



RAYSTAR

RAYSTAR Optronics, Inc.
曜凌光電股份有限公司



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TST0004R3H4111XXX10

SPECIFICATION

CUSTOMER:

APPROVED BY	
PCB VERSION	
DATE	

FOR CUSTOMER USE ONLY

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY

Release DATE:

Revision History

VERSION	DATE	REVISED PAGE NO.	Note
0	2021/04/19		First issue

Contents

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2.Interface Pin Function

3.Contour Drawing

4.Other

1.General Specification

1.1. Feature:

NO.	Item	Specifications
1	Type	Projected Capacitive
2	Input Mode	Finger
3	Connector	COF-IIC

1.2. General Specification:

NO.	Item	Specifications	Unit
1	Touch Panel Size	4.3(Diagonal)	inch
2	Structure	CTP	
3	View Area	96.24(H)x54.66(V)	mm
4	Outline Dimension	104.80(H)x66.50(V)x1.68(D)	mm

2.Interface Pin Function

Pin No.	Symbol	I/O	Description
1	VSS	---	System ground
2	VDDT	---	Power supply
3	SCL	I/O	I2C clock signal
4	NC	---	NC
5	SDA	I/O	I2C data signal
6	NC	---	NC
7	RST	I	External reset signal, active low
8	NC	---	NC
9	INT	O	Interrupt signal, active low, asserted to request Host start a new transaction
10	VSS	---	System ground

IC Specification

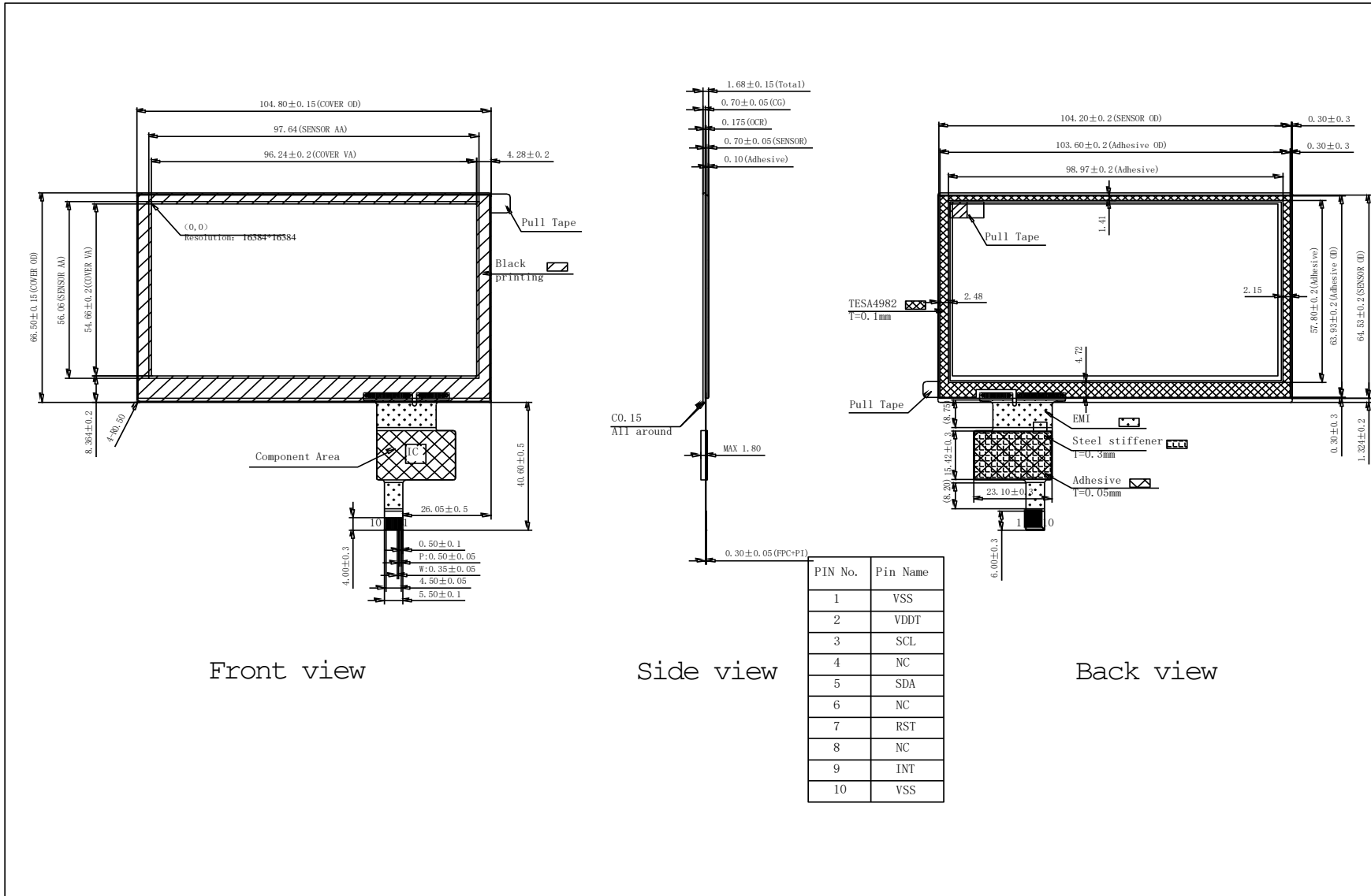
NO.	Item	Specifications
1	Driver IC	ILI2130
2	Detect Points	5
3	Interface	I2C
4	Power Supply	3.3V

FW : FN043IGRGXX011C_ILI2130_V01_20210401.hex

Test config:FN043IGRGXX011C_ILI2130_test_MP.ini

Version: 0x07.0x00.0x00.0x00.0x01.0x0C.0x11.0x43

3. Contour Drawing



4. Other

4.1 Environmental Characteristic

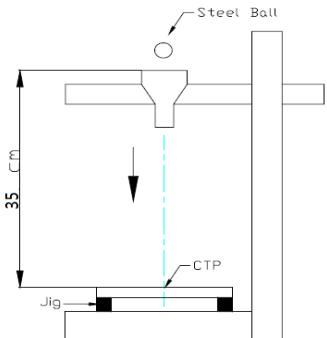
NO.	Item	Specifications
		Temperature
1	Operation	-30~85°C
2	Storage	-40~85°C

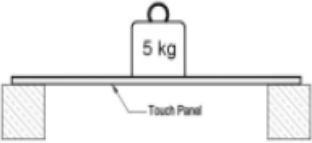
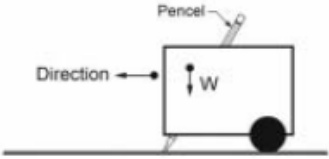
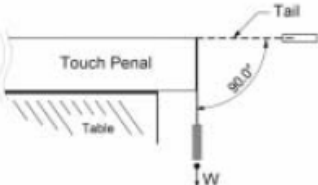
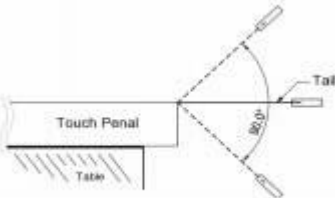
Note: Testing environment is under normal atmospheric pressure. When the ambient temperature is above 65°C, the humidity is allowed to be below 50%RH

4.2. Optical characteristics:

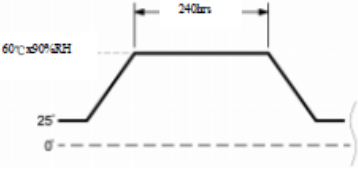
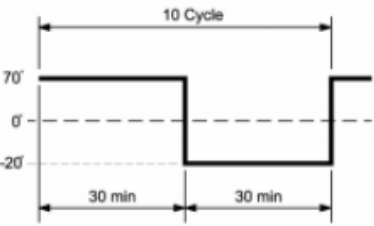
Items	Value
Transparency	(Min)85%

4.3 Mechanical Characteristic

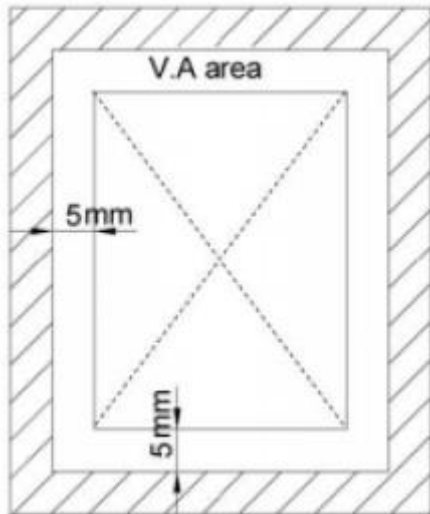
NO.	Item	Condition	Specifications
1	Operating Force	Finger \leq 10g	<p>Satisfy-</p> <p>1. Optical Characteristics</p> <p>2. Electrical Characteristics</p> <p>Appearance-</p> <p>1. Ignore test area</p> <p>2. No mechanical damage</p>
2	Impact	<p>30.0ΦDIA. Steel Ball/200g/Height=17.5cm/1 time, Impact at center area</p> 	

NO.	Item	Condition	Specifications	
3	Static Load	5000g within 10cm Φ area for 30sec 	<p style="text-align: center;">Satisfy-</p> <ol style="list-style-type: none"> 1. Optical Characteristics 2. Electrical Characteristics <p style="text-align: center;">Appearance-</p> <ol style="list-style-type: none"> 1. Ignore test area 2. No mechanical damage 	
4	Hardness	7H pencil, pressure 500g/45° 		
5	Tail Peeling	500g/cm by vertical 90° for 30sec 		
6	Tail Bending	90° 10times left & right 		

4.4 Reliability Test

NO.	Item	Condition	Specifications
1	Constant Temperature/Humidity	<p>60°C X 90%RH, 240hrs and normalized for 24hrs</p> 	<p>Satisfy- 1、Electrical Characteristics</p>
2	Heat Cycle	85°C/240hrs and normalized for 24hrs	
3	Cold Cycle	-30°C/240hrs and normalized for 24hrs	
4	Thermal Cycle	<p>-30°C ~ 85°C [30min/cycle]*10cycles and normalized for 24hrs</p> 	

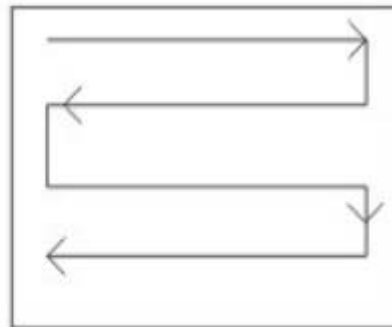
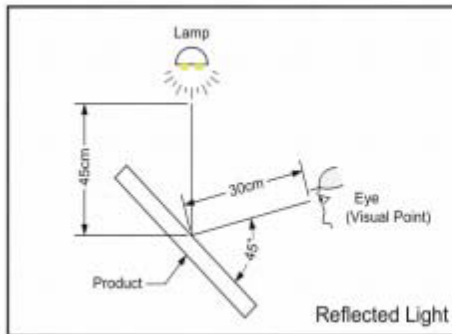
4.5 Function test

<p>Function Test</p>	<p>Test Method: Use Φ8 copper stick to draw the square diagonal line.</p> <p>Test Area: 5mm inward view area</p> <p>Disapproval Criteria: It is NG when we see the off-liner or jumping out spec shift.</p>	
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4.6 Appearance Inspection

The inspection is to be performed with 20W(800-1000 LUX)fluorescent lamp lighting from the back or side.The panel is to be placed 35cm away from eyes.

Remark: The dirty of Cover Lens surface can be clean that can be acceptable.



4.7 Appearance Specification

NO.	Item	Specifications	Judgment
1	Dot Contamination	1)D ≤0.1mm 2)0.10mm<D≤0.20mm 3)0.2mm<D≤0.25mm 4)D>0.25mm	1)Ignore 2)OK with 3 3)OK with 1 4)NG
2	Linear Contamination	1)W≤0.03mm L≤3mm 2)W≤0.05mm L≤2mm 3)W>0.05mm or L≥3mm	1)OK with 2 2)OK with 2 3)NG
3	Cracks and Chips(Surface)	X<0.2mm , Y<0.2mm , Z<½T	Ignore
<p><Endorse></p> <p>1.D=Diameter / W=Width / L=Length 2.Tail: Slight bend mark is allowed on the tail; crack or tear is not allowed. 3.Particle Spots: Flaws found coating if transparent, please follow Particle Spots specification. 4.Can wipe dirty oversight</p>			