



RAYSTAR

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RFK1010G-AYW-LNG

SPECIFICATION

General Specifications

- Screen Diagonal: 10.1 inch
 - Number of Pixels: 1280 x 3(RGB) x 800 dots
 - Module dimension: 257.96 x 168.6 x 5.575 mm
 - Active area: 216.96 (H) x 135.6(V) mm
 - Pixel pitch: 0.1695 x 0.1695 mm
 - Display Mode: Normally Black
 - Pixel Arrangement: R.G.B. Vertical Stripe
 - Backlight Type: LED, Normally White
 - Aspect Ratio:16:9
 - PCAP FW Version: 50
 - Electrical Interface (Logic): LVDS
 - Touch Screen: Projected Capacitive Touchscreen, PCAP
 - Surface: Glare
- *Color tone slight changed by temperature and driving voltage.

Interface

1.Interface Connector

A 40pin connector is used for the module electronics interface. The recommended model is F62240-H1210B manufactured by Vigorconn.

Pin No.	Symbol	I/O	Function
1	VCOM	P	Common Voltage
2	VDD	P	Power Supply
3	VDD	P	Power Supply
4	NC	-	No connection
5	NC	-	No connection
6	NC	-	No connection
7	GND	P	Ground
8	Rxin0-	I	-LVDS Differential Data Input
9	Rxin0+	I	+LVDS Differential Data Input
10	GND	P	Ground
11	Rxin1-	I	-LVDS Differential Data Input
12	Rxin1+	I	+LVDS Differential Data Input
13	GND	P	Ground
14	Rxin2-	I	-LVDS Differential Data Input
15	Rxin2+	I	+LVDS Differential Data Input
16	GND	P	Ground
17	RxCLK-	I	-LVDS Differential Clock Input
18	RxCLK+	I	+LVDS Differential Clock Input
19	GND	P	Ground
20	Rxin3-	I	-LVDS Differential Data Input
21	Rxin3+	I	+LVDS Differential Data Input
22	GND	P	Ground
23	NC	-	No connection
24	NC	-	No connection
25	GND	P	Ground
26	NC	-	No connection
27	NC	-	No connection
28	NC	-	No connection
29	AVDD	P	Power for Analog Circuit

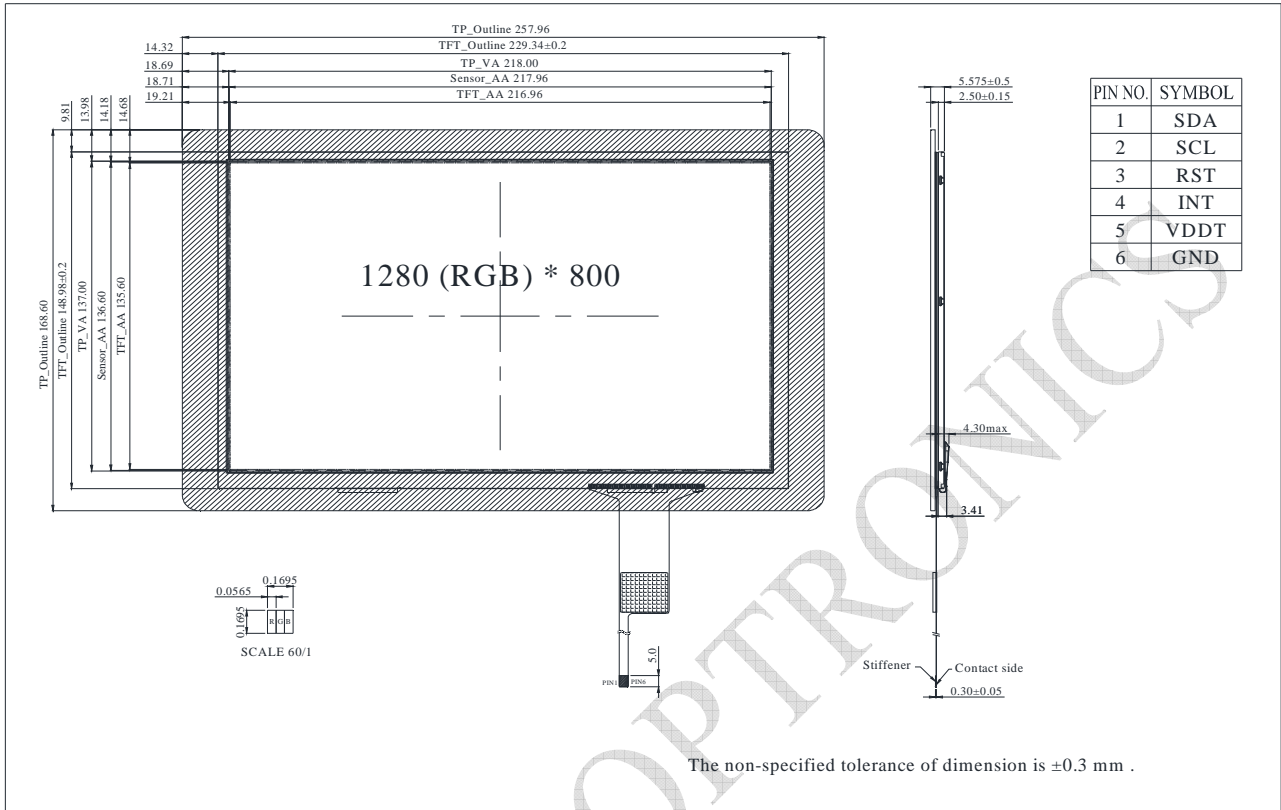
30	GND	P	Ground
31	LED-	P	LED Cathode
32	LED-	P	LED Cathode
33	NC	-	No connection
34	NC	-	No connection
35	VGL	P	Gate OFF Voltage
36	NC	-	No connection
37	NC	-	No connection
38	VGH	P	Gate ON Voltage
39	LED+	P	LED Anode
40	LED+	P	LED Anode

I: input, O: output, P: Power

2. PCAP PIN Definition

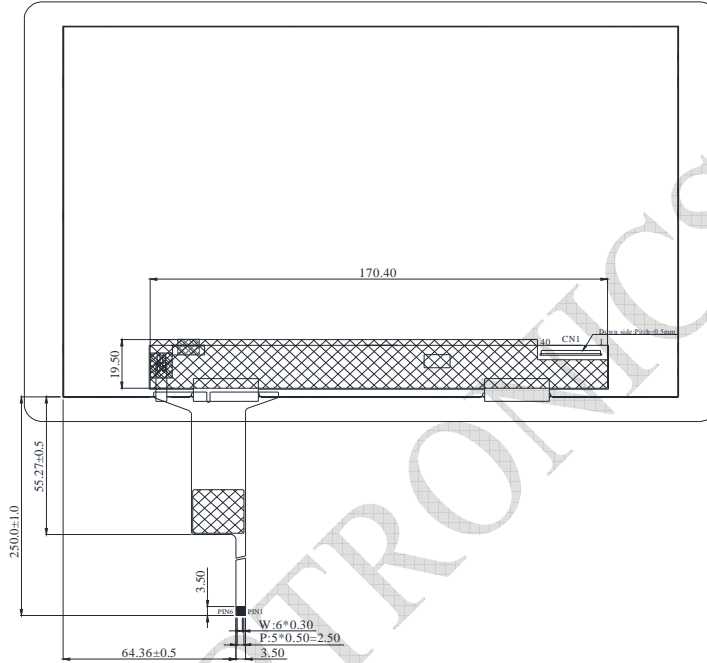
Pin	Symbol	Function
1	SDA	I2C data input and output
2	SCL	I2C clock input
3	/RST	External Reset, Low is active
4	/INT	External interrupt to the host
5	VDDT	Power Supply : +3.3V
6	VSS	Ground for analog circuit

Contour Drawing



RAYSTAR OPTRONICS

PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	VCOM	21	Rxin3+
2	VDD	22	GND
3	VDD	23	NC
4	NC	24	NC
5	NC	25	GND
6	NC	26	NC
7	GND	27	NC
8	Rxin0-	28	NC
9	Rxin0+	29	AVDD
10	GND	30	GND
11	Rxin1-	31	LED-
12	Rxin1+	32	LED-
13	GND	33	NC
14	Rxin2-	34	NC
15	Rxin2+	35	VGL
16	GND	36	NC
17	RxCLK-	37	NC
18	RxCLK+	38	VGH
19	GND	39	LED+
20	Rxin3-	40	LED+



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

RAYSTAR OPTROINCS

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-20	—	+70	°C
Storage Temperature	TST	-20	—	+70	°C

Electrical Characteristics

1. Typical Operation Conditions

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Power voltage	VDD	2.3	2.5	2.7	V
	AVDD	8.0	8.2	8.4	V
	VGH	21.7	22	22.3	V
	VGL	-7.3	-7	-6.7	V
Input signal voltage	VCOM	2.7	3.0	3.3	V
Supply Voltage For Touch Logic	VDDT	2.8	—	3.3	V

2. Current Consumption

Item	Symbol	Values			Unit
		Min.	Typ.	Max.	
Current for Driver	IGH	300	705	1000	uA
	IGL	300	705	1000	uA
	IVDD	50	95	120	mA
	IAVDD	8	45	70	mA