WINSTAR Display

OLED SPECIFICATION

Model No:

TSL012864AF191XXXX00

first FC components

Represented by:

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SPECIFICATION Version: 0

CUSTOMER :	
MODULE NO. :	**TSL012864AF191XXXX00**

APPROVED BY: **(FOR CUSTOMER USE ONLY)**	

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
first FC components			
RELEASE DATE:			

■APPROVAL FOR SPECIFICATIONS ONLY

□APPROVAL FOR SPECIFICATIONS AND SAMPLE

MODEL NO：

RECORDS OF REVISION			DOC. FIRST ISSUE
VERSION	DATE	REVISED PAGE NO.	SUMMARY
0	2022/09/27		First release

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1.General Specification

1.1. Type: capacitive touch panel

1.2. Input mode: finger

1.3. Structure and material:

Structure	Material	Thickness	Remark
Cover lens	Glass	1.1mm	強化玻璃
Upper circuits	ITO Film	0.125mm	-
Back tape	Adhesive	0.17mm	3M 9495LE

1.4. Dimension:

Item	Description	Unit
Outline dimension	43.04±0.1 × 28.22±0.1	mm
View Area	36.05±0.2 × 18.51±0.2	mm
Active area	36.05±0.2 × 18.51±0.2	mm
Total thickness	1.52±0.15（含背膠）	mm
Length of FPC	18.64±0.5	mm
Thickness of FPC terminal	0.3±0.03	mm

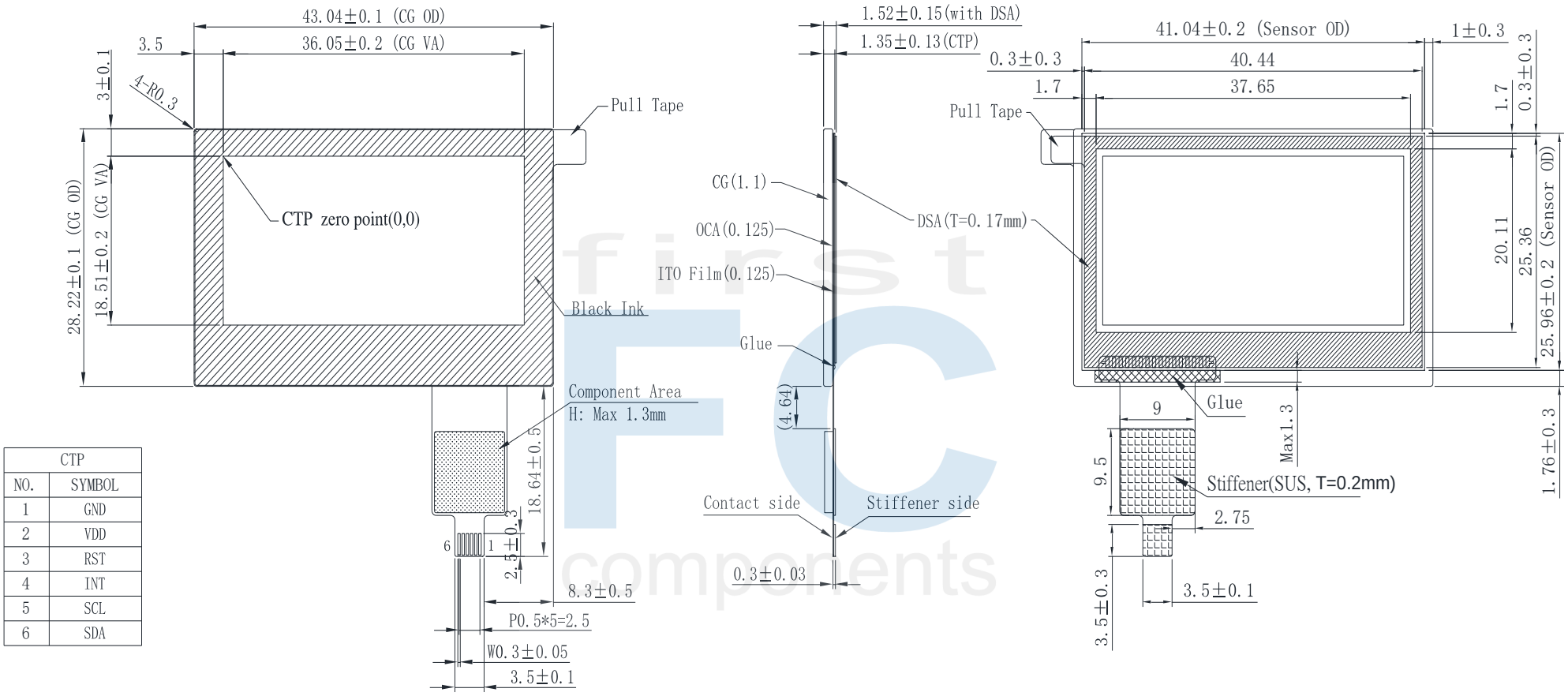
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2.Electrical Characteristics

Item	Specification
IC model	FT6336U
Interface	I2C
Surface hardness	≥6H
Supply voltage	DC 2.8V~3.3V
Support touch mode	1 points

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3.Contour Drawing



CTP	
NO.	SYMBOL
1	GND
2	VDD
3	RST
4	INT
5	SCL
6	SDA

1	TP IC	FT6336U
2	Light Transparency	83%Min
3	Power supply	3V
4	Interface	I2C
5	Operating Temperature	-10℃~60℃
6	Storage Temperature	-20℃~70℃

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

4. Interface Pin Function

Pin No.	Symbol	Description
1	GND	Ground.
2	VDD	Power Supply Voltage of CTP
3	RST	External Reset, Low is active
4	INT	External interrupt to the host
5	SCL	I2C clock input
6	SDA	I2C data input and output

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5.Other

5.1. Environmental characteristics

Item	Specification
Operating Temp.	-10℃～60℃
Storage Temp.	-20℃～70℃

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

5.2. Optical characteristics

Item	Specification	Remark
Light transmission	≧83%	-

5.3. Reliability and Durability test

Item	Condition	Criteria
High temperature storage	70℃ for 240H	After the above test, the touch panel is to be exposed at room condition for 24H or more. Must be within the spec.
Low temperature storage	-20℃ for 240H	
High temperature &high humidity storage	60℃,90%RH for 240H	
Thermal shock	-10℃（0.5H）～60℃（0.5H），10 cycles	

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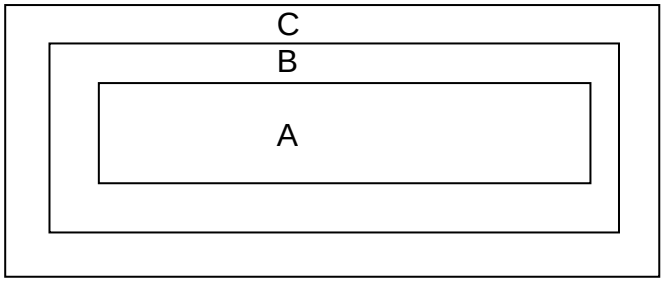
6. Inspection specification

Inspection Standard:

MIL-STD-105E table normal inspection single sample level II.

Definition

1 Major defect : The defect that greatly affect the usability of product.
2 Minor defect : The other defects, such as cosmetic defects, etc.
Definition of inspection zone:

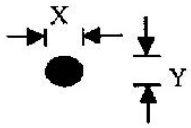


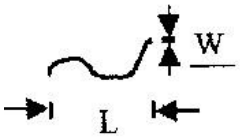
Zone A: Active Area
Zone B: Viewing Area except Zone A
Zone C: Outside Viewing Area
Note: As a general rule, visual defects in Zone C are permissible, when it is no trouble of quality and assembly to customer`s product.

Inspection Methods

1 The general inspection : Under fluorescent light illumination: 750~1500 Lux, about 30cm viewing distance, within 45º viewing angle, under 25±5°C.
2 The luminance and color coordinate inspection : By SR-3 or BM-7 or the equal equipments, in the dark room, under 25±5°C.

NO	Item	Criterion	AQL
01	Electrical Testing	No function	0.65
02	Black or white spots on OLED (display only)	2.1 White and black spots on display ≦0.25mm, no more than four white or black spots present. 2.2 Densely spaced: No more than two spots or lines within 3mm.	2.5

<table>
<tr><th>NO</th><th>Item</th><th>Criterion</th><th>AQL</th></tr>
<tr><td rowspan="2">03</td><td>OLED black spots, white spots, contamination (non-display)</td><td>3.1 Round type :
As following drawing
Φ=(x + y) / 2


<table><tr><th>SIZE</th><th>Acceptable QTY</th><th>Zone</th></tr><tr><td>Φ≦0.10</td><td>ignore</td><td>A+ B</td></tr><tr><td>0.10＜Φ≦0.20</td><td>3</td><td>A+ B</td></tr><tr><td>0.20＜Φ≦0.25</td><td>1</td><td>A+ B</td></tr><tr><td>0.25＜Φ</td><td>0</td><td>A+ B</td></tr></table></td><td>2.5</td></tr>
<tr><td>3.2 Line type : (As following drawing)


<table><tr><th>Length</th><th>Width</th><th>Acceptable Q TY</th><th>Zone</th></tr><tr><td>---</td><td>W≦0.02</td><td>ignore</td><td>A+B</td></tr><tr><td>L≦3.0</td><td>0.02＜W≦0.03</td><td rowspan="2">4</td><td>A+B</td></tr><tr><td>L≦2.5</td><td>0.03＜W≦0.05</td><td>A+B</td></tr><tr><td>---</td><td>0.05＜W</td><td>As round type</td><td></td></tr></table></td><td>2.5</td></tr>
<tr><td>04</td><td>bubbles</td><td>If bubbles are visible, judge using black spot specifications, not easy to find, must check in specify direction.
<table><tr><th>Size Φ</th><th>Acceptable Q TY</th><th>Zone</th></tr><tr><td>Φ≦0.20</td><td>ignore</td><td>A+B</td></tr><tr><td>0.20＜Φ≦0.50</td><td>2</td><td>A+B</td></tr><tr><td>0.50＜Φ≦1.00</td><td>0</td><td>A+B</td></tr><tr><td>Total Q TY</td><td>2</td><td></td></tr></table></td><td>2.5</td></tr>
<tr><td>05</td><td>Scratches</td><td>Follow NO.3 OLED black spots, white spots, contamination.</td><td></td></tr>
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