

TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WF70C6TYFB5MHGV#

General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	1200 x RGB x 1920 (TFT)	dots
Module dimension	122.1 x 173.75 x 24.25	mm
Active area	94.5 x 151.2	mm
Pixel Pitch	0.07875 X 0.07875	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing Angle	80/80/80/80	
Aspect Ratio	10:16	
Controller IC	LT6911C or equivalent	
Backlight Type	LED, Normally White	
TFT Interface	DVI	
CTP Driver IC	GT911 or equivalent	
CTP Interface	USB	
CTP FW Version	66	
CTP Resolution	1200*1920	
Touch Panel	Projected Capacitive Touch Panel (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

1. Operating conditions:

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage For LCM	VDD	4.75	5.0	5.25	V
Supply Current For LCM	IDD	—	1000	1500	mA
LED life time	—	50,000	—	—	Hr

Interface

1. LCM PIN Definition(CON4)

Pin No	Symbol	Function
1	NC	No connection
2	5V	Raspberry Pi:Power 5V
3	GPIO02	Raspberry Pi:GPIO02
4	5V	Raspberry Pi:Power 5V
5	GPIO03	Raspberry Pi:GPIO03
6	GND	Raspberry Pi:GND
7	GPIO04	Raspberry Pi:GPIO04
8	GPIO14	Raspberry Pi:GPIO14
9	GND	Raspberry Pi:GND
10	GPIO15	Raspberry Pi:GPIO15
11	GPIO17	Raspberry Pi:GPIO17
12	BL-PWM GPIO18	Raspberry Pi:GPIO18 (Backlight Enable)
13	GPIO27	Raspberry Pi:GPIO27
14	GND	Raspberry Pi:GND
15	GPIO22	Raspberry Pi:GPIO22
16	GPIO23	Raspberry Pi:GPIO23
17	NC	No connection
18	GPIO24	Raspberry Pi:GPIO24
19	GPIO10	Raspberry Pi:GPIO10
20	GND	Raspberry Pi:GND
21	GPIO09	Raspberry Pi:GPIO09
22	GPIO25	Raspberry Pi:GPIO25
23	GPIO11	Raspberry Pi:GPIO11
24	GPIO08	Raspberry Pi:GPIO08
25	GND	Raspberry Pi:GND
26	GPIO07	Raspberry Pi:GPIO07
27	ID_SD	Raspberry Pi:ID_SD
28	ID_SC	Raspberry Pi:ID_SC
29	GPIO05	Raspberry Pi:GPIO05

30	GND	Raspberry Pi:GND
31	GPIO06	Raspberry Pi:GPIO06
32	GPIO12	Raspberry Pi:GPIO12
33	GPIO13	Raspberry Pi:GPIO13
34	GND	Raspberry Pi:GND
35	GPIO19	Raspberry Pi:GPIO19
36	GPIO16	Raspberry Pi:GPIO16
37	GPIO26	Raspberry Pi:GPIO26
38	GPIO20	Raspberry Pi:GPIO20
39	GND	Raspberry Pi:GND
40	GPIO21	Raspberry Pi:GPIO21

2. LCM PIN Definition (CON5)

Pin No	Symbol	Function
1	3.3V	TFT Module Power limit can only output 3.3V,100mA
2	5V	Raspberry Pi:Power 5V
3	GPIO02	Raspberry Pi:GPIO02
4	5V	Raspberry Pi:Power 5V
5	GPIO03	Raspberry Pi:GPIO03
6	GND	Raspberry Pi:GND
7	GPIO04	Raspberry Pi:GPIO04
8	GPIO14	Raspberry Pi:GPIO14
9	GND	Raspberry Pi:GND
10	GPIO15	Raspberry Pi:GPIO15
11	GPIO17	Raspberry Pi:GPIO17
12	BL-PWM GPIO18	Raspberry Pi:GPIO18 (Backlight Enable)
13	GPIO27	Raspberry Pi:GPIO27
14	GND	Raspberry Pi:GND
15	GPIO22	Raspberry Pi:GPIO22
16	GPIO23	Raspberry Pi:GPIO23
17	3.3V	TFT Module Power limit can only output 3.3V,100mA
18	GPIO24	Raspberry Pi:GPIO24
19	GPIO10	Raspberry Pi:GPIO10
20	GND	Raspberry Pi:GND
21	GPIO09	Raspberry Pi:GPIO09
22	GPIO25	Raspberry Pi:GPIO25
23	GPIO11	Raspberry Pi:GPIO11
24	GPIO08	Raspberry Pi:GPIO08
25	GND	Raspberry Pi:GND
26	GPIO07	Raspberry Pi:GPIO07
27	ID_SD	Raspberry Pi:ID_SD
28	ID_SC	Raspberry Pi:ID_SC
29	GPIO05	Raspberry Pi:GPIO05
30	GND	Raspberry Pi:GND
31	GPIO06	Raspberry Pi:GPIO06

32	GPIO12	Raspberry Pi:GPIO12
33	GPIO13	Raspberry Pi:GPIO13
34	GND	Raspberry Pi:GND
35	GPIO19	Raspberry Pi:GPIO19
36	GPIO16	Raspberry Pi:GPIO16
37	GPIO26	Raspberry Pi:GPIO26
38	GPIO20	Raspberry Pi:GPIO20
39	GND	Raspberry Pi:GND
40	GPIO21	Raspberry Pi:GPIO21

Note3: The 3.3V supply current is limited; please pay special attention to use

3. PW_5V

Pin No	Symbol	Function
A1	GND	Power Ground
A4	VBUS	Power 5V
A5	CC1	Configuration channel
A6	NC	No connection
A7	NC	No connection
A8	NC	No connection
A9	VBUS	Power 5V
A12	GND	Power Ground
B12	GND	Power Ground
B9	VBUS	Power 5V
B8	NC	No connection
B7	NC	No connection
B6	NC	No connection
B5	CC2	Configuration channel
B4	VBUS	Power 5V
B1	GND	Power Ground

4. DVI

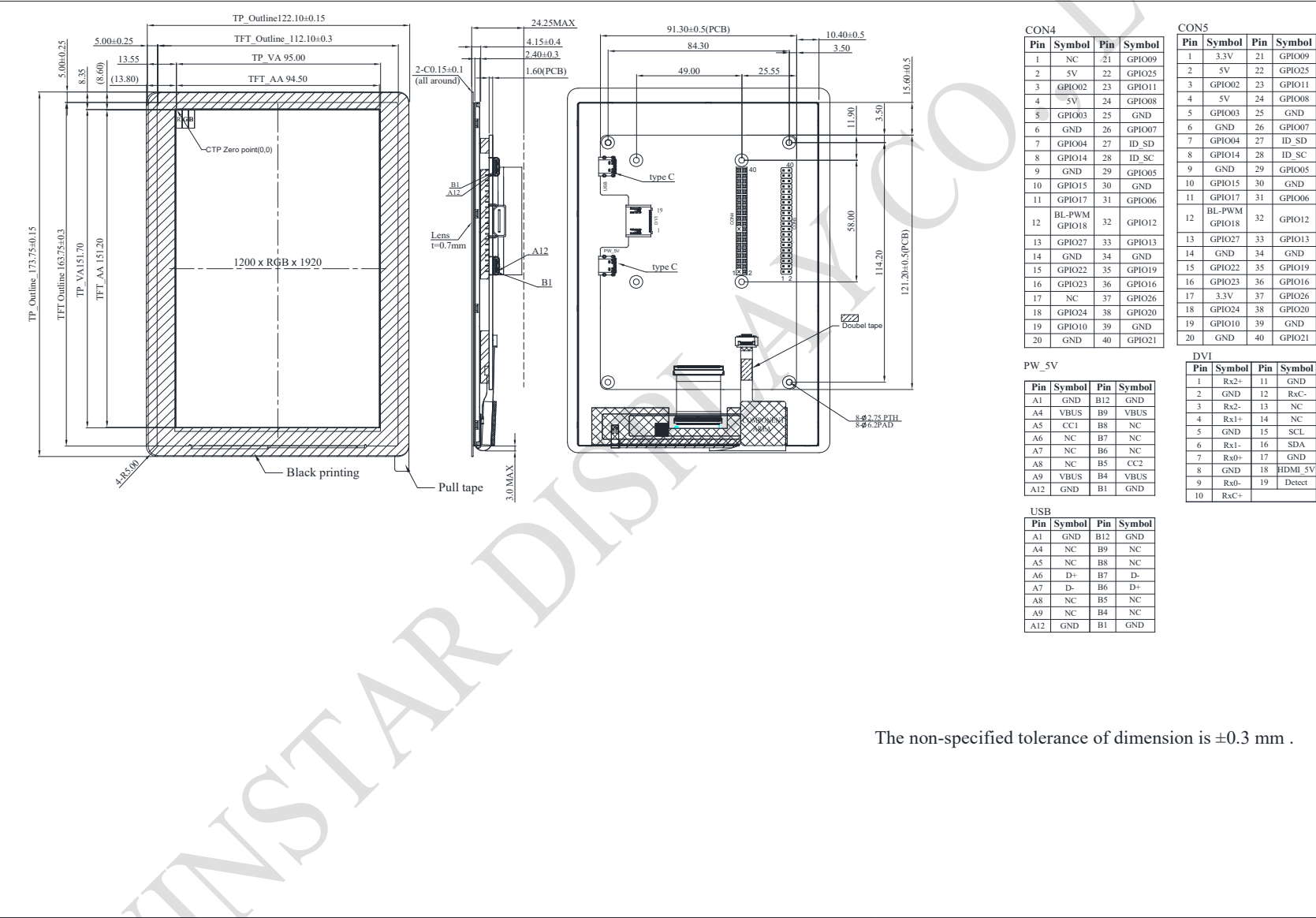
Pin No.	Symbol	I/O	Function	Remark
1	Rx2+	I	Channel-2 positive receiver input; low-voltage signal differential- input pair.	
2	GND	P	Ground	
3	Rx2-	I	Channel-2 negative receiver input; low-voltage signal differential- input pair.	
4	Rx1+	I	Channel-1 positive receiver input; low-voltage signal differential- input pair.	
5	GND	P	Ground	
6	Rx1-	I	Channel-1 negative receiver input; low-voltage signal differential- input pair.	
7	Rx0+	I	Channel-0 positive receiver input; low-voltage signal differential- input pair.	
8	GND	P	Ground	
9	Rx0-	I	Channel-0 negative receiver input; low-voltage signal differential- input pair.	
10	RxC+	I	Clock positive receiver input; low-voltage signal differential- input pair.	
11	GND	P	Ground	
12	RxC-	I	Clock negative receiver input; low-voltage signal differential- input pair.	
13-14	NC	-	No connection	
15	SCL	I/O	DDC(Data Display Channel) Clock	
16	SDA	I/O	DDC(Data Display Channel) Data	
17	GND	P	Ground	
18	HDMI_5V	P	Power Supply	
19	Detect	I/O	Hot plug detect	

I: input, O: output, P: Power

5. USB

Pin No	Symbol	Function
A1	GND	Power Ground
A4	NC	No connection
A5	NC	No connection
A6	D+	Data line +
A7	D-	Data line -
A8	NC	No connection
A9	NC	No connection
A12	GND	Power Ground
B12	GND	Power Ground
B9	NC	No connection
B8	NC	No connection
B7	D-	Data line -
B6	D+	Data line +
B5	NC	No connection
B4	NC	No connection
B1	GND	Power Ground

Contour Drawing



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