杭州凡诺电子有限公司

FANNAL ELECTRONICS CO., LTD

Specifications for Module

Model NO: FN070A131-V1.0

☐ Approved For Specifications Only

■ Approved For Specifications And Sample

FANNAL			CUSTOMER
PREPARED	CHECKED	APPROVED	APPROVED
Yan Zhang 2019.11.11	Adam 2019.11.11	Dolphe 2019.11.11	

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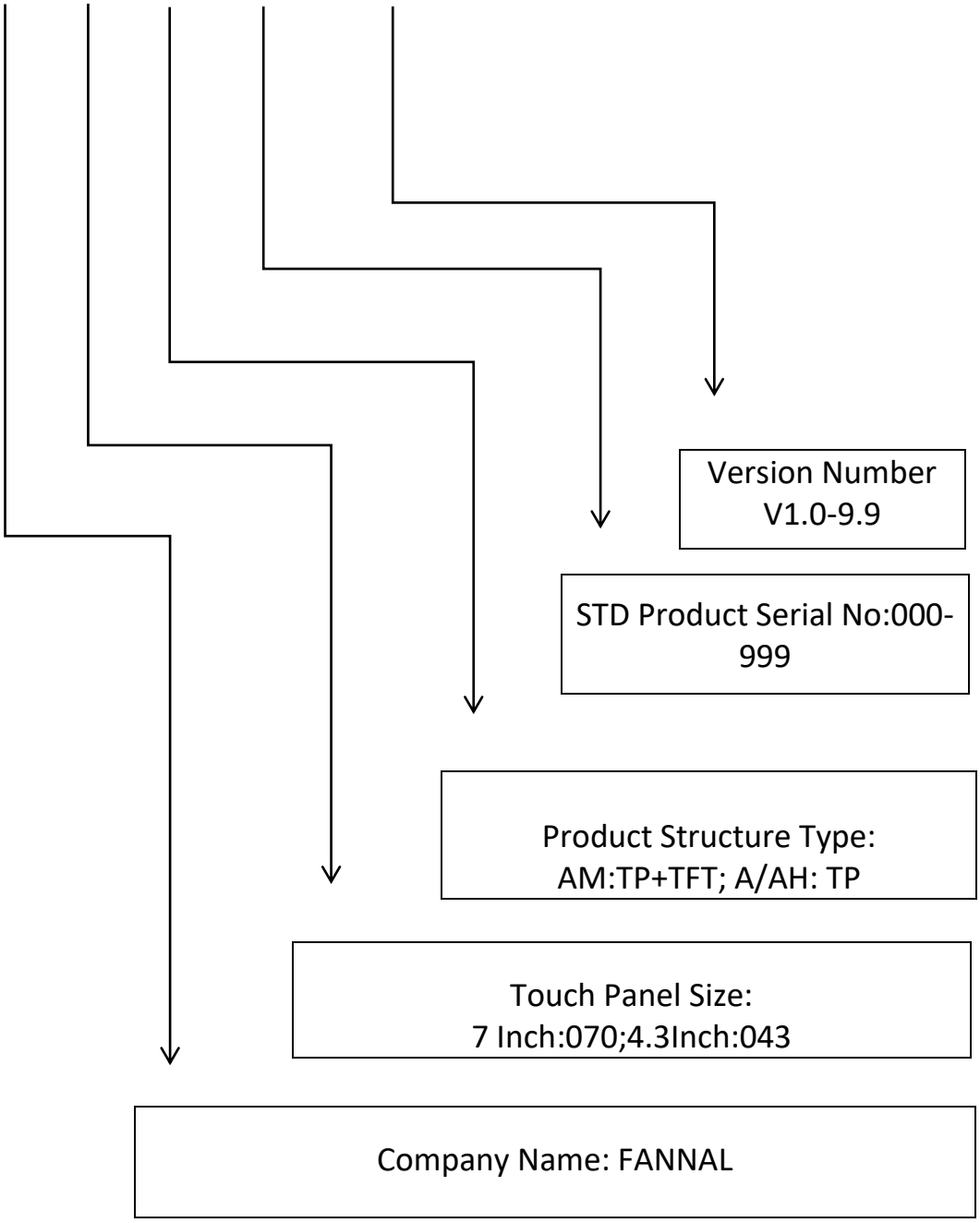
1. Record of Revision

NO.	Content	Page	Date
1	Preliminary Specification was first issued	2	2019/11/11

2. Table of Content

3. Module Numbering System

FN 070 A 131 - V1.0



4. Application

This improved projected capacitive touch panel module is applied to industrial applications which required touch input.

Industrial control, medical devices and automation industries (transportation, military, smart home, and others)

5. General Specifications

NO.	Item		Specifications	Unit
1	Touch Panel Size		7.0(Diagonal)	inch
2	Structure		G+G	
3	View Area		154.88(H)x86.72(V)	mm
4	Outline Dimension		165(H)x100(V)x1.43(D)	mm
5	Transparency		82%Min	
6	Surface Hardness		6H	
7	Driver IC		CYTMA568-56LQI-44BB	
8	Detect Points		5	
9	Interface		I2C	
10	Power supply		3.3	V
11	Operating Temperature		-20~70	℃
12	Storage Temperature		-30~80	℃
13	ESD	Air	±8	KV
		Contact	±4	KV
14	RoHS Compliance		OK	

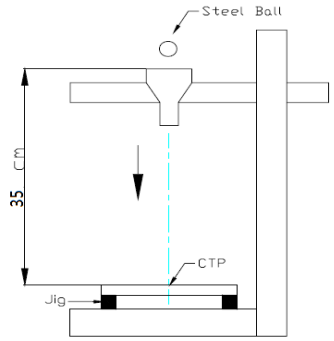
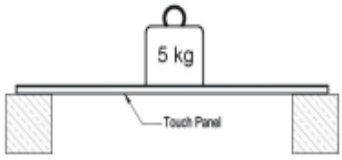
6. Pin Assignment

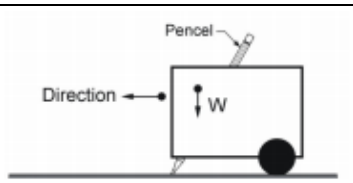
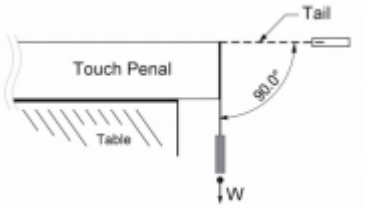
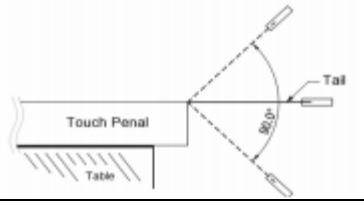
Pin No.	Symbol	I/O	Description	Note
1	VCC (3.3V)	--	Power supply	
2	RST (3.3V)	I	External reset signal, active low	
3	INT (3.3V)	O	Interrupt signal, active low, asserted to request Host start a new transcation	
4	SCL (3.3V)	I/O	I^2C clock signal	
5	SDA (3.3V)	I/O	I^2C data signal	
6	GND	--	System ground	

CTP Test Program

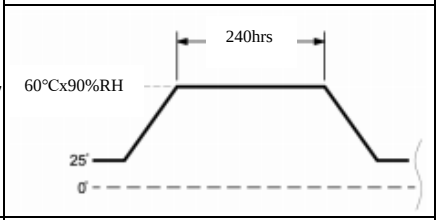
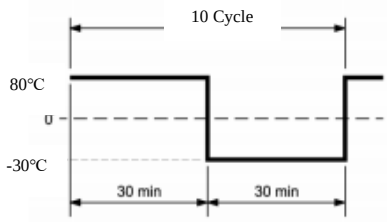
FW Name:	FN070A01-2_V1.0_V08_Marissa_3mmCover_20181219.hex
FW Version:	0X01
Test Config:	FN070A131_TP_MP.cfg

7. Mechanical Characteristic

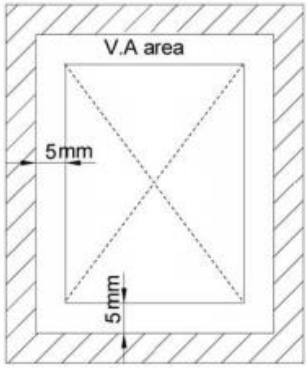
NO.	Item	Condition	Specifications
1	Operating Force	Finger≦10g	Satisfy- 1.Optical Characteristics 2.Electrical Characteristics Appearance- 1.Ignore test area 2.No mechanical damage
2	Impact	30.0Φ DIA.Steel Ball/132g/Height=30cm/1 time, Impact at center area 	
3	Static Load	5000g within 10cmΦ area for 30sec 	Satisfy- 1. Optical Characteristics 2. Electrical Characteristics Appearance- 1. Ignore test area 2. No mechanical damage

NO.	Item	Condition	Specifications
4	Hardness	6H pencil,pressure 500g/45°	Satisfy- 1. Optical Characteristics 2. Electrical Characteristics Appearance- 1. Ignore test area 2. No mechanical damage
			
5	Tail Peeling	500g/cm by vertical 90° for 30sec	
			
6	Tail Bending	90° 10times left & right	
			

8. Reliability Test

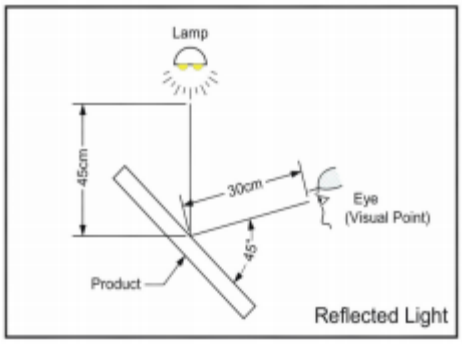
NO.	Item	Condition	Specifications
1	Constant Temperature/Humidity	60℃ X 90%RH,240hrs and normalized for 24hrs	Satisfy- 1、Electrical Characteristics
			
2	Heat Cycle	80℃/240hrs and normalized for 24hrs	
3	Cold Cycle	-30℃/240hrs and normalized for 24hrs	
4	Thermal Cycle	-30℃~80℃ [30min/cycle]*10cycles and normalized for 24hrs	
			

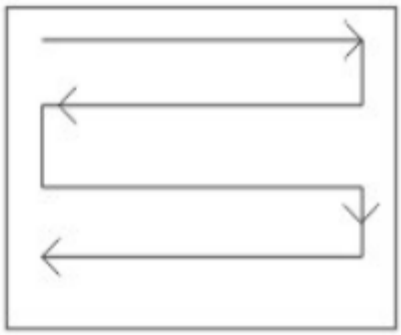
9. Function test

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

10. Appearance Inspection

The inspection is to be performed with 800-1000 LUX fluorescent lamp lighting from the back or side.The panel is to be placed 30cm away from eyes.Viewing Time: 15±3 seconds/per face(Figure 13-1)





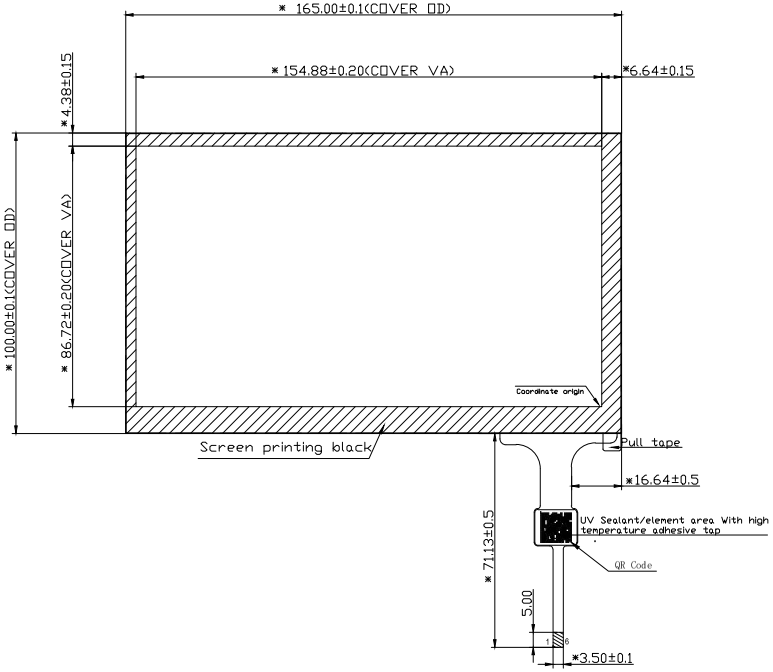
11. Appearance Specification

NO.	Item	Specifications	Judgment
1	Dot Contamination	1)D ≤0.2mm 2)0.2mm＜D≤0.50mm,DS≥10mm 3)D＞0.5mm	1)Ignore 2)OK with 5 3)NG
2	Linear Contamination	1)W≤0.05mm,DS≥10mm 2)0.05mm＜W≤0.1mm,L≤5mm,DS≥10mm 3)W＞0.1mm or L≥5mm	1)Ignore 2)OK with 5 3)NG
3	Cracks and Chips(Surface)	X＜0.2mm , Y＜0.2mm , Z＜½T	Ignore
<Endorse> 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.The dirty of surface can be clean that can be acceptable.			

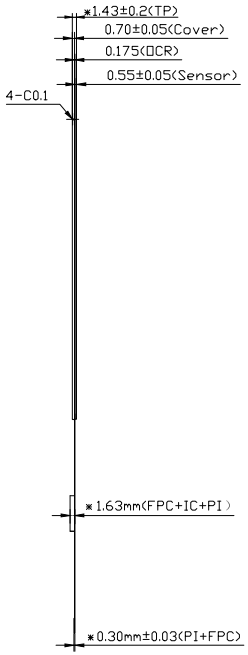
12. Mechanical Drawing

THE DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO FANNAL AND SHALL NOT BE USED IN WHOLE OR IN PART WITHOUT WRITTEN PERMISSION OF FANNAL

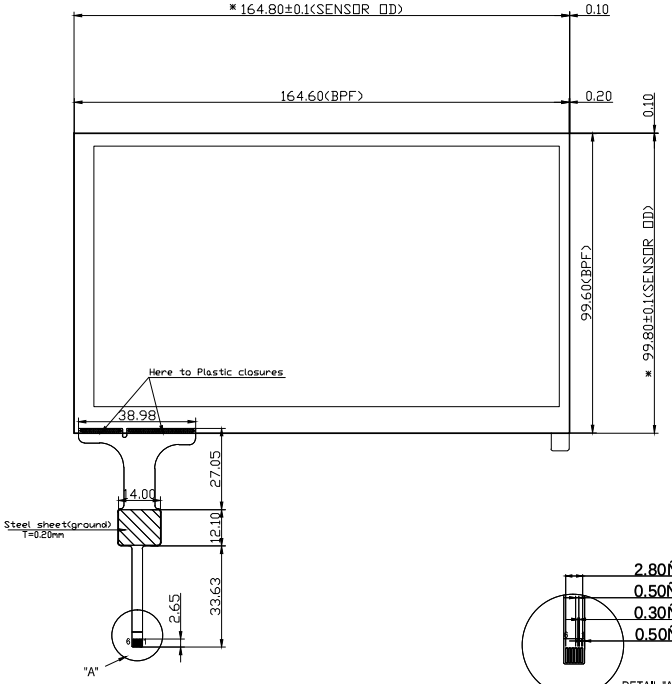
Rev	Revision note	Date
V1.0	First Release	2019.11.08



Front view



Side view



Back view

TECHNOLOGY CHARACTERISTICS CTP	
PROPERTY	Requirement
IC	CYTMA568-56L01-443B
NO OF TOUCH	5
COVER GLASS Thickness	0.70mm
ITO GLASS Thickness	0.55mm
Surface Hardness	>6H
Light Transmission	82% min
Operating Temperature	-20-70C°
Storage Temperature	-30-80C°

TP/FN070A01-V1.0 IIC PIN DEFINITION	
Pin NO.	Definition
1	VCC(3.3V)
2	RST(3.3V)
3	INT(3.3V)
4	SCL(3.3V)
5	SDA(3.3V)
6	GND

NOTES:
*:Important dimensions
TOLERANCE UNLESS: x.x Ñ0.2
OTHERWISE SPECIFIED: x.xx Ñ0.1
DIMENSIONS IN MM; ANGULAR:ÑÍÁ

RoHS

FANNAL ELECTRONICS CO., LTD

MODEL NO: FN070A131-V1.0

THIRD ANGLE PROJECTION

	NAME	SIGN	DATE
DRAWN:	Yan		2019-11-08
CHECKED:	Lee		
APPROVED:	Dolphe		

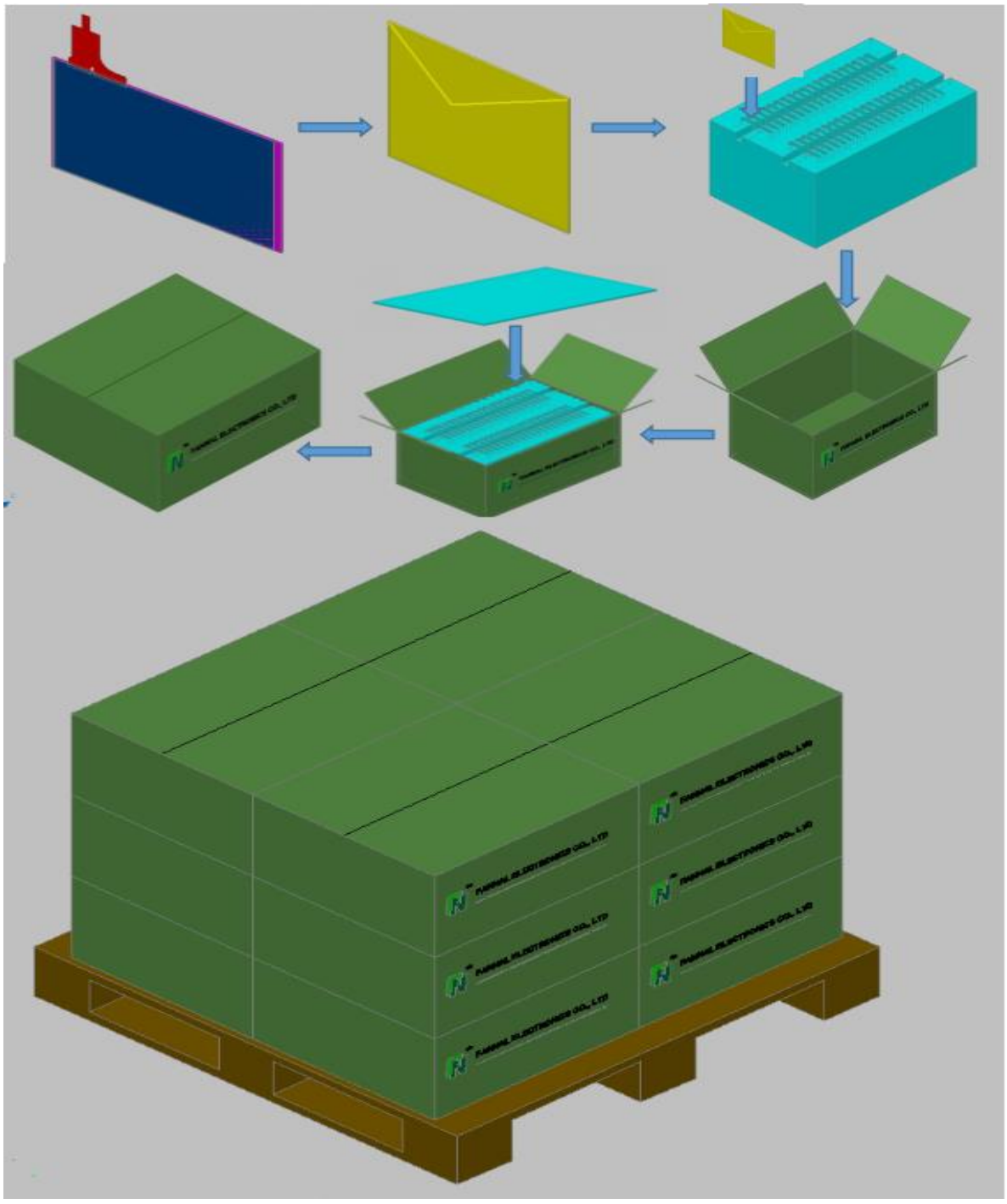
PROJECT NO: TPA5300

CUSTOMER NO:

FILE NO:

SHEET 1 OF 1

13. Packaging(NEUTRAL PACKING)



SIZE(Carton): 53X36X27.5cm