
Customer 客户:

Customer Material No:

Product No :

Product Name : D5' &S' &S58) 7HD(PA320320A with 2.5D CTP)

Project Capacitive Touch Panel Module

Customer	Signature

Approved by	Reviewed by

Revision History

Date	Rev	Page	Item	Old	New	Reason
						Preliminary specification first
						issued

3. MECHANICAL DATA SPECIFICATIONS

NO.	Item	Specification	Remark
1	Lens color	Black	Refer to limited sample
2	Lens figure	Asahi Glass	2.5D
3	Lens coating	NA	
4	Outline Dimension	44.07mm×35.92mm	±0.05mm
5	Cover lens View Area	29.88mm×29.88mm	±0.10mm
6	LCD Active Area	29.28mm×29.28mm	
7	Total thickness (LCM+TP)	2.375mm	±0.10mm
8	Lens Thickness (including Ink printing)	1.3mm	±0.1mm
9	Lens strength	Glass rigidity>6H	
10	Proximity sensor hole	NA	
11	Logo	NA	
12	Touch key	NA	
13	Anti-Finger	NA	
14	AR	NA	

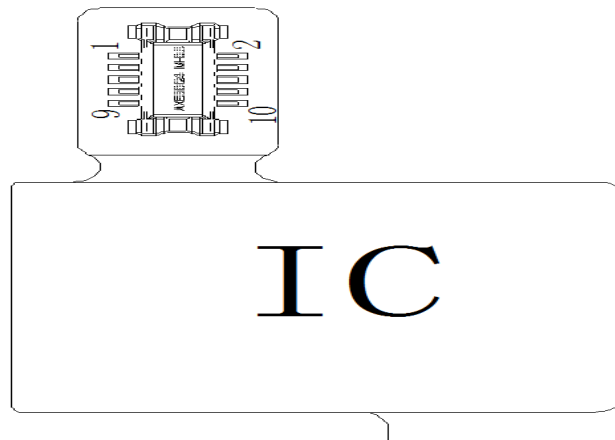
4.TP Sensor/FPC Specifications

NO.	Item	Specification	Remark
1	Structure	G+F	
2	IC solution	ITE IT7258	
3	Pitch(A)	4mm <A<7.5mm	Be suitable for TX and RX
5	Rx channel resistance	<150 ohm	
6	Tx channel resistance	<150 ohm	
8	FPC Spec	Ref to MD drawing	
9	Trace type /Process	Sliver trace	
10	Sensor outline	44.07mm×35.92mm	±0.05mm
11	Screen Sensor AA	29.88mm×29.88mm	±0.1mm
12	Bridge type	NA	Dito -type
13	Independence Icon (Yes/No/NA)	NA	
14	Icon Sensor AA	NA	
15	Lens&SensorAssembly tolerance	NA	
16	Total Thickness	1.3mm	±0.1mm
17	Sensor thickness	NA	
	Average Sensor sheet resistance	150ohm±25ohm/□	For reference
18		Uniformity>85%(9 points)	For reference
19	Other details	Ref to ID/MD drawing	

5.Basic specifications

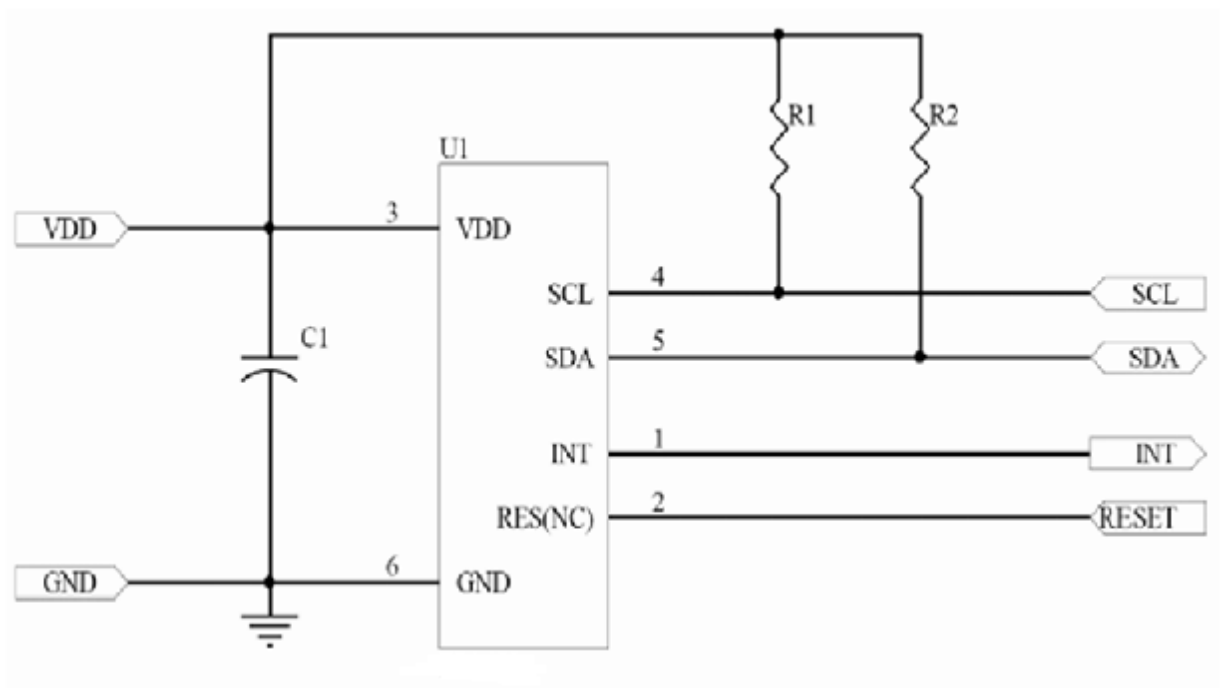
No.	Item	Specification	Description	Remark
1	Communication Protocol to Host	I2C	Standard-Mode : 100KHZ Fast-Mode: 400KHZ	
2	I2C Address	TBD		
3	Touch Origination Dot	TBD		
4	Finger	One layer 2 point		
6	Touch Resolution	320*320		
7	Report Rate	80HZ	LCD Frame 60Hz	
9	Point Sensitivity	$\leq \Phi 7\text{mm}$	Report Percent=100 % (Both center area and edge area)	

6.PIN ASSIGNMENTS



PIN NAME	PIN NO	DESCRIPTION
GND	1	Ground. Connect to circuit ground.
SCL	2	I ² C Clock Signal
SDA	3	I ² C Data Signal
GND	4	Ground. Connect to circuit ground.
INT	5	This is interrupt pin for interrupt request.
DVDD	6	Power Source
AVDD	7	Power Source
TE(NC)	8	NC
RST	9	Active high external reset with internal pull down.
GND	10	Ground. Connect to circuit ground.

7. APPLICATION CIRCUIT



Recommend components:

C1 : 1uF/10V(0603)

R1 , R2 : 4.7K ohm(0603)

Note : For I²C R1, R2 value should be fine tune by customer host.

8. RELIABILITY TEST CONDITIONS

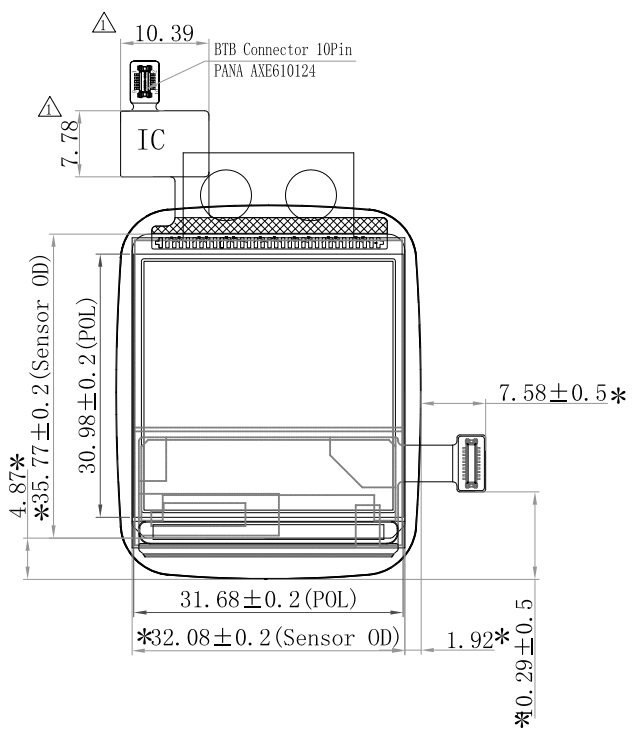
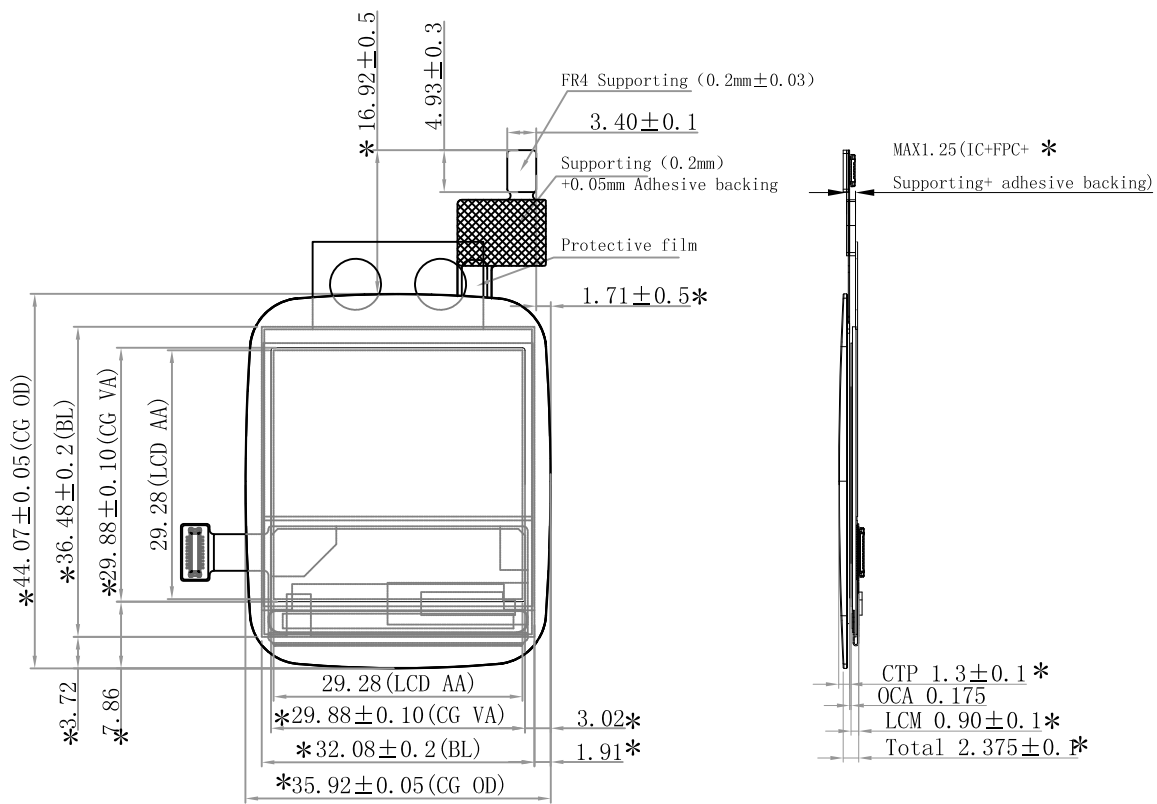
NO.	Items	Specification	Quantity
1	High temp. / High humidity (Non-operation)	60°C, 90%RH, 72hrs	5
2	High temp (Non-operation)	70°C, 72hrs	5
3	Low temp (Non-operation)	-20°C, 72hrs	5
4	Thermal shock (Non-operation)	-30°C~80°C (-30°C /30min; transit 30min; 85°C /30min; transit 30min) 1cycle :60min, 50 cycles	5
5	Ball Drop (Laminated Assembly)	Ball diameter =20mm(64g) Height : 45cm, time:1	5

Test and measurement conditions

All measurement shall not be started until the specimens attain to temperature stability.

Evaluation criteria

1. The function test is OK.
2. No observable defects.
3. No panel distortions or loss visual clarity.
4. No delaminations between cover lens and touch panel.
5. Average transmittance, color (La*b*) and haze : with $\pm 10\%$ of initial value.



TOP	
CTP (1.3mm)	
OCA (175um)	
LCM (0.9mm)	

MATERIAL CHARACTERISTICS

Property	Requirement
IC	ITE IT7258
CTP thickness	1.3mm
OCA thickness	0.175mm
Surface Hardness	6H
Light transmission	86%MIN
Operating temperature	-40~80°
Storage temperature	-40~80°
Operating Humidity	45~85 RH
Storage Humidity	5~95 RH

NO.	Pin Name
1	GND
2	SCL
3	SDA
4	GND
5	INT
6	DVDD
7	AVDD
8	TE(NC)
9	/RST
10	GND

PI TEK Technology Inc.				Drawing Number		Rev.	
						A	
Projection Type		Tolerance		MODEL			
		Dimension	±0.3	PTH003#2.5D			
		Unit	mm	TITLE			
	Drawn	Checked	Approved	PM	OLED Module		
By	Eco-2048	Eco-1500	Eco-0150	Eco-0097	Scale	Sheet	Size
Note	2048.00	1500.00	0150.00	0097.00	3/2	1 of 1	A4