TFT DISPLAY SPECIFICATION

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RFH1010J-AYH-LNB SPECIFICATION

General Specifications

- Size: 10.1 inch
- Dot Matrix: 1024 RGB X 600 dots
- Module dimension: 235(W) x143(H) x 8.78(D) mm
- Active area: 222.72 (H) x 125.28(V) mm
- Pixel pitch: 0.2175(W) x 0.2088(H) mm
- LCD type: TFT, Normally Black, Transmissive
- Interface: LVDS
- Driver IC: EK79001HN + EK73215BCGA 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.

Interface

TFT LCD MODULE

Pin No.	Symbol	Description
1	VCOM	Common voltage
2	VDD	Digital power
3	VDD	Digital power
4	NC	Not connect
5	Reset	Global reset pin. Active low to enter reset state. Suggest to connecting with an RC reset circuit for stability. Normally pull high. (R=10KΩ，C=1μF)
6	STBYB	Standby mode, normally pull high STBYB=”1”, normal operation STBYB=”0”,timing control, source driver will turn off, all output are high-Z
7	GND	Digital ground
8	RXIN0-	Negative LVDS differential data inputs
9	RXIN0+	Positive LVDS differential data inputs
10	GND	Digital ground
11	RXIN1-	Negative LVDS differential data inputs
12	RXIN1+	Positive LVDS differential data inputs
13	GND	Digital ground
14	RXIN2-	Negative LVDS differential data inputs
15	RXIN2+	Positive LVDS differential data inputs
16	GND	Digital ground
17	RXCLKN-	Negative LVDS differential clock inputs
18	RXCLKN+	Positive LVDS differential clock inputs
19	GND	Digital ground
20	RXIN3-	Negative LVDS differential data inputs
21	RXIN3+	Positive LVDS differential data inputs
22	GND	Digital ground
23	NC	Not connect
24	NC	Not connect
25	GND	Digital ground
26	NC	Not connect
27	NC	Not connect
28	SELB	6-bit/8-bit input select SELB = L , 8-bit ; SELB = H , 6-bit

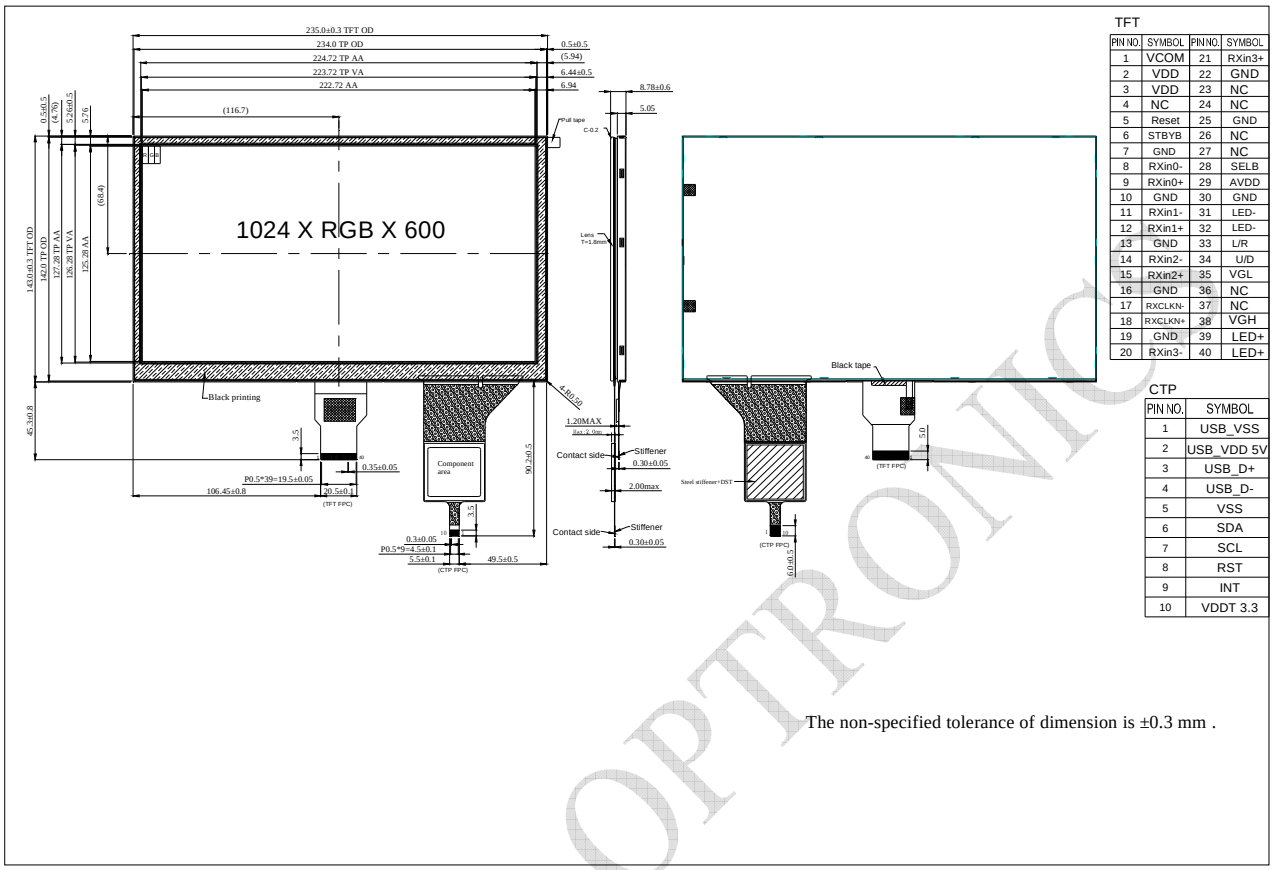
29	AVDD	Analog power
30	GND	Digital ground
31	LED-	LED Cathode
32	LED-	LED Cathode
33	L/R	Left or right display control
34	U/D	Up / down display control
35	VGL	Negative power for TFT
36	NC	Not connect
37	NC	Not connect
38	VGH	Positive power for TFT
39	LED+	LED Anode
40	LED+	LED Anode

When L/R="0",set right to left scan direction.
When L/R="1",set left to right scan direction.
When U/D="0",set top to bottom scan direction.
When U/D="1",set bottom to top scan direction.

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

Contour Drawing



TFT

PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	VCOM	21	RXin3+
2	VDD	22	GND
3	VDD	23	NC
4	NC	24	NC
5	Reset	25	GND
6	STBYB	26	NC
7	GND	27	NC
8	RXin0-	28	SELB
9	RXin0+	29	AVDD
10	GND	30	GND
11	RXin1-	31	LED-
12	RXin1+	32	LED-
13	GND	33	L/R
14	RXin2-	34	U/D
15	RXin2+	35	VGL
16	GND	36	NC
17	RXCLKN-	37	NC
18	RXCLKN+	38	VGH
19	GND	39	LED+
20	RXin3-	40	LED+

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 .

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	3	3.3	3.6	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	VCOM	4.0	4.3	4.6	V
Input logic high voltage	VIH	0.7 V_{DD}	-	V_{DD}	V
Input logic low voltage	VIL	0	-	0.3 V_{DD}	V
Supply CTP	USB_VDD 5V	4.4	5.0	5.5	V
	$I_{VDD\ 5V}$	—	97.8	120	mA