TFT DISPLAY SPECIFICATION

WINSTAR Display Co.,Ltd.

華凌光電股份有限公司

SPECIFICATION

MODULE NO.: WF70GTIAGDNGD#

General Specification

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	800 x RGB x 480(TFT)	dots
Module dimension	165.0(W) x 100(H) x 7.4(D)	mm
Active area	154.08 x 85.92	mm
Dot pitch	0.0642 x 0.179	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Driver IC	HX8264+HX8664 or Equivalent	
TFT Interface	24-bit RGB	
Aspect Ratio	16:9	
PCAP IC	ILI2130 or Equivalent	
PCAP Interface	I2C	
PCAP FW Version	0x07.0x00.0x00.0x00.0x65.0x90.0x00.0x01	
PCAP Resolution	16384*16384	
Backlight Type	LED, Normally White	
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	℃
Storage Temperature	TST	-30	—	+80	℃

Electrical Characteristics

Operating conditions:

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage For Logic	VCC	3.0	3.3	3.6	V
Supply PCAP	VDDT	2.8	—	3.3	V
	I_{CTP}	—	65	98	mA
Power Supply For Current	VDD=3.3 V		4	10	mA
Power Consumption	VDD=3.3 V		13.2	36	mW
Power voltage	AVDD	10.2	10.4	10.6	V
Power voltage	VGH	15.3	16.0	16.7	V
Power voltage	VGL	-7.7	-7.0	-6.3	V
Input signal voltage	VCOM	2.6	(3.6)	4.6	V

Interface

1. LCM PIN Definition

Pin	Symbol	Function
1	A	Power supply for backlight
2	A	Power supply for backlight
3	K	Backlight ground
4	K	Backlight ground
5	GND	Power ground
6	VCOM	Common voltage
7	VCC	Power for Digital Circuit
8	MODE	DE/SYNC mode select
9	DE	Data Input Enable(DEN)
10	VS	Vertical Sync Input (VSD)
11	HS	Horizontal Sync Input(HSD)
12	B7	Blue data(MSB)
13	B6	Blue data
14	B5	Blue data
15	B4	Blue data
16	B3	Blue data
17	B2	Blue data
18	B1	Blue data
19	B0	Blue data(LSB)
20	G7	Green data(MSB)
21	G6	Green data
22	G5	Green data
23	G4	Green data
24	G3	Green data
25	G2	Green data
26	G1	Green data
27	G0	Green data(LSB)
28	R7	Red data(MSB)
29	R6	Red data
30	R5	Red data
31	R4	Red data

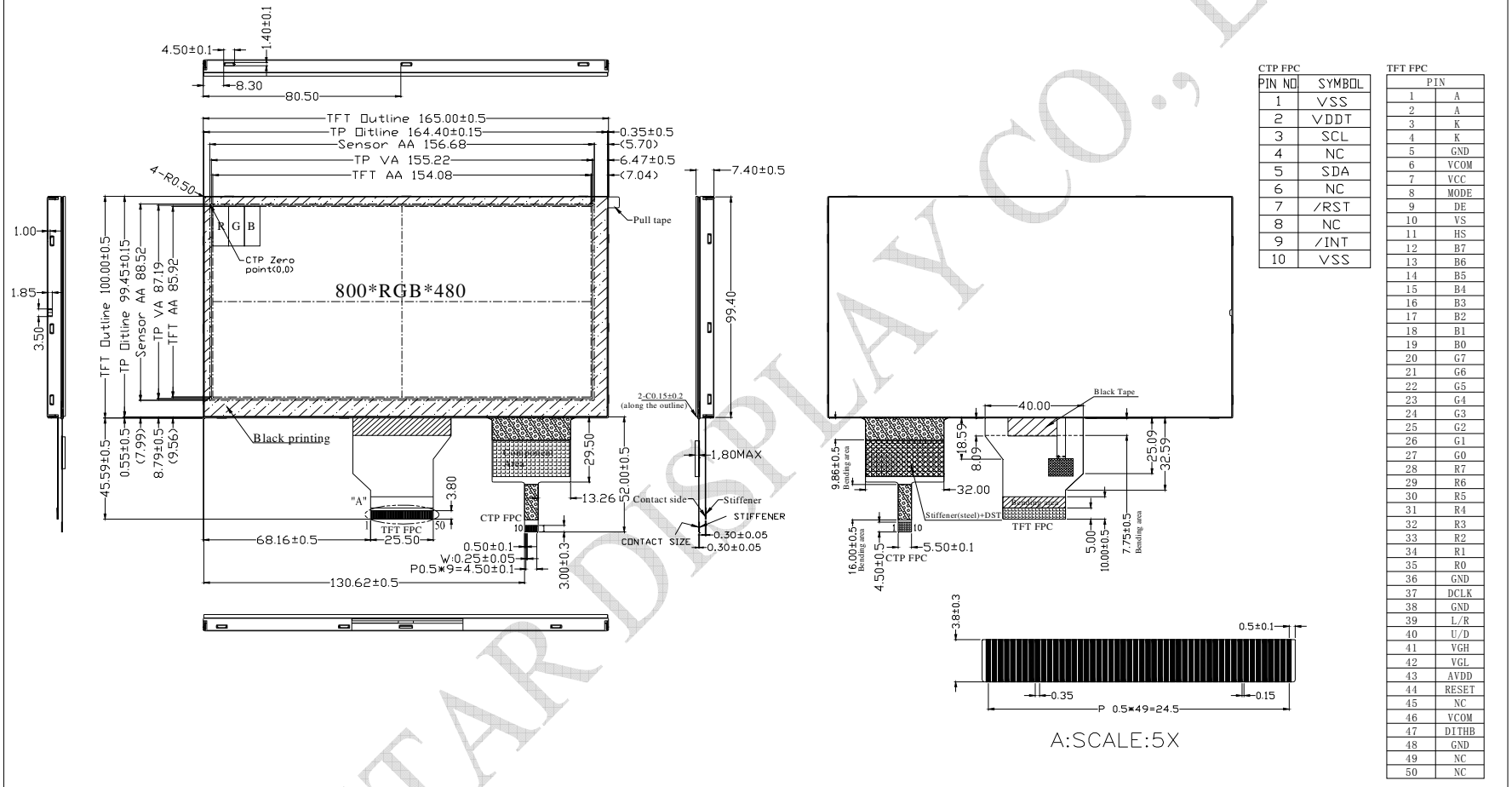
32	R3	Red data
33	R2	Red data
34	R1	Red data
35	R0	Red data(LSB)
36	GND	Power Ground
37	DCLK	Sample clock (CLKIN)
38	GND	Power Ground
39	L/R	Left / right selection
40	U/D	Up/down selection
41	VGH	Gate ON Voltage
42	VGL	Gate OFF Voltage
43	AVDD	Power for Analog Circuit
44	RESET	Global reset pin.
45	NC	No connection
46	VCOM	Common Voltage
47	DITHB	Dithering function
48	GND	Power Ground
49	NC	No connection
50	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

Contour Drawing



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	
1	A
2	A
3	K
4	K
5	GND
6	VCOM
7	VCC
8	MODE
9	DE
10	VS
11	HS
12	B7
13	B6
14	B5
15	B4
16	B3
17	B2
18	B1
19	B0
20	G7
21	G6
22	G5
23	G4
24	G3
25	G2
26	G1
27	G0
28	R7
29	R6
30	R5
31	R4
32	R3
33	R2
34	R1
35	R0
36	GND
37	DCLK
38	GND
39	L/R
40	U/D
41	VGH
42	VGL
43	AVDD
44	RESET
45	NC
46	VCOM
47	DITHB
48	GND
49	NC
50	NC

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