TOUCH PANEL

SPECIFICATION

Model:	CTP-UE101WU-AN40-A018-A
Version:	V1.0
Date:	20180606

■ **Preliminary Specification** 样品规格书

□ **Final Specification** 量产规格书

Customer Confirmation 客户确认

Approved by	Notes

Please return one of the copies of the specification with your signature to us within two weeks after you receive this document. If it is not returned, we will assume that you agree to the entire contents of this specification document.

请贵司在收到规格书的两周内，将签好字的规格书原件或者复印件寄回.如果没有返回，我司将会认为贵司已经默认接受产品规格书中的全部资料和规范.

VIEWE Confirmation 优奕确认

Prepared by	Reviewed by	Approved by

REVISION HISTORY

Revision 版本号	Date 日期	Contents of Revision Change 修改内容	Remark 备注
V1.0	2018.06.06	Preliminary release	

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1. GENERAL INFORMATION

1.1 Features

Item 项目	Specification 规格	Remark 备注
TP Size(触屏尺寸)	10.1	Inch(Diagonal)
Overall Dimensions (外形尺寸)	246.60(W)*170.60(H)*1.3(D)	mm
View Area(可视区)	217.58(W)*136.36(H)	mm
Light Transmittance(透光率)	≥86%	
Surface Hardness(表面硬度)	≥7H	
Touch Response Time(相应时间)	300	ms
IC Model(芯片型号)	ILI2511	-
TP Structure(触屏结构)	G+G	-
Connection Model(连接方式)	连接器型号:ECONNWF32-081S3R OR COMPATIBLE,PITCH=0.8mm	8PIN
Interface Type(接口类型)	I2C	
Touch Point(触控点数)	多点	Point
Resolution(分辨率)	1200(W) *1920(H)	Pixel
Lens Type(盖板材质)	旭硝子	T=0.7mm

2. ELECTRICAL CHARACTERISTICS

2.1 Absolute Maximum Ratings

Item 项目	Symbol 符号	Min. 最小值	Max. 最大值	Unit 单位
Digital Power	CTP_VCC	-0.3	4.2	V
Digital Power	USB_VCC	-0.3	6	V
Operating temperature	Top	-20	70	°C
Storage temperature	Tst	-10	60	°C

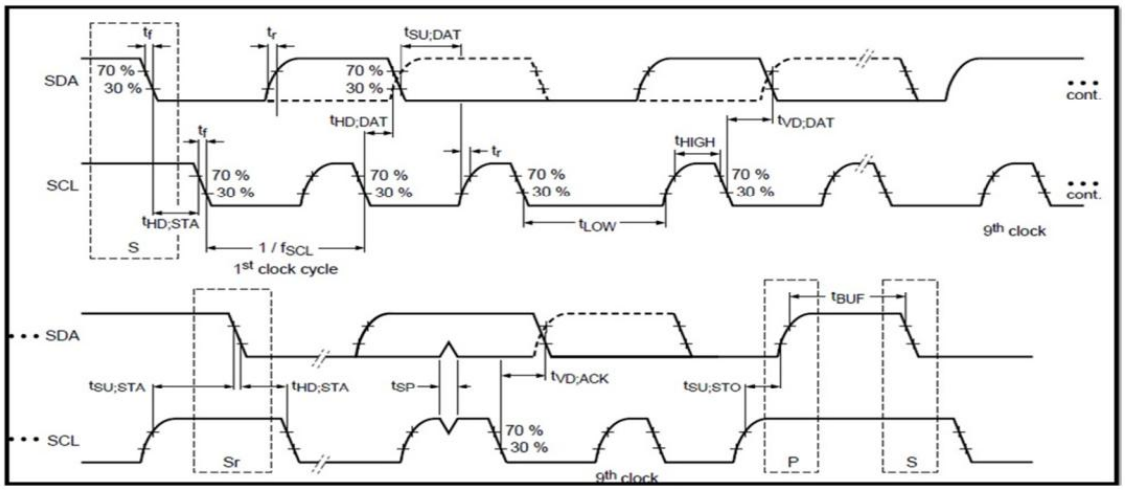
(Ta=+25°C,AGND=DGND=0V)
Note1:All of the voltages listed above are with respective to DGND=AGND=0V
Note2:Device is subject to be damaged permanently if stresses beyond those absolute maximum ratings listed above.

2.2 Recommended Operating Conditions

Item 项目	Symbol符号	Min. 最小值	Typ. 典型值	Max. 最大值	Unit 单位
Power For Digital Voltage	CTP_VDD	2.8	3.3	3.6	V
Power For Digital Voltage	USB_VCC	4.5	5	5.5	
Logic Input High Voltage	V_{IH}	0.7VDD	-	VDD	V
Logic Input Low Voltage	V_{IL}	0	-	0.3VDD	V
Module Power Consumption	P_{TP}	-	0.066	-	Watt

(Ta=+25°C,AGND=DGND=0V)
Note:All of the voltages listed above are with respective to DGND=AGND=0V

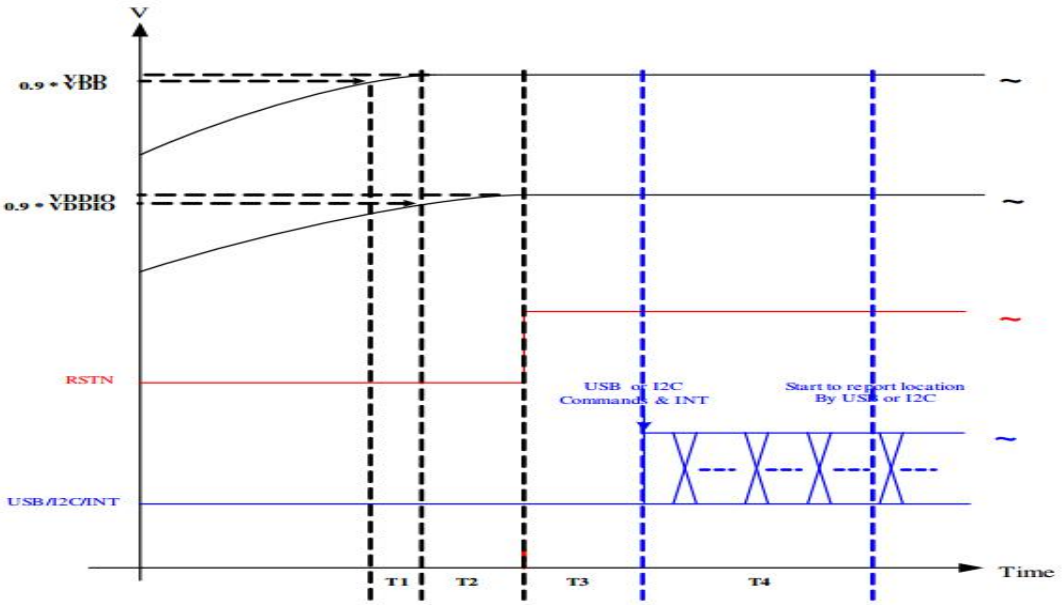
2.3 Power On Timing



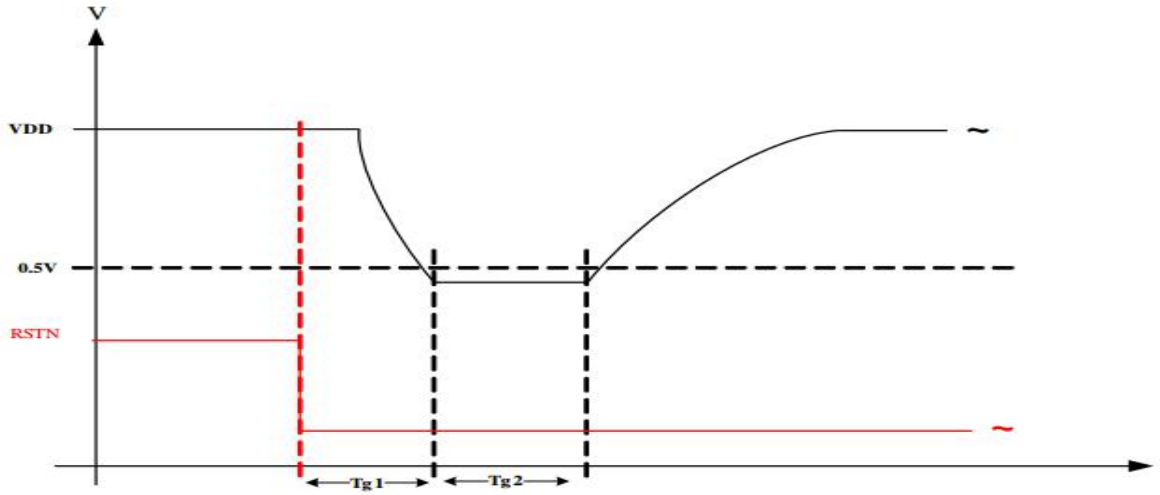
Parameter	Symbol	Standard-mode		Fast-mode		Unit
		Min	Max	Min	Max	
SCL clock frequency	f_{SCL}	0	100	0	400	kHz
Hold time START condition	$t_{HD;STA}$	4.0	-	0.6	-	us
LOW period of the SCL clock	t_{Low}	4.7	-	1.3	-	us
HIGH period of the SCL clock	t_{High}	4.0	-	0.6	-	us
Set-up time for a repeated START condition	$t_{SU:STA}$	4.7	-	0.6	-	us
Data hold time	$t_{HD;DAT}$	300	-	300	-	ns
Data set-up time	$t_{SU;DAT}$	250	-	100	-	ns
Rise time of both SDA and SCL signals (30% to 70%)	t_r	-	1000	20	300	ns
Fall time of both SDA and SCL signals (70% to 30%)	t_f	-	300	20	300	ns
Set-up time for STOP condition	$t_{SU;STO}$	4.0	-	0.6	-	us
Bus free time between a STOP and START condition	t_{BUF}	4.7	-	1.3	-	us
Capacitive load for each bus line	C_b	-	400	-	400	pF
Noise margin at the LOW level for each connected device	V_{nL}	$0.1V_{DD}$	-	$0.1V_{DD}$	-	V
Noise margin at the HIGH level for each connected device	V_{nH}	$0.2V_{DD}$	-	$0.2V_{DD}$	-	V

*SCL = I2C Host must to support clock stretching mode for using 400 kHz.

6.1 Power-on Sequence



1. T1: the time difference between 0.9*VDD and 0.9*VDDIO. T1 must be ≥ 0 sec.
2. T2: the time difference between 0.9*VDDIO and RSTN. T2 must be ≥ 200 us.
3. T3: the time difference between RSTN and Commands.T3 must be ≥ 150 ms.
4. T4: IC start to report point location to host. T4 must be ≥ 300 ms.

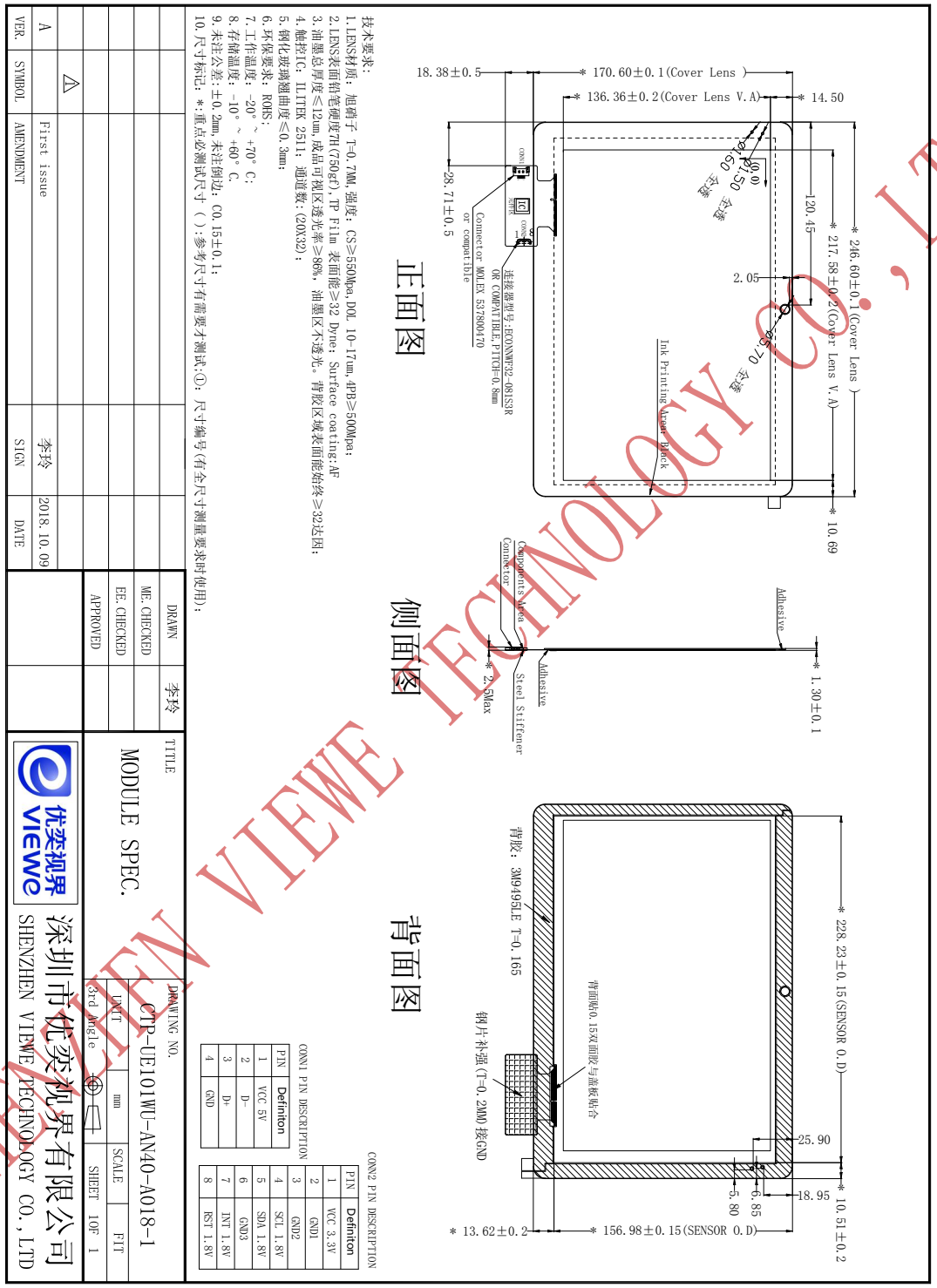


Tg1 : the time difference between power-off and power-on. Tg1 must be > 10us.

Tg2 : the time difference between power-off and power-on. Tg2 must be > 10us.

Note. During the power off time, the VDD must be lower than 0.5V that make sure the touch controller have been correctly reset.

3. MECHANICAL DRAWING



4. PIN ASSIGNMENT

Pin No. 序号	Symbol 符号	I/O	Description 描述
1	**CTP_VCC**	P	Power supply for logic & analog circuit(3.3V)
2	**GND**	P	Power Ground
3	**GND**	P	Power Ground
4	**CTP_SCL**	I	I2C Serial Clock
5	**CTP_SDA**	I/O	I2C Serial Data Input or Output
6	**GND**	P	Power Ground
7	**CTP_INT**	O	Interrupt Signal
8	**CTP_RST**	I	Global reset for TP, active is low

Pin No. 序号	Symbol 符号	I/O	Description 描述
1	**USB_VDD**	P	Power supply for logic & analog circuit(5V)
2	**D-**	I/O	Differential input sensitivity
3	**D+**	I	Differential input sensitivity
4	**GND**	P	Power Ground

I：Input；O：Output；P：Power

5. RELIABILITY

Item 项目	Test Condition 测试条件	Remark 备注
High Temperature Storage	Ta =+60°C / 96Hours	Note1,2,3
Low Temperature Storage	Ta =-10°C / 96Hours	Note1,2,3
High Temperature Operating	Ta =+70°C / 96Hours	Note1,2,3
Low Temperature Operating	Ta =-20°C / 96Hours	Note1,2,3
Temperature Cycle Storage Test	-10°C/30min ⇆+60°C /30min for 30cycles,Transfer time less than 5min	Note2,3
Thermal Humidity Storage Test	60°C x 90%RH / 96Hours	Note2,3
Ball Drop Test	Test ball weight:130g Test height:30cm Test position: center/3times	Note 5
Bonding Tension Test	≥500gf/cm, Sensor face up, FPC& sensor for 90°	Note 6

Inspection after Test:

Note1:Ta is the ambient temperature of samples.

Note 2: In the standard condition, there shall be no practical problem that may affect the display function. After the reliability test, the product only guarantees operation, but doesn't guarantee all the cosmetic specification.

Note 3: Before cosmetic and function tests , the product must have enough recovery time, at least 2 hours at room temperature.

Note 4: In case of malfunction defect caused by ESD damage, if it would be recovered to normal state after resetting, it would be judged as a good part.

Note 5: TP without crack.

Note 6: FPC and sensor are not separated.

Note 7: The right to interpret the reliability test standard above belongs to VIEWE.