

TFT DISPLAY SPECIFICATION



WINSTAR Display Co.,Ltd.
華凌光電股份有限公司



SPECIFICATION

MODULE NO.: WF101JSYFHLHBV#

General Specifications

Item	Dimension	Unit
Screen Diagonal	10.1	inch
Number of Pixels	1024 RGB x 600	dots
Module dimension	235(W) x143(H) x 27.96(MAX)(D)	mm
Active area	222.72 (H) x 125.28(V)	mm
Pixel pitch	0.2175(W) x 0.2088(H)	mm
Display Mode	TFT, Normally Black, Transmissive	
Viewing Angle	85/85/85/85	
Color arrangement	RGB-STRIFE	
Aspect Ratio	16:9	
Driver IC	EK79001HN + EK73215BCGA or equivalent	
Backlight Type	LED, Normally White	
Electrical Interface (Logic)	HDMI(only for DVI)	
PCAP IC	ILI2511 or equivalent	
PCAP Interface	USB (I2C available)	
PCAP FW Version:	V6.0.0.0.62.90.1.2	
Touch Panel	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

Operating conditions:

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For LCM	VDD	—	4.7	5	5.3	V
Supply Current For LCM	IDD	—	—	1.7	2.6	A
LED life time	—	—	50000	—	—	Hr

Interface

1.CON6

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)	Backlight Enable ,Active_L (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

2. 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)	Backlight Enable ,Active_L (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. CTP 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

4. DVI

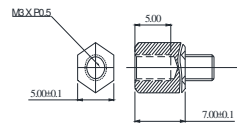
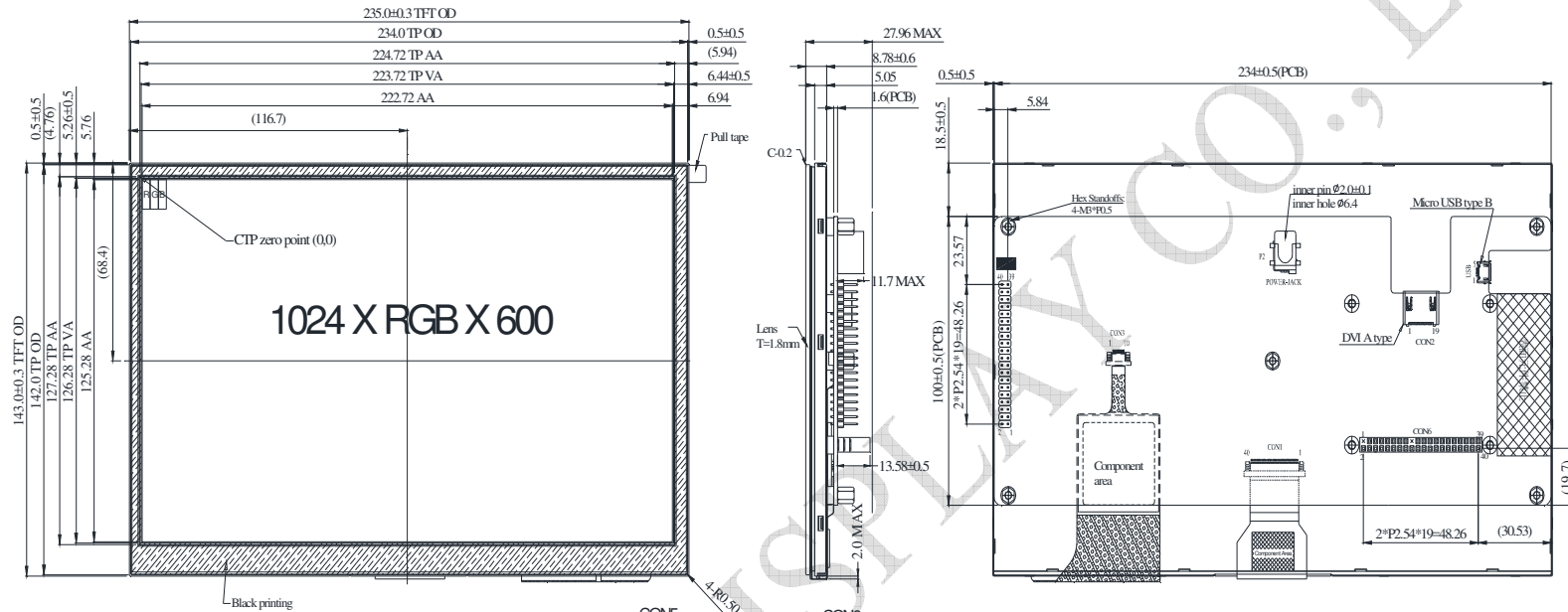
Pin No.	Symbol	I/O	Function
1	Rx2+	I	+LVDS Differential Data Input
2	GND	P	Ground
3	Rx2-	I	-LVDS Differential Data Input
4	Rx1+	I	+LVDS Differential Data Input
5	GND	P	Ground
6	Rx1-	I	-LVDS Differential Data Input
7	Rx0+	I	+LVDS Differential Data Input
8	GND	P	Ground
9	Rx0-	I	-LVDS Differential Data Input
10	RxC+	I	+LVDS Differential Clock Input
11	GND	P	Ground
12	RxC-	I	-LVDS Differential Clock Input
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

5. POWER-JACK

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

Contour Drawing



Hex Standoffs
SCALE:3/1

CCN5

Pin	Symbol	Pin	Symbol
1	3.3V	21	GPIO9
2	5V	22	GPIO25
3	GPIO2	23	GPIO11
4	5V	24	GPIO8
5	GPIO3	25	GND
6	GND	26	GPIO7
7	GPIO4	27	ID_SD
8	GPIO4	28	ID_SC
9	GND	29	GPIO5
10	GPIO15	30	GND
11	GPIO17	31	GPIO6
12	BE-PWM	32	GPIO2
13	GPIO27	33	GPIO13
14	GND	34	GND
15	GPIO22	35	GPIO19
16	GPIO23	36	GPIO16
17	3.3V	37	GPIO26
18	GPIO24	38	GPIO20
19	GPIO10	39	GND
20	GND	40	GPIO21

CCN6

Pin	Symbol	Pin	Symbol
1	NC	21	GPIO9
2	5V	22	GPIO25
3	GPIO2	23	GPIO11
4	5V	24	GPIO8
5	GPIO3	25	GND
6	GND	26	GPIO7
7	GPIO4	27	ID_SD
8	GPIO4	28	ID_SC
9	GND	29	GPIO5
10	GPIO15	30	GND
11	GPIO17	31	GPIO6
12	BE-PWM	32	GPIO2
13	GPIO27	33	GPIO13
14	GND	34	GND
15	GPIO22	35	GPIO19
16	GPIO23	36	GPIO16
17	NC	37	GPIO26
18	GPIO24	38	GPIO20
19	GPIO10	39	GND
20	GND	40	GPIO21

POWER JACK

PIN NO.	SYMBOL
1	5V
2	GND
3	NC



DVI

PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	RX2+	11	GND
2	GND	12	RXC-
3	RX2-	13	NC
4	RX1+	14	NC
5	GND	15	SCL
6	RX1-	16	SDA
7	RX0+	17	GND
8	GND	18	5V
9	RX0-	19	Detect
10	RXC+		

USB

PIN NO.	SYMBOL
1	5V
2	D-
3	D+
4	NC
5	GND

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