	mA
Supply PCAP	VDDT	3.0	3.3	3.6	V
	ICTP	—	65	98	mA

Interface

1. 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

I: input, O: output, P: Power

2. PCAP 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

Technical drawing of a TFT module assembly, showing dimensions and pin configurations.

Top View Dimensions:

- 165.00 TFT OD
- 164.40 TP OD
- 156.68 TP AA
- 155.22 TP VA
- 154.08 TFT AA
- 100.00 TFT OD
- 99.45 TP OD
- 88.52 TP AA
- 87.19 TP VA
- 85.92 TFT AA
- 63.12±0.5
- 72.25±0.5
- 20.50±0.1
- 28.29±0.5
- 5.5±0.1
- 52±0.5
- 9.86±0.5
- 3.0
- 0.5±0.1
- 0.3±0.05
- 0.3±0.05
- 0.35±0.08
- 0.15±0.05
- P0.5*39=19.5±0.1
- 20.5±0.1

Side View Dimensions:

- 7.45±0.5
- 5.75±0.3
- 2-C0.15±0.2 (along the outline)
- 4-R0.5
- Pull tape
- 1.8 Max
- 2.5MAX
- Contact side
- Stiffener
- 16.00±0.5 Bending Area (CTP FPC)
- 4.5±0.5
- 5.00
- 40
- 20.90
- 62.30
- 18.55

Pin Configurations:

CTP FPC:

PIN NO.	SYMBOL
1	VSS
2	VDDT
3	SCL
4	NC
5	SDA
6	NC
7	RST
8	NC
9	INT
10	VSS

TFT FPC:

PIN NO.	SYMBOL
1	LED-
2	LED+
3	GND
4	VCC
5	R0
6	R1
7	R2
8	R3
9	R4
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

DETAIL A
SCALE 4/1

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