





**Contents**

**1. Handling Precautions..... 4**

**2. General Specification..... 5**

    2.1 Features..... 5

    2.2 Touch Dimensions..... 5

    2.3 Touch Characteristics..... 6

    2.4 Optical Characteristics ..... 6

**3. Electrical Specification ..... 7**

    3.1 Electrical Characteristics..... 7

    3.2 Touch Driver Connector ..... 7

    3.3 Pin Assignment ..... 7

**4. Test Criteria ..... 8**

    4.1 Reliability..... 8

    4.2 Mechanical..... 8

**5. Cosmetic Specification ..... 9**

**6. Touch Drawing ..... 11**

    6.1 Sensor 2D drawing ..... 11



## 1. Handling Precautions

- 1) Since front surface is easily damaged, pay attention not to scratch it.
- 2) Wipe off water drop immediately. Long contact with water may cause discoloration or spots.
- 3) When the sensor surface is soiled, wipe it with absorbent cotton or other soft cloth.
- 4) Since the sensor is made of glass, it may break or crack if dropped or bumped on hard surface.
- 5) Since conductive materials are used in this sensor, take care of static electricity and insure human earth when handling.
- 6) Please touch with the finger or electric pen during the capacitive touch screen operation.
- 7) The purpose of product protective film is to prevent the damage for product during the cargo transportation. Therefore the dirty and scratch on the outer surface of protective film is acceptable. We also strongly recommend that product protective film can not be used in customer process. We recommend removing this product protective film during cosmetic inspection process.
- 8) Strongly recommend customer to remove the protective film, cleaning and visual inspection before assembly, and then do the following assembly. Don't use the peeled off protective film again, because the peeled off protective film already has been contaminated by operator glove stain or user fingerprint stain.
- 9) Before customer uses our touch panel product for cosmetic inspection , lamination or assembly, strongly recommend customer or user to remove the protective film completely, then use the clean room level specific dry clean cloth (or clean wiper or cotton swab) and cleaning solvent (IPA or Ethanol) to clean the removable surface dirty (not Glue Residue). Of course, user must wear the clean glove and necessary clean dress. The product surface clean handling procedure is also very critical that AUO could provide AUO effective cleaning process experience sharing to customer. After effective surface cleaning, customer can start the cosmetic inspection and suitable dry clean cloth re-cleaning for some dust or water stain. Customer must confirm that there is no any new coming particle, dirty, dust, water stain or user glove fingerprint stain from customer process on the product surface after cleaning. Finally, customer can start to laminate or assemble product.

## 2. General Specification

I101FGT14.0 is a Projected Capacitive Touch Panel with USB interface to support and compatible with s multi-touch on Android system.

### 2.1 Features

Item		Specifications
Type		Projected Capacitive Touch Panel
Structure		Glass
Panel Size		10.1 inch
Total Thickness		1.25 ± 0.15 mm (sensor_1.1mm & ASF_0.15mm)
Input Mode		Multi Finger
Temperature Range	Operating	-20°C ~ + 70 °C
	Storage	-40°C ~ + 80 °C

### 2.2 Touch Dimensions

Item	Specifications
O.D.	249.56 mm * 168.2 mm
Thickness	1.1 mm
TP Active Area	226.34 mm * 128.1 mm
Total Weight	170g (max.)

## 2.3 Touch Characteristics

Item	Specifications
Substrate Material	SDL CS Glass
Chemical Strength	$\geq 400$ mpa
Surface Hardness	$\geq 7H$
Interface	USB
Touch Resolution	Same with display resolution
Single / Multi-touch Accuracy	1 mm
Linearity	+/- 1 mm
The smallest distance between 2 points	5 mm
Channel (X * Y)	52 * 32
Report Rate (points /sec)	>100Hz
Power Consumption	TBD mW (typ.)
Operating System	Android 4.2

## 2.4 Optical Characteristics

Item	Specifications
Transmittance (%)	88%
Haze	3% (max.)
Transparency Chromaticity (a*)	TBD
Transparency Chromaticity (b*)	TBD
AS coating	No AS coating

Note: Optical specification is measured:

- a. in the dark room, and ambient temperature = 25°C

## 3. Electrical Specification

### 3.1 Electrical Characteristics

Item		Min.	Typ.	Max.	Unit	Remark
Power Supply		3	3.3	3.6	Voltage	
Power Supply Current	Normal Operation Mode				mA	
	Idle Mode				mA	
	Sleep Mode				mA	

### 3.2 Touch Driver Connector

Connector Name / Designation	TP Connector
Manufacturer	eGalax_eMPIA Technology Inc.
Type / Part Number	EXC- 3062

### 3.3 Pin Assignment

CONNECTOR PINOUT	
PIN NO.	DESIGNATION
1	GND_EARTH
2	VDD
3	GND
4	D+
5	D-

## 4. Test Criteria

### 4.1 Reliability

No	Item	Condition	
1	High temp High humidity Storage	60°C , 90% RH , 240hrs.	Note1
2	Low Temperature Storage	-30°C , 240hrs.	
3	High temperature Storage	80°C , 240hrs.	
4	Thermal shock	-30 °C/30 min, 80 °C /30 min, 100cycles	
5	ESD	Contact Discharge: ± 8KV, 150pF(330Ω ) 1sec, 8 points, 25 times/ point Air Discharge: ± 15KV, 150pF(330Ω ) 1sec, 8 points, 25 times/ point	Note 2

Note1.

- No premanent cosmetic damage after test
- No functional failure after test
- No extremely loss of anti-blocking particals
- Need OM or 2.5D inspection after test

Note2.

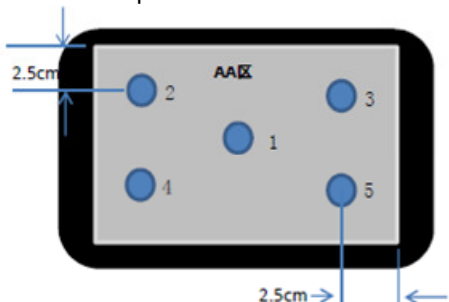
According to EN61000-4-2, ESD class B: Some performance degradation allowed. No data lost, Self-recoverable.  
No hardware failures.

### 4.2 Mechanical

Items		Condition	
Touch panel	Ball Drop Test	130g, 30cm	Note1
	Hardness	Loading: 500g, Position: VA area of test sample	
FPC	Direct Pulling Test	500g, 90°, 25mm/min	Note2

Note1.

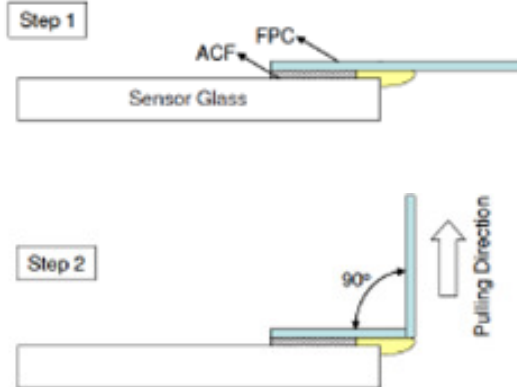
The ball drop test illustration is showed as follow:





Note2.

The FPC test illustration is showed as follow:

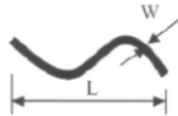


## 5. Cosmetic Specification

### Defect Item and definition

Defects count method · number and distance between defects

#### A. Linear defects scale by the length / width



Size	Pass Criteria
$L \leq 5\text{mm}$ or $W \leq 0.1\text{mm}$	Ignore
$5\text{mm} < L \leq 10\text{mm}$ or $0.1\text{mm} < W \leq 0.2\text{mm}$	$N \leq 5$
$L > 10\text{mm}$ or $W > 0.2\text{mm}$	Not Allowed

\* Linear defects include Scratch / Line shape defect ( Stain, Dirt, Dent, Foreign material)

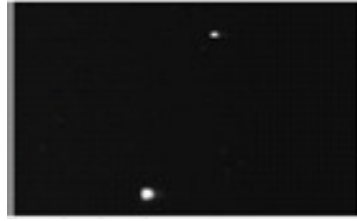
#### B. Dot defects is counted in diameter "D" as below.

Active Area only, and scaled by



Size	Acceptable Q'TY
$D \leq 0.4\text{mm}$	Ignore
$0.4\text{mm} < D \leq 0.8\text{mm}$	$N \leq 5$
$D > 0.8\text{mm}$	Not Allowed

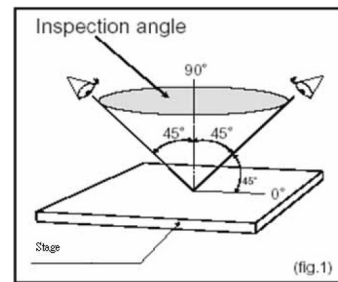
### C. BM pin hole



Size	Acceptable Q'TY
$D \leq 0.1\text{mm}$	Ignore
$0.1\text{mm} < D \leq 0.2\text{ mm}$	$N \leq 2$ (distance $\geq 10\text{mm}$ )
$D > 0.2\text{mm}$	Not Allowed

### Inspection Enviroment

- A. The luminance in appearance detecting should be 3000LUX, and the luminance in electrical detecting should be between 1500LUX.
- B. The detecting distance should be 30cm +/-5cm.
- C. No other objects and raised appearance on the surface.
- D. Be inspected under general daylight lamp.
- E. Inspection view-angle:



### Glass crack

#### Glass crack



-No glass cracks of any kind allowed (including creeping cracks)

## 6. Touch Drawing

### 6.1 Sensor 2D drawing

