

TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WF70A7TIFHLHGV#

General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	1024 x RGB x 600(TFT)	dots
Module dimension	164.8(W) x 99.8(H) x 26.5 (D)	mm
Active area	154.2144 x 85.92	mm
Pixel pitch	0.1506 x 0.1432	mm
LCD type	TFT, Normally White, Transmissive	
View Direction	12 o'clock	
Gray Scale Inversion Direction	6 o'clock	
Aspect Ratio	16:9	
Controller IC	TFP401 or equivalent	
Backlight Type	LED, Normally White	
TFT Interface	HDMI(only for DVI)	
CTP IC	ILI2130 or Equivalent	
CTP Interface	USB	
CTP FW Version	0x07.0x00.0x00.0x00.0x65.0x90.0x00.0x01	
CTP Resolution	16384*16384	
With /Without TP	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

1. Operating conditions:

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For LCM	VDD	—	4.9	5	5.1	V
Supply Current For LCM	IDD	—	—	940	1420	mA
LED life time	—	—	—	50,000	—	Hr

Interface

1. LCM PIN Definition(CON6)

Pin	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	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	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	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

Note1: The 3.3V supply current is limited; please pay special attention to use

3. USB

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

4. POWER JACK

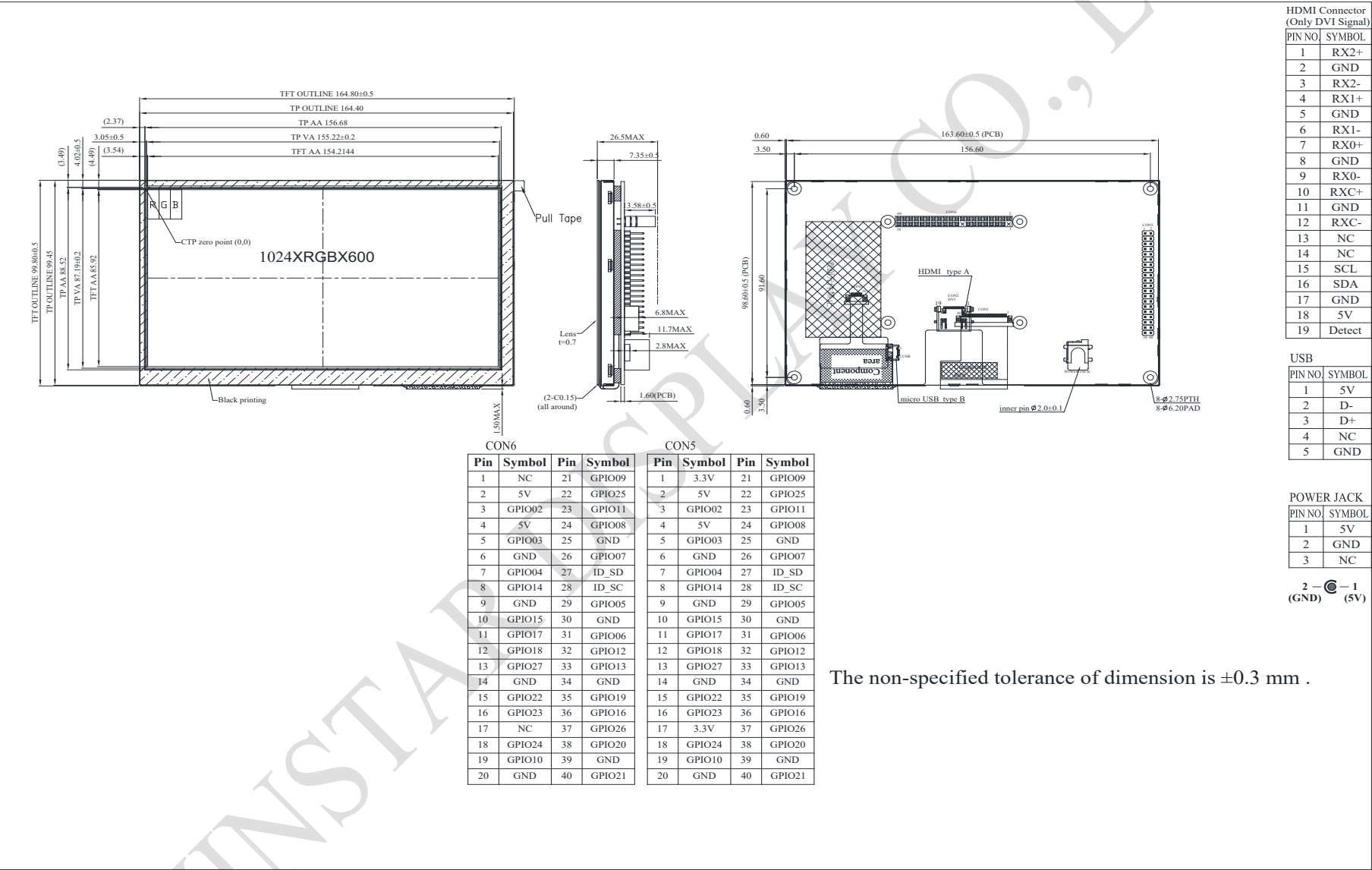
Pin No.	Symbol	I/O	Function
1	5V	P	Power Supply (5V)
2	GND	P	Ground
3	NC		No connection

5. 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

Contour Drawing



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