Winstar Display Co., LTD
華凌光電股份有限公司
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SPECIFICATION

MODULE NO.: WF101-1024600JM#0P8-FC

General Specifications

Item	Dimension	Unit
Size	10.1	inch
Dot Matrix	1024 RGB × 600	dots
Module dimension	235(W) × 143(H) × 8.78(D)	mm
Active area	222.72 (H) × 125.28(V)	mm
Pixel pitch	0.2175(W) × 0.2088(H)	mm
LCD type	TFT, Normally Black, Transmissive	
TFT Interface	4-Lanes MIPI	
Driver IC	EK79007AD3 + EK73217BCGA or equivalent	
Viewing Angle	85/85/85/85	
Aspect Ratio	16:9	
Backlight Type	LED, Normally White	
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.

Represented by:
first FC components
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Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-20	—	+70	℃
Storage Temperature	TST	-30	—	+80	℃

Electrical Characteristics

Typical Operation Conditions (At Ta = 25 °C,)

Item	Symbol	Min.	Typ.	Max.	Unit
Digital Power Supply Voltage For LCD	VDD	1.71	1.8	1.89	V
Analog Power Supply Voltage	AVDD	9.89	10.2	10.5	V
Gate On Power Supply Voltage	VGH	19.4	20.0	20.6	V
Gate Off Power Supply Voltage	VGL	-10.3	-10.0	-9.7	V
Common Power Supply Voltage	VCOMI	4.0	4.3	4.6	V
Supply PCAP	VDDT	3.0	3.3	3.6	V
	I_{VDDT}		90.5	115	mA
	USB_VDD 5V	4.4	5.0	5.5	V
	$I_{VDD\ 5V}$	—	97.8	120	mA

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Interface

1. TFT LCD MODULE

Pin No.	Symbol	Description
1	VLED+	LED Anode
2	VLED+	LED Anode
3	VGH	Positive power for TFT
4	VGL	Negative power for TFT
5	UPDN	Gate up or down scan control. UPDN = ”L”, STV2 output vertical start pulse and UD pin output logical “L” to Gate driver. (default) UPDN = ”H”, STV1 output vertical start pulse and UD pin output logical “H” to Gate driver
6	SHLR	Source right or left sequence control. SHLR = ”L“, shift left: last data = S1←S2←S3…….←S1536 = first data. SHLR = ”H“, shift right: first data = S1→S2→S3…….→S1536 = last data.(default)
7	VLED-	LED Cathode
8	VLED-	LED Cathode
9	AVDD	Analog power
10	GND	Digital ground
11	D3P	MIPI data input.
12	D3N	MIPI data input.
13	GND	Digital ground
14	D2P	MIPI data input.
15	D2N	MIPI data input.
16	GND	Digital ground
17	CLKP	MIPI clock input
18	CLKN	MIPI clock input
19	GND	Digital ground
20	D1P	MIPI data input.
21	D1N	MIPI data input.
22	GND	Digital ground
23	D0P	MIPI data input.
24	D0N	MIPI data input.
25	GND	Digital ground

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26	STBYB	Standby mode. STBYB = ”H“,normal operation(default) STBYB = ”L”, timing controller, source driver will turn off, all output are GND.
27	RESET	Global reset pin. Active Low to enter Reset State. Normally pull high. Connecting with an RC reset circuit for stability.
28	VDD (1.8V)	Digital power
29	VDD (1.8V)	Digital power
30	VCOMI	Common voltage

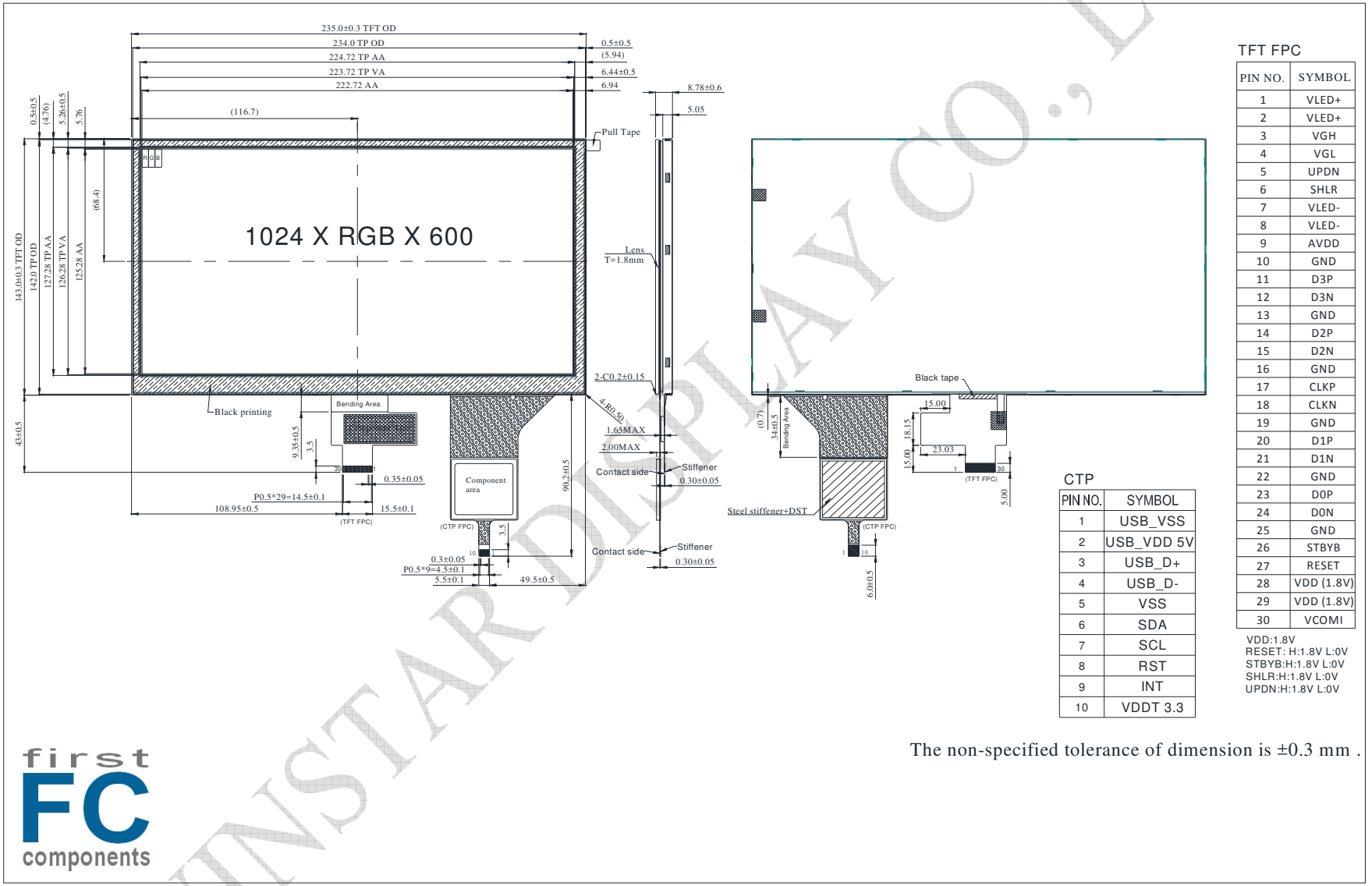
2. PCAP PIN Definition

Pin	Symbol	Function
1	USB_VSS	System ground
2	USB_VDD 5V	Power supply
3	USB_D+	Data +
4	USB_D-	Data -
5	VSS	System ground
6	SDA	I2C data input and output
7	SCL	I2C clock input
8	RST	External Reset, Low is active
9	INT	External interrupt to the host
10	VDDT 3.3	Power supply

Note: Interface can support both USB and I2C,USB is main function
Note 2 : Connect VSS(USB_VSS) of CTP wtih TFT GND

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Contour Drawing



TFT FPC

PIN NO.	SYMBOL
1	VLED+
2	VLED+
3	VGH
4	VGL
5	UPDN
6	SHLR
7	VLED-
8	VLED-
9	AVDD
10	GND
11	D3P
12	D3N
13	GND
14	D2P
15	D2N
16	GND
17	CLKP
18	CLKN
19	GND
20	D1P
21	D1N
22	GND
23	D0P
24	D0N
25	GND
26	STBYB
27	RESET
28	VDD (1.8V)
29	VDD (1.8V)
30	VCOMI

VDD:1.8V
RESET: H:1.8V L:0V
STBYB:H:1.8V L:0V
SHLR:H:1.8V L:0V
UPDN:H:1.8V L:0V

CTP

PIN NO.	SYMBOL
1	USB_VSS
2	USB_VDD 5V
3	USB_D+
4	USB_D-
5	VSS
6	SDA
7	SCL
8	RST
9	INT
10	VDDT 3.3

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

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