

## CAPACITIVE TOUCH PANEL SPECIFICATION

电容式触摸屏规格书

<b>CUSTOMER NAME</b> 客户名称:
<b>PRODUCT MODEL</b> 产品型号 : CTS0021DAGGFD-70-E

REVISION 变更记录			
Revision NO. 版本号	Date 日期	Revision 变更内容	Reason 变更原因
A	2007-12-02	First release 初版	/
B	2008-04-14	Ver.2 第 2 版	Modify software parameters and naming system 修改软件参数及命名系统
C	2008-05-29	Ver.3 第 3 版	Modify parameters of reliability 修改可靠性参数
D	2008-05-30	Ver4 第 4 版	Modify flow chart of software 修改软件流程图
REMARK/备注			

WRITTEN BY / DATE 审批人/时间	APPROVED BY / DATE 审批人/时间

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## 1. General Specification 产品规格

Item 项目	Specification 规格	Remarks 备注
1-1 Product name 产品名称	Transparent touch panel 透明触摸屏	
1-2 Product No. 产品编号	CTS0021DAGGFD-70-E	
1-3 Drawing No. 图纸编号	CTS0021QR-B-E	
1-4 Code No. 样品编号		

## 2 .Basic features 基本特性

Item 项目	Specification 规格	Remarks 备注
2-1. Dimension 尺寸		
2-1-1 Outline Dimension 外形尺寸	100.14×164.4	Unit 单位: mm
2-1-2 Viewing Area 可视区	93.24×154.2	Unit 单位: mm
2-1-3 Active Area 动作区	92.24×153.2	Unit 单位: mm
2-2. Construction 结构	Materials used 所用材料	
2-2-1 First Layer 第一层	ITO glass ITO 玻璃	Thickness: 0.7mm 厚度: 0.7mm
2-2-2 Second Layer 第二层	ITO glass ITO 玻璃	Thickness: mm 厚度: 0.7mm
2-2-3 Third Layer 第三层	double adhesive 双面粘	Thickness: 0.15mm 厚度: 0.15mm
2-2-3 Forth Layer 第四层	无	Thickness: mm 厚度: mm
2-3 Surface Hardness 表面硬度	7H- pressure 500 gf , 45 deg	
2-4 Scope 应用方式	<p>This specification applies for finger input transparent touch panels. (Those mentioned in the individual specification shall be given priority.)</p> <p>此规格适用在手指输入型透明触摸屏（此处以提到的有特殊要求应优先考虑）</p>	

2-5 Application 应用范围	<p>The product is touch panels used as the input devices for general electric appliances and OA equipment.</p> <p>此产品是透明触摸屏，常作为常用的电子器件和 OA 设备的输入装置</p>	
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### 3. Mechanical characteristics 机械特性

Item 项目	Specification 规格	Remarks 备注
3-1 Operation distance 操作间距	0.2mm or less. 小于 0.2mm.	
3-2 Package drop 包装跌落测试	No damage to the product.( drop from 50 cm height ) 包装从 50 cm 高处跌落无损伤	
3-3 FPC bending test FPC 弯折测试	≥3 times bending (by R1 mm), Electrical performance should be OK。 FPC弯折3次以上，电气性能OK。	

### 4. Electric characteristics 电气参数

Item 项目	Specification 规格					Remarks 备注
4-1 Insulation 绝缘性	20M Ω or over(Dc 25V)					
4-2 Supply voltage for logic 电压	Symbol	min	type	max	unit	
	vdd	3.0v	3.3v	3.8v	v	
4-3 Supply current for logic 电流	Symbol	min	type	max	unit	
	idd		8	12	mA	

### 5. Optics characteristics 光学特性

Item 项目	Specification 规格	Remarks 备注
5-1 Light transmissivity 光透过率	>85%	白光测试

### 6. Reliability 可靠性

Item 项目	Specification 规格	Remarks 备注
6-1 Operating temperature and humidity 操作温度和湿度	-10~60℃, 20~85% RH	Except for dew gathering 无结露
6-2 storage temperature and humidity 存储温度和湿度	-20~70℃, 20~85% RH	Except for dew gathering 无结露
6-3 Humidity resistance 高温高湿	<p>The requirement in 6 shall be satisfied after exposing at 60℃, 90% RH for 240 hours and at normal temperature and humidity for 24 hours.</p> <p>在 60℃, 90% RH 条件下存放 240 小时，取出在常温常湿下</p>	Except for dew gathering 无结露

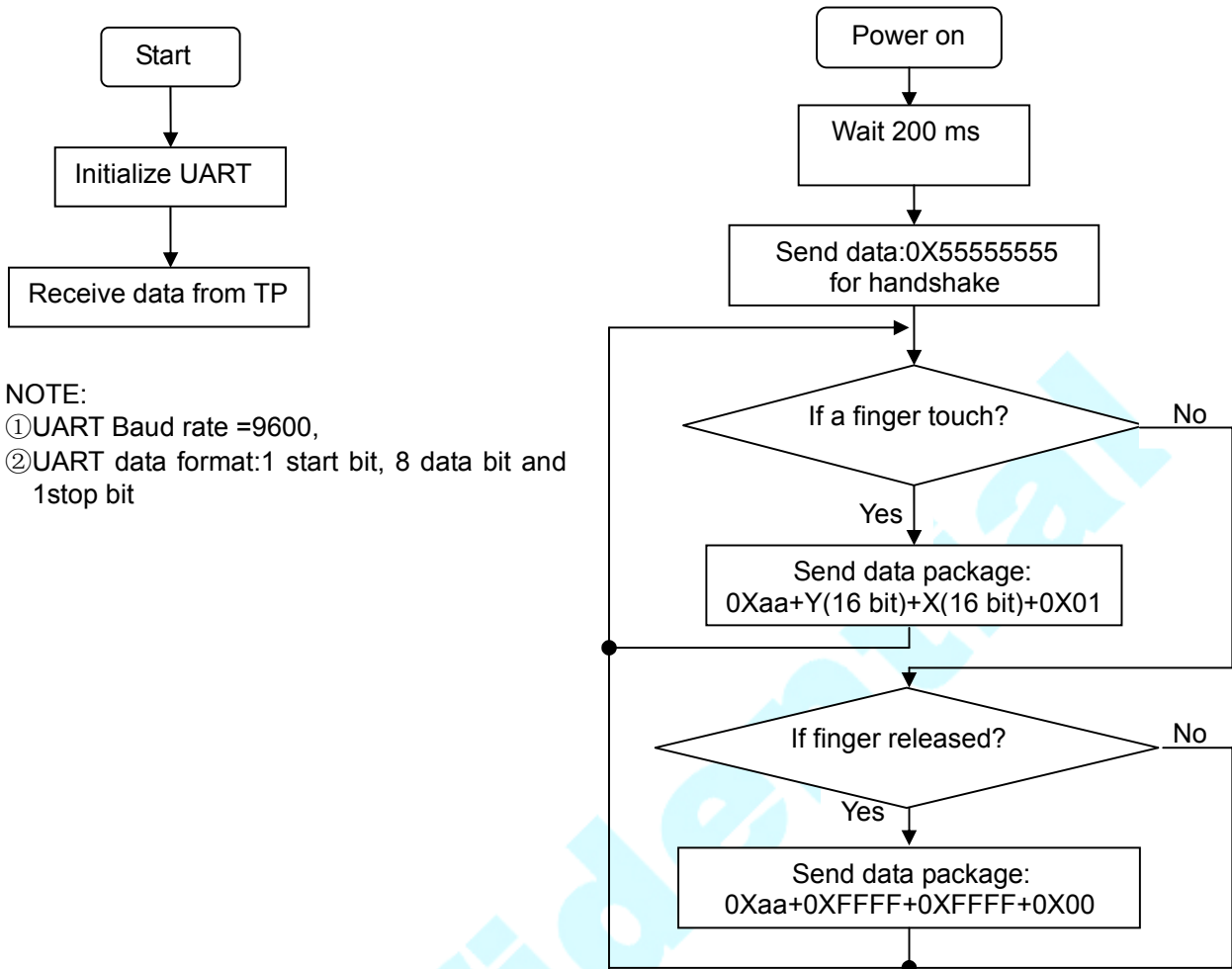
	再存放 24 小时后，满足第 6 点所要求的各项电气参数。	
6-4 Heat resistance 高温存储	The requirements in 6 shall be satisfied after exposing at 70℃, for 240 hours and at normal temperature and humidity for 24 hours. 在 70℃条件下存放 240 小时，取出在常温常湿下再存放 24 小时后，满足第 4 点所要求的各项电气参数。	Except for dew gathering 无结露
6-5 Cold resistance 低温存储	The requirements in 6 shall be satisfied after exposing at -20℃, for 240 hours and at normal temperature and humidity for 24 hours 在-20℃条件下存放 240 小时，取出在常温常湿下再存放 24 小时后，满足第 4 点所要求的各项电气参数。	Except for dew gathering 无结露
6-6 Thermal shock 冷热冲击	The requirements in 6 shall be satisfied after exposing under the conditions of -30℃(0.5hour)→80℃(0.5hour) by 10 cycles ,and at normal temperature and humidity for 24 hours. 按照-20℃（0.5 小时）→70℃（0.5 小时）的条件循环 50 次，取出在常温常湿下再存放 24 小时后，满足第 4 点所要求的各项电气参数。	Except for dew gathering 无结露
6-7 Vibration resistance 抗振动	The requirements in “Operation force” of the item 3-1 Mechanical Characteristics and 6 Electric characteristics shall be satisfied after sweep vibration. of 20 m/s <sup>2</sup> , 10 Hz to 55 Hz (1 min) is given for 30 min. each in the directions of X, Y, Z.	

## 7.Block diagram 原理框图

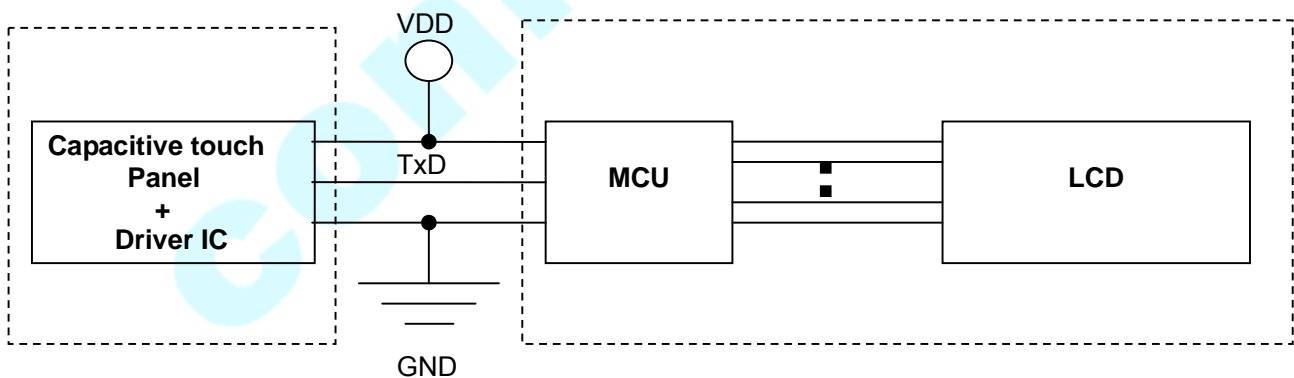
### 7-1 IC Pin Configuration IC 脚定义

PIN No.	PIN Name	Description
1	VDD	Supply voltage. VDD: 3.3V
2	GND	Ground Connection
3	NC	No connection
4	TXD	Data output, I <sup>2</sup> C Clock and UART Serial interface, baud rate:9600
5	NC	No connection
6	NC	No connection
7	NC	No connection
8	NC	No connection

7-2 Flow Chart 流程图



7-3 Block diagram 原理框图



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Customer side

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