

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



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華凌光電股份有限公司



WEB: <https://www.winstar.com.tw> E-mail: sales@winstar.com.tw

SPECIFICATION

MODULE NO.: WF104GSWFMLHBV#

General Specifications

Item	Dimension	Unit
Size	10.4	inch
Dot Matrix	1024 x RGB x 768 (TFT)	dots
Module dimension	240.6 x 190.8 x 30.83	mm
Active area	210.432 x 157.824	mm
Pixel pitch	0.2055 x 0.2055	mm
LCD type	TFT, Normally Black, Transmissive	
Viewing Angle	80/80/80/80 min	
Aspect Ratio	4:3	
Controller IC	TFP401	
Backlight Type	LED, Normally White	
Electrical Interface (Logic)	HDMI(only for DVI)	
PCAP IC	ILI2511 or Equivalent	
PCAP Interface	USB	
PCAP FW Version	0x06.0x00.0x00.0x00.0x00.0x00.0x00.0x00	
PCAP Resolution	16384*16384	
Screw torque	M2 Min:1.4 Max:2.2 (Unit, Kgf.cm) M3 Min:2.0 Max:2.4 (Unit, Kgf.cm)	
Touch Panel	With PCAP	
Surface	Glare	
Assembly Instructions	Need to use edge measuring keyholes to perform fixing and support	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-30	—	+80	°C
Storage Temperature	TST	-30	—	+80	°C

Electrical Characteristics

1. Operating conditions

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage For LCM	12V	11.4	12.0	12.6	V
Supply Current For LCM	I _{12V}	—	940	1410	mA
LED life time	—	-	100,000	-	Hr

Interface

1. CN4

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	GPIO18 (PWM_BL)	Backlight Enable,Active_H (Raspberry Pi:GPIO18)
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

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

2. CN5

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	GPIO18 (PWM_BL)	Backlight Enable ,Active_H (Raspberry Pi:GPIO18)
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

3. 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

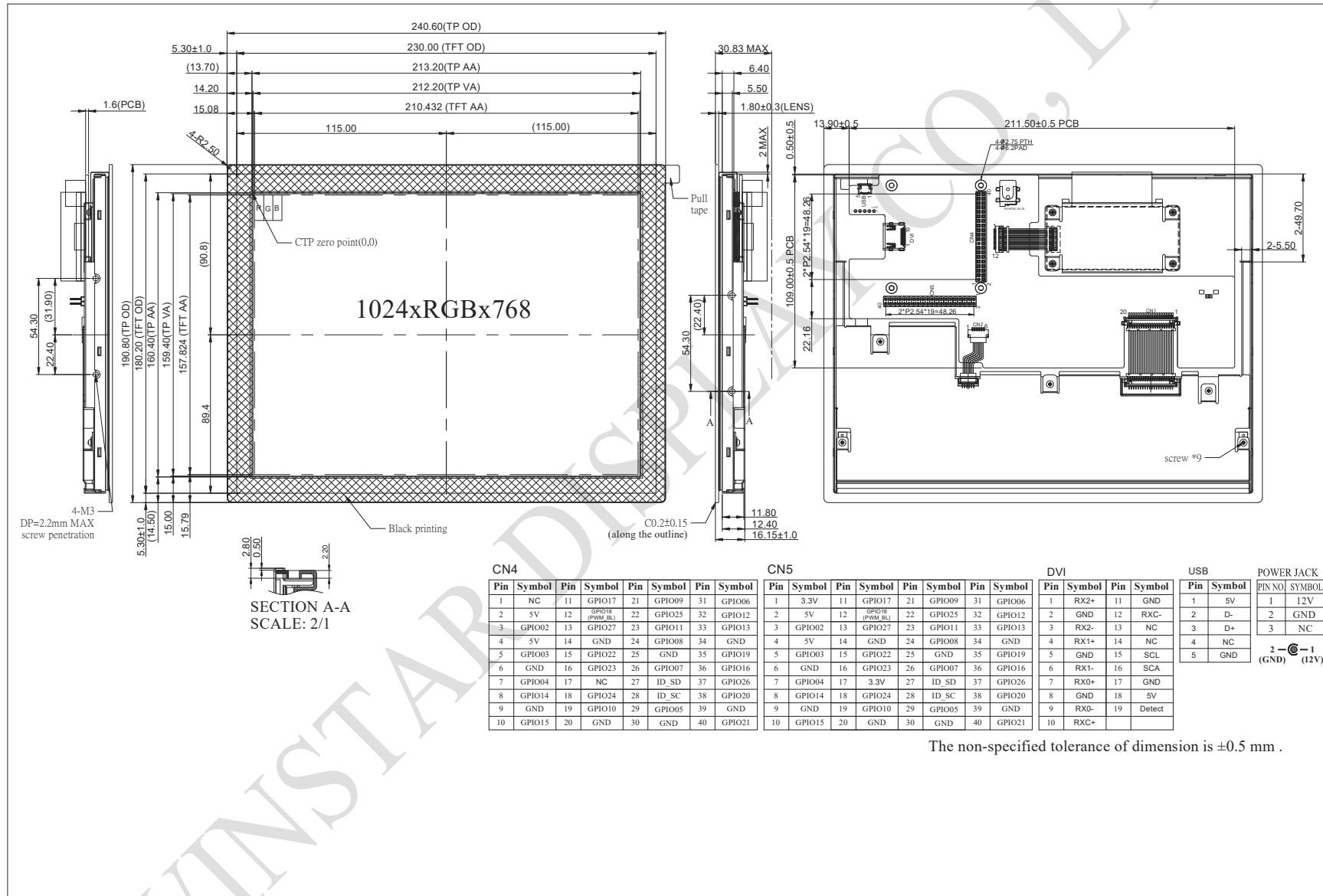
4. PCAP USB PIN Definition

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

5. POWER JACK

Pin	Symbol	Function
1	12V	Power Supply (12.0V)
2	GND	Power Ground
3	NC	No connection

Contour Drawing



CN4

Pin	Symbol	Pin	Symbol	Pin	Symbol	Pin	Symbol
1	NC	11	GPI017	21	GPI009	31	GPI006
2	5V	12	GPI018 (TPVA BL)	22	GPI025	32	GPI012
3	GPI002	13	GPI027	23	GPI011	33	GPI013
4	5V	14	GND	24	GPI008	34	GND
5	GPI003	15	GPI022	25	GND	35	GPI019
6	GND	16	GPI023	26	GPI007	36	GPI016
7	GPI004	17	NC	27	ID_SD	37	GPI026
8	GPI014	18	GPI024	28	ID_SC	38	GPI020
9	GND	19	GPI010	29	GPI005	39	GND
10	GPI015	20	GND	30	GND	40	GPI021

CN5

Pin	Symbol	Pin	Symbol	Pin	Symbol	Pin	Symbol
1	3.3V	11	GPI017	21	GPI009	31	GPI006
2	5V	12	GPI018 (TPVA BL)	22	GPI025	32	GPI012
3	GPI002	13	GPI027	23	GPI011	33	GPI013
4	5V	14	GND	24	GPI008	34	GND
5	GPI003	15	GPI022	25	GND	35	GPI019
6	GND	16	GPI023	26	GPI007	36	GPI016
7	GPI004	17	3.3V	27	ID_SD	37	GPI026
8	GPI014	18	GPI024	28	ID_SC	38	GPI020
9	GND	19	GPI010	29	GPI005	39	GND
10	GPI015	20	GND	30	GND	40	GPI021

DVI

Pin	Symbol	Pin	Symbol
1	RX2+	11	GND
2	GND	12	RXC-
3	RX2-	13	NC
4	RX1+	14	NC
5	GND	15	SCL
6	RX1-	16	SCA
7	RX0+	17	GND
8	GND	18	5V
9	RX0-	19	Detect
10	RXC+		

USB

Pin	Symbol
1	5V
2	D-
3	D+
4	NC
5	GND

POWER JACK

PIN NO.	SYMBOL
1	12V
2	GND
3	NC

2 - 1 (GND) (12V)

The non-specified tolerance of dimension is ±0.5 mm .