TFT DISPLAY SPECIFICATION

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RF41010N-AYW-LNG

General Specifications

- Size: 10.1-inch
- Dot Matrix: 1920 (H) x RGB x 1200 (V) dots
- Module Dimension: 257.96 x 168.6 x 12.33 Max mm
- Active Area: 216.8064 (H) x 135.504 (V) mm
- Pixel Pitch: 0.11292 (H) x 0.11292 (V) mm
- LCD Type: TFT, Normally Black, Transmissive
- Interface: 2ch-LVDS
- Driver IC: AMC8601
- Viewing Angle: 80/80/80/80
- Aspect Ratio: 16:10
- PCAP IC: GT928
- PCAP Interface: I2C
- PCAP FW Version: 82
- PCAP Resolution: 1920 * 1200
- Backlight Type: LED, Normally White
- Touch Panel: Projected Capacitive Touchscreen, PCAP
- Surface: Glare

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*Color tone slight changed by temperature and driving voltage.

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Interface

TFT LCD MODULE

Pin No.	Symbol	Description
1-5	NC	No connection
6	GND	Ground
7	ELV3P	EVEN LVDS Positive data signal (+)
8	ELV3N	EVEN LVDS Negative data signal (-)
9	GND	Ground
10	ELV2P	EVEN LVDS Positive data signal (+)
11	ELV2N	EVEN LVDS Negative data signal (-)
12	GND	Ground
13	ELVCLKP	EVEN LVDS Positive CLK signal (+)
14	ELVCLKN	EVEN LVDS Negative CLK signal (-)
15	GND	Ground
16	ELV1P	EVEN LVDS Positive data signal (+)
17	ELV1N	EVEN LVDS Negative data signal (-)
18	GND	Ground
19	ELV0P	EVEN LVDS Positive data signal (+)
20	ELV0N	EVEN LVDS Negative data signal (-)
21	GND	Ground
22	OLV3P	Odd LVDS Positive data signal (+)
23	OLV3N	Odd LVDS Negative data signal (-)
24	GND	Ground
25	OLV2P	Odd LVDS Positive data signal (+)
26	OLV2N	Odd LVDS Negative data signal (-)
27	GND	Ground
28	OLVCLKP	Odd LVDS Positive CLK signal (+)
29	OLVCLKN	Odd LVDS Negative CLK signal (-)
30	GND	Ground
31	OLV1P	Odd LVDS Positive data signal (+)
32	OLV1N	Odd LVDS Negative data signal (-)

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33	GND	Ground
34	OLV0P	Odd LVDS Positive data signal (+)
35	OLV0N	Odd LVDS Negative data signal (-)
36	GND	Ground
37 -39	NC	No connection (PIN39 and PIN40 cannot be short-circuited together)
40	NC	No connection alone
41-45	VDDIN	Power supply VDDIN=3.3V (Typ.)

Backlight PIN Definition

Pin No.	Symbol	Description
1	VLED+	Red, LED_ Anode
2	VLED-	Black, LED_ Cathode

PCAP PIN Definition

Pin No.	Symbol	Function
1	SDA	I2C data input and output
2	SCL	I2C clock input
3	RST	External Reset, Low is active
4	INT	External interrupt to the host
5	VDDT	Power Supply : +3.3V
6	VSS	Ground for analog circuit

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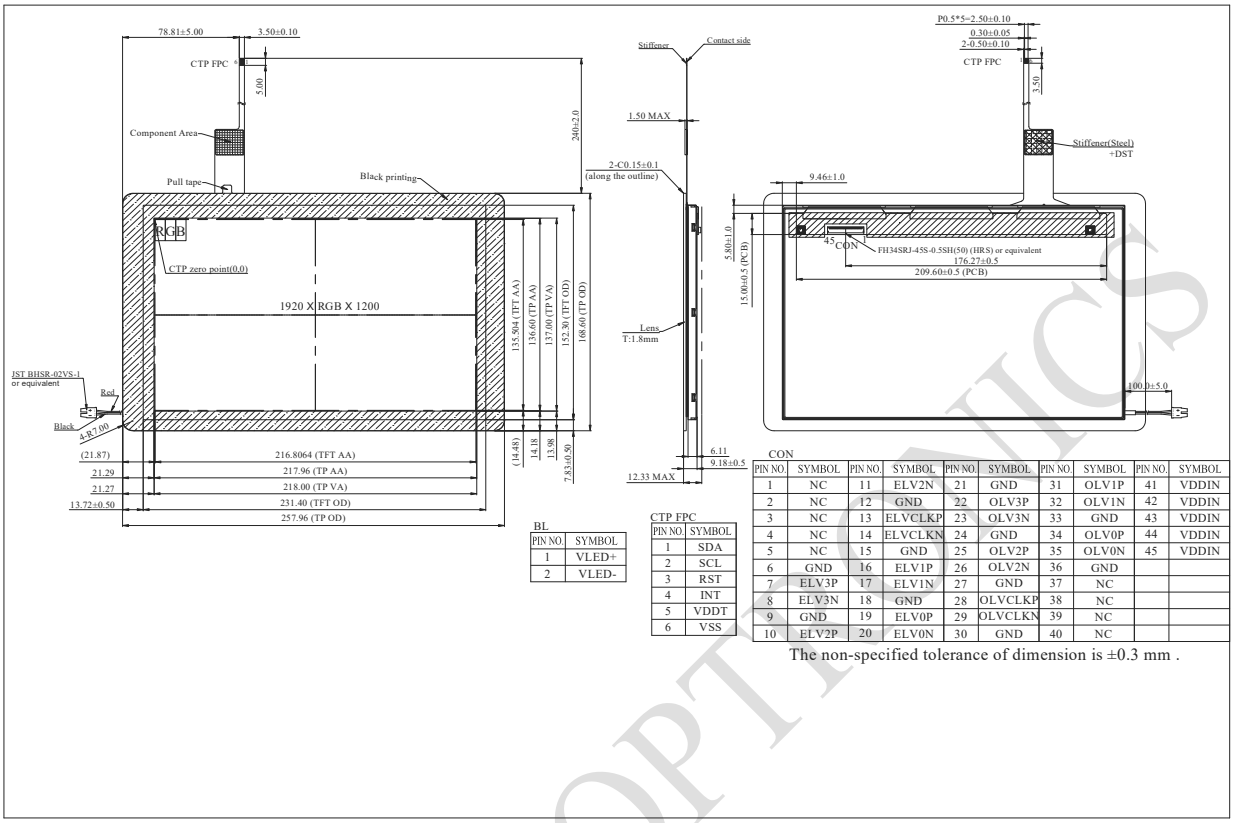
Contour Drawing



BL

PIN NO.	SYMBOL
1	VLED+
2	VLED-

CTP FPC

PIN NO.	SYMBOL
1	SDA
2	SCL
3	RST
4	INT
5	VDDT
6	VSS

CON

PIN NO.	SYMBOL	PIN NO.	SYMBOL	PIN NO.	SYMBOL	PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	NC	11	ELV2N	21	GND	31	OLV1P	41	VDDIN
2	NC	12	GND	22	OLV3P	32	OLV1N	42	VDDIN
3	NC	13	ELVCLKP	23	OLV3N	33	GND	43	VDDIN
4	NC	14	ELVCLKN	24	GND	34	OLV0P	44	VDDIN
5	NC	15	GND	25	OLV2P	35	OLV0N	45	VDDIN
6	GND	16	ELV1P	26	OLV2N	36	GND		
7	ELV3P	17	ELV1N	27	GND	37	NC		
8	ELV3N	18	GND	28	OLVCLKP	38	NC		
9	GND	19	ELV0P	29	OLVCLKN	39	NC		
10	ELV2P	20	ELV0N	30	GND	40	NC		

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

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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)

Parameter		Symbol	Values			Unit
			Min	Typ	Max	
Power Supply Voltage		VDD	3.0	3.3	3.6	V
		VRP			300	mV
Power Supply Current		IDD	-	300	360	mA
Power Consumption		PLCD	-	1	1.2	W
Rush Current		IRUSH	-	-	3.0	A
CMOS Interface	Input Voltage	VIH	2.7		3.3	V
		VIL	0		0.5	V
	Output Voltage	VOH	2.7		3.3	V
		VOL	0		0.5	V
Supply PCAP		VDDT	3.1	3.3	3.5	V
		IVDDT	—	73	110	mA

Backlight Driving Conditions

Parameter	Symbol	Min	Typ	Max	Unit
Supply Voltage of White LED Backlight	VL	26.0	29.0	32.0	V
Current for LED Backlight	IL	-	110	-	mA
LED Life Time	-	50,000	-	-	Hr

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