

TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WF50DSYF3MHG1V

General Specifications

Item	Dimension	Unit
Size	5.0	inch
Dot Matrix	720× 3(RGB) ×1280	dots
Module dimension	91.3 (W) × 127.6 (H) × 24.85	mm
Active area	62.1 (W) × 110.4 (H)	mm
Pixel pitch	0.08625(W) ×0.08625(H)	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing angle	80/80/80/80(IPS)	
Driver IC	LT6911C	
Interface	HDMI(only for DVI)	
Aspect Ratio	16:9	
Backlight Type	LED ,Normally White	
PCAP FW Version	0x5F	
PCAP IC	GT928	
PCAP Interface	USB	
PCAP Resolution	720 x 1280	
Touch Panel	With PCAP	
Surface	Glare	

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 LCM	VDD	4.75	5	5.25	V
Supply Current For LCM	IDD	—	0.9	1.35	A
LED life time	-		50,000		Hr

Interface

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

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

USB

Pin No.	Symbol	Function
1	5V	Power 5V
2	D-	Data line -
3	D+	Data line +
4	NC	No connection
5	GND	Power Ground

DVI

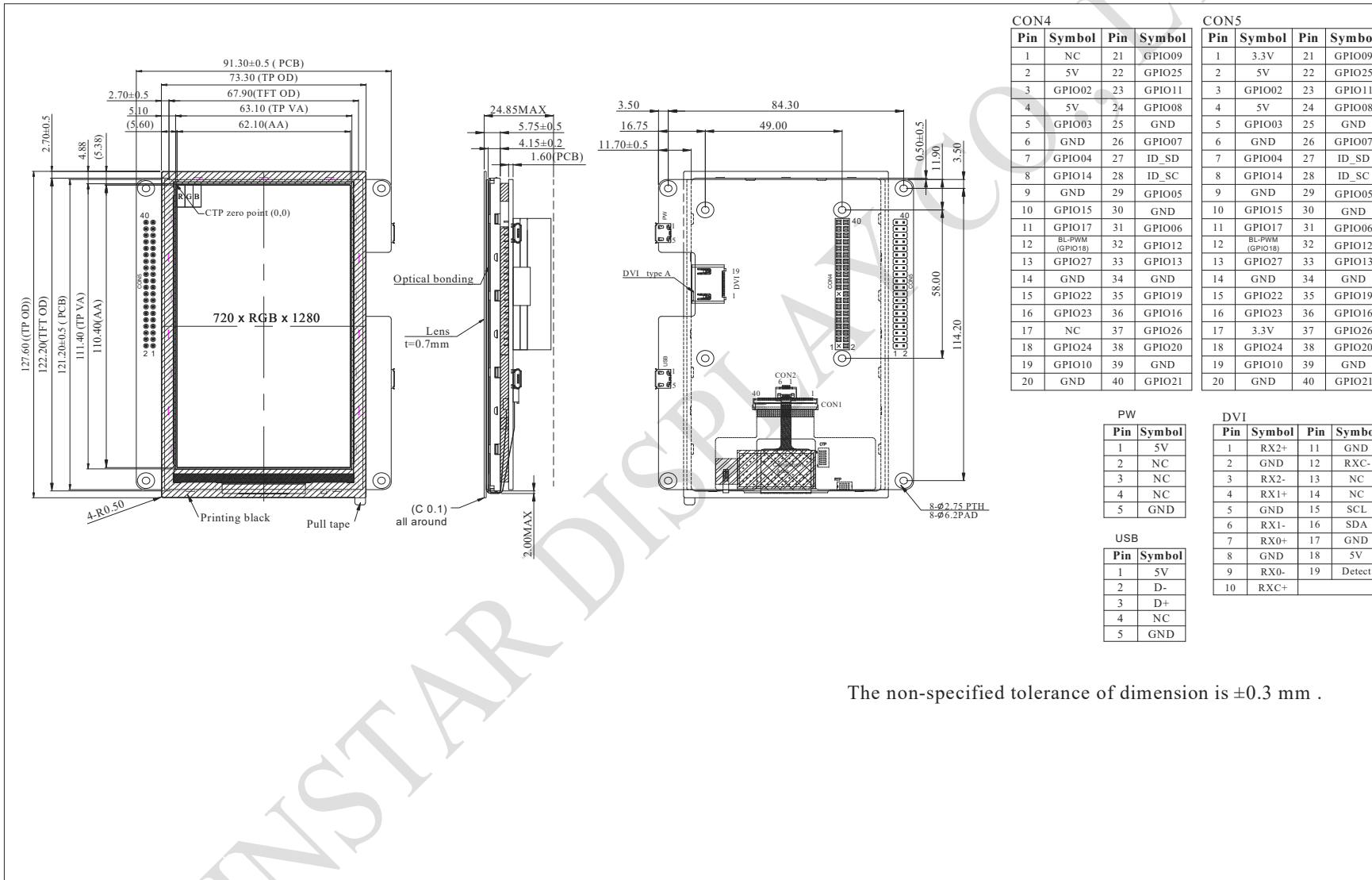
Pin No.	Symbol	I/O	Function
1	Rx2+	I	Channel-2 positive receiver input; low-voltage signal differential- input pair.
2	GND	P	Ground
3	Rx2-	I	Channel-2 negative receiver input; low-voltage signal differential- input pair.
4	Rx1+	I	Channel-1 positive receiver input; low-voltage signal differential- input 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	5V	P	Power Supply
19	Detect	I/O	Hot plug detect

I: input, O: output, P: Power

PW

Pin No	Symbol	Function
1	5V	Power 5V
2	NC	No connection
3	NC	No connection
4	NC	No connection
5	GND	Power Ground

Contour Drawing



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