Product Specification
产 品 规 格 书

产品名称/**Product Name:** Capacitive touch control board from 14 to 32 inch

产品型号/**Product Mode:** ZCC-4805

产品版本/**Product Version:** Ver 0

客户名称/**Customer Name:** _____

客户料号/**Customer Part No.:** _____

制方签核/**Signed By Maker:**

批准 （Approved by）	审核 （Reviewed by）	编制 （Prepared by）

客户确认/**Approved By Customer:**

批准 （Approved by）	日期 （Date）

修订记录/ Revision Record：

No.	Version	Date	Summary of changes	Page
1	V0	2016.12.26	Newly Created	
备注/Remarks:				

目录
Table of Contents

1. 产品说明 Product Introduction----------4
1.1 产品摘要 Product Summary----------4
1.2 产品优点 Product Advantages----------4
1.3 产品特性 Product Features----------4
2. 控制器规格 Controller Board Specification----------5
2.1 电器特性 Electrical Property----------5
2.2 连接器脚位定义 Connector Pin Assignment----------5
2.3 适用之作业系统 OS Compatibility ----------6
3. 可靠度测试规范 Reliability Test Specification----------6
3.1 可靠度规格 Reliability Specification----------6
4. 控制器结构图 Controller Board Drawing----------7
4.1 连接器 Connector ----------8、9
5.包装Packaging----------10
5.1包装流程图Packing Flow Diagram----------10

1.产品说明 Product Introduction

1.1 产品摘要 Product Summary

这是一款被设计应用于投射式电容触控面板的控制器，透过玻璃的接触感应来满足全平面需求的产品；在Windows7，Windows8或Android作业平台支援下，控制器可驱动触控面板达到十指的触控功能。

The controller board is designed to be used with projected capacitive touch panels. It meets the touch demand of flat-faced products by the contact and induction with the touch panel. It can make touch panels realize ten-point touch under Win7, Win8 and android operation systems..

1.2 产品优点 Product Advantages

(1) 高准确度并且不必校正。
Excellent touch accuracy and calibration free.

(2) 极高灵敏度并且触控点击力度小。
High sensitivity and low touch force.

(3) 系统重启模式可支持软体更新作业。
Software can be updated during system rebooting process.

1.3 产品特性 Product Features

项次Items	规格Specification
IC方案 IC controller	ILI2510
连接器界面 Interface	USB Standard 2.0 Full Speed
作业条件 Operation Condition	-20℃- +70℃ at Min 20% to Max 85% RH
储存条件 Storage Condition	-30℃- +80℃ at Min 20% to Max 85% RH
控制器外观尺寸 Size of the Controller Board	L 84.5mm*W 28mm*H 7.6mm±0.5mm

备注1：为确保触控模组可有效发挥其功能，请务必于作业时将控制器作有效的接地动作；
Note 1: In order to ensure the touch module works normally, make sure the controller board is grounded effectively during the operation.

备注2：假设触控模组没有被有效的执行接地动作时，触控面板可能会有功能性受损或不稳定等现象发生。
Note2: The touch panel may be damaged functionally or works unstably if the touch module has not been grounded.

2.控制器规格 Controller Board Specification

2.1电器特性 Electrical Property

项次 Items	规格 Specification	备注 Notes
连接器界面 Interface	USB	USB Standard 2.0 Full Speed
电源供给 Power Supply	5V	DC
工作电流 operating current	100mA(Typical)	120mA(Max.)
报点率 Report Rate	120HZ	50HZ（min）under windows7 or windows 8

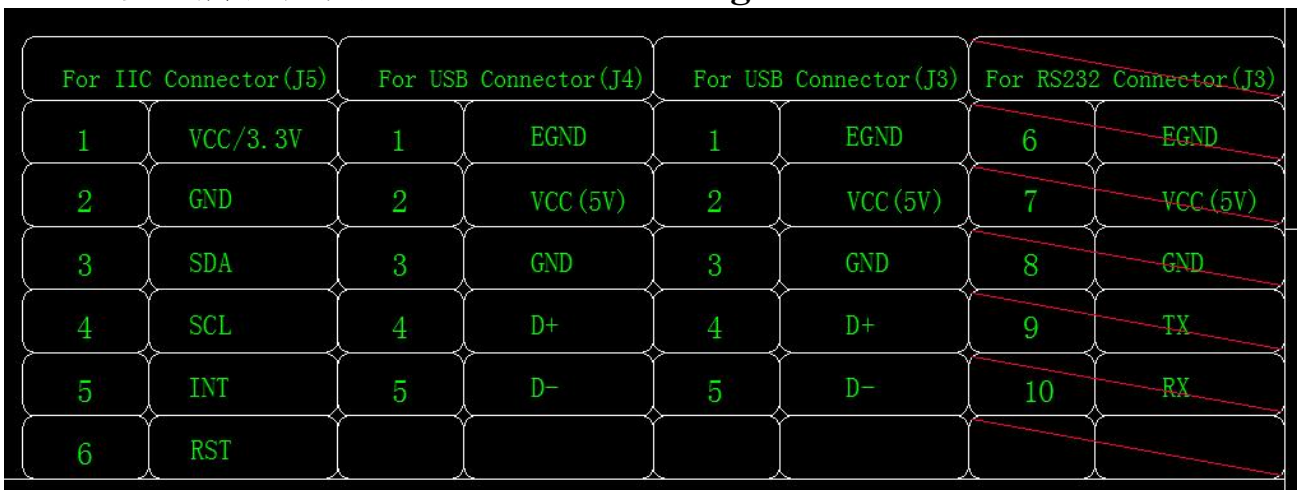
备注1：USB为本控制器标准连接器界面, 针对其它连接器介面需求可采以客制化，如IIC或RS232连接器介面;

Note1: USB is the standard connector interface for the controller board. Other interface such as I2C and RS232 can be customized according to customers' requirements.

备注2：为确保触控模组可有效发挥其功能，电源供应器必须符合IEC 62684 规范。

Note2: In order to make the touch module work normally, the power supply or power adapter has to conform to IEC 62684.

2.2 连接器脚位定义 Connector Pin Assignment



FPC Connector Pin Definitions

连接器 J1 40PIN , PIN PITCH=0.5mm FPC+补强=0.3mm														
编号	1	2	3	4	5	6	7	8	9	10	11	12	13	14
定义	GND	TX35	TX34	TX33	TX32	TX31	TX30	TX29	TX28	TX27	TX26	TX25	TX24	TX23
编号	15	16	17	18	19	20	21	22	23	24	25	26	27	28
定义	TX22	TX21	TX20	TX19	TX18	TX17	TX16	TX15	TX14	TX13	TX12	TX11	TX10	TX9
编号	29	30	31	32	33	34	35	36	37	38	39	40		
定义	TX8	TX7	TX6	TX5	TX4	TX3	TX2	TX1	TX0	GND	NC	NC		

连接器 J2 68PIN , PIN PITCH=0.5mm FPC+补强=0.3mm														
编号	1	2	3	4	5	6	7	8	9	10	11	12	13	14
定义	GND	GND	NC	NC	GND	RX57	RX56	RX55	RX54	RX53	RX52	RX51	RX50	RX49
编号	15	16	17	18	19	20	21	22	23	24	25	26	27	28
定义	RX48	RX47	RX46	RX45	RX44	RX43	RX42	RX41	RX40	RX39	RX38	RX37	RX36	RX35
编号	29	30	31	32	33	34	35	36	37	38	39	40	41	42
定义	RX34	RX33	RX32	RX31	RX30	RX29	RX28	RX27	RX26	RX25	RX24	RX23	RX22	RX21
编号	43	44	45	46	47	48	49	50	51	52	53	54	55	56
定义	RX20	RX19	RX18	RX17	RX16	RX15	RX14	RX13	RX12	RX11	RX10	RX9	RX8	RX7
编号	57	58	59	60	61	62	63	64	65	66	67	68		
定义	RX6	RX5	RX4	RX3	RX2	RX1	RX0	GND	NC	NC	GND	GND		

2.3 适用之作业系统 OS Compatibility

系统分类		触控点数 Touch Points		USB 驱动程式 USB Driver		座标校正 Calibration	备注 Note
Operation System		Single	Multi touch	Single Touch	Multi Touch		
windows	windows 10	V	V	Driver free	Driver free	Calibration free	
	windows 8	V	V	Driver free	Driver free	Calibration free	
	windows 7	V	V	Driver free	Driver free	Calibration free	
	windows Vista	V		Driver free	Non-support	Calibration free	
	windows XP	V		Driver free	Non-support	Calibration free	
	windows 2000	V		Driver free	Non-support	Calibration free	
	windows ME	V		Driver free	Non-support	Calibration free	
	windows 98	V		Driver free	Non-support	Calibration free	
Linux	Ubunta linex 10.10	V		Driver needed		Needed	Kernel 2.6.35
	Knoppix 6.2	V		Driver needed		Needed	Kernel 2.6.32
Android			V		Driver needed	Calibration free	

3. 可靠度测试规范Reliability Test Specification

3.1 可靠度规格Reliability Specification

环境测试条件列表如下所示。
Environment test conditions are listed as follows.

项目 Items	规格 Specification
恒温恒湿测试 Constant Temperature and Humidity	+70℃,85% RH for 240 hours; Get to be normal after 4 hours.
冷热冲击测试 Thermal Shock	-20℃ to +70℃,30min/cycle for 50 cycles; Get to be normal after 4 hours.
高温储存测试 High Temperature Storage	+80℃ for 240 hours; Get to be normal after 4 hours.
低温储存测试 Low Temperature Storage	-30℃ for 240 hours; Get to be normal after 4 hours.

4. 控制器 Controller Board Drawing

由 Autodesk 教育版产品制作

标记(mark)	修改内容(revised contents)	签名(signature)	日期(Date)
<1>			
<2>			
<3>			
<4>			
<5>			

注：

（1）控制器板厚 1.6mm,铜厚按半0.5 0Z，两层板。

（2）板板材FR4无铅。

（3）采用沉金工艺。

（4）蓝油白字。

（5）未标注公差以±0.5为准。

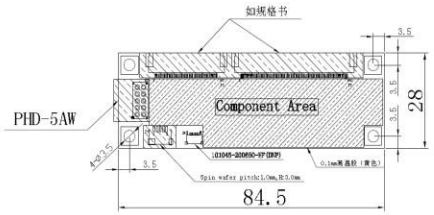
贴片元件限高:2.5mm.

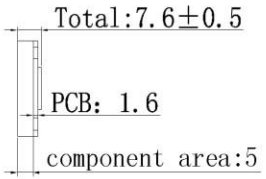
贴片元件限高:3.0mm.

插件元件限高:5.0mm.

未注明区域限高:2.0mm.

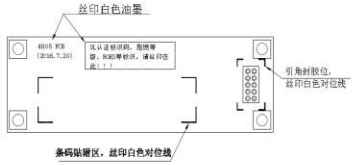
Front view





side view

Back view



技术参数：

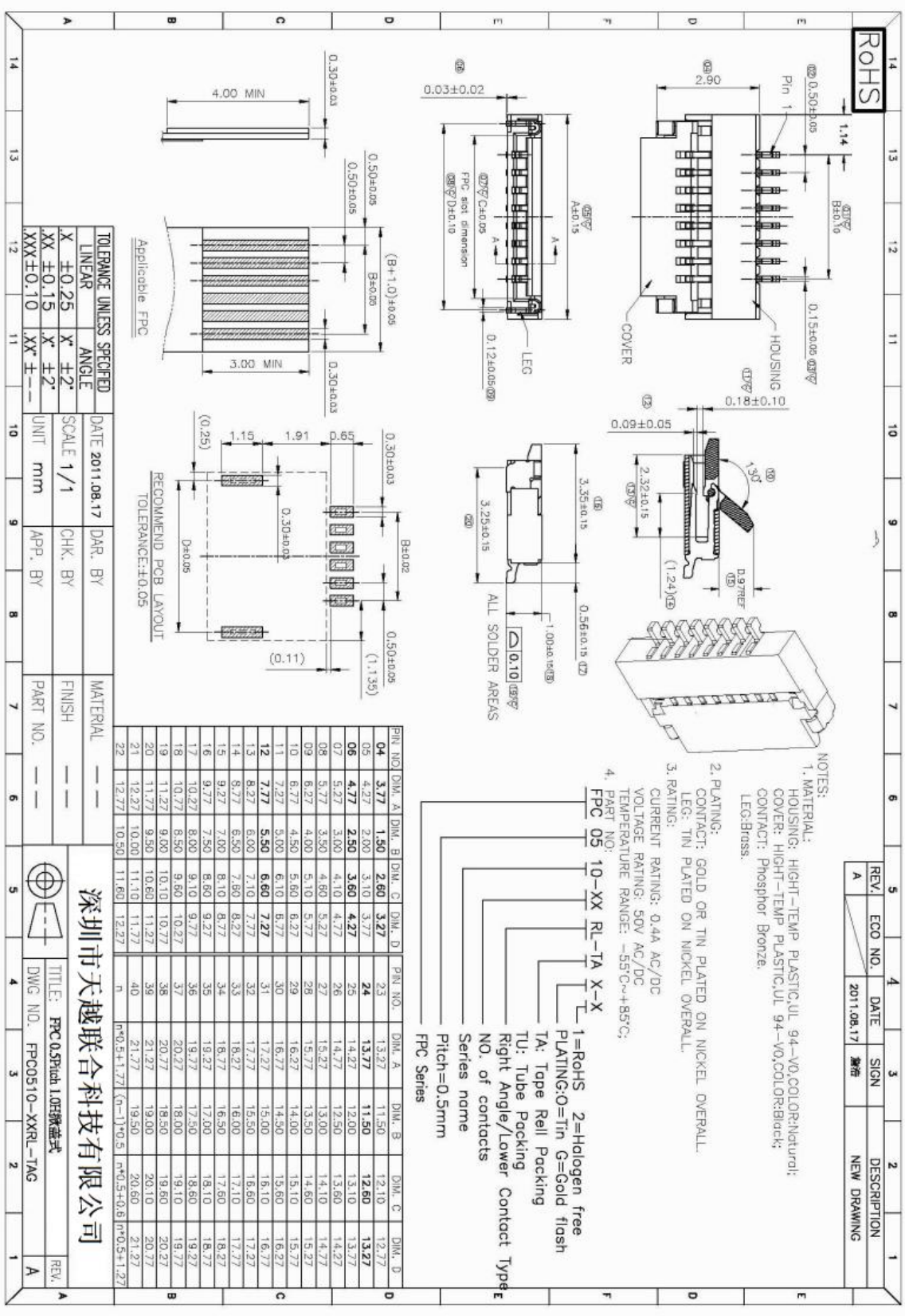
1. IC选用：ILI2510;
   工作电压：USB(5V).
2. 兼容系统：win7、win8、安卓4.0以上版本、winXP。
3. 工作环境：-20℃~+70℃，≤85%RH;
4. 储存环境：-30℃~+80℃，≤85%RH;
5. 未注尺寸公差按±0.5mm
6. 产品符合RoHS标准.

注：
控制器默认支持USB接口，如需支持IIC,RS232，需更改元件bom!!!

For IIC Connector(J5)		For USB Connector(J4)		For USB Connector(J3)		For RS232 Connector(J2)	
1	VCC/3.3V	1	EGND	1	EGND	6	EGND
2	GND	2	VCC(5V)	2	VCC(5V)	7	VCC(5V)
3	SDA	3	GND	3	GND	8	GND
4	SCL	4	D+	4	D+	9	TX
5	INT	5	D-	5	D-	10	RX
6	RST						

连城县中触电子有限公司 Lian Cheng Touch-China Electronics Co.,Ltd					
TITLE: 产品编号	ZCC-4805 Control panel				
Designed By: 设 计	Eddie Xu	Customerid: 客户编号		View: 投影方式	
Checked By: 审 核		Unit: 单 位	mm		
Approved By: 批 准		Date: 日 期	2016.12.2	Scale: 比 例	1:1

4.1 连接器 Connector（J5）



PIN NO	DIM. A	DIM. B	DIM. C	DIM. D	PIN NO.	DIM. A	DIM. B	DIM. C	DIM. D
04	3.77	1.50	2.60	3.27	23	13.27	11.50	12.10	12.77
05	4.27	2.00	3.10	3.77	24	13.77	11.50	12.60	13.27
06	4.77	2.50	3.60	4.27	25	14.27	12.00	13.10	13.77
07	5.27	3.00	4.10	4.77	26	14.77	12.50	13.60	14.27
08	5.77	3.50	4.60	5.27	27	15.27	13.00	14.10	14.77
09	6.27	4.00	5.10	5.77	28	15.77	13.50	14.60	15.27
10	6.77	4.50	5.60	6.27	29	16.27	14.00	15.10	15.77
11	7.27	5.00	6.10	6.77	30	16.77	14.50	15.60	16.27
12	7.77	5.50	6.60	7.27	31	17.27	15.00	16.10	16.77
13	8.27	6.00	7.10	7.77	32	17.77	15.50	16.60	17.27
14	8.77	6.50	7.60	8.27	33	18.27	16.00	17.10	17.77
15	9.27	7.00	8.10	8.77	34	18.77	16.50	17.60	18.27
16	9.77	7.50	8.60	9.27	35	19.27	17.00	18.10	18.77
17	10.27	8.00	9.10	9.77	36	19.77	17.50	18.60	19.27
18	10.77	8.50	9.60	10.27	37	20.27	18.00	19.10	19.77
19	11.27	9.00	10.10	10.77	38	20.77	18.50	19.60	20.27
20	11.77	9.50	10.60	11.27	39	21.27	19.00	20.10	20.77
21	12.27	10.00	11.10	11.77	40	21.77	19.50	20.60	21.27
22	12.77	10.50	11.60	12.27	n	n*0.5+1.77	(n-1)*0.5	n*0.5+0.6	n*0.5+1.27

G103 ROHS

REV	ECN NO.

Assembly Layout

ELECTRICAL PERFORMANCE

1. RATED VOLTAGE(MAX.):50V AC/DC
2. RATED CURRENT(MAX.):1.0A AC/DC (28-32 AWG)
3. DIELECTRIC STRENGTH:500V AC FOR 1 MINUTE BETWEEN ADJACENT TERMINAL, NO BREAKDOWN
4. INSULATION RESISTANCE:100 MEGOHMS MIN. 500V DC FOR 1 MINUTE BETWEEN ADJACENT TERMINAL
5. CONTACT RESISTANCE:20 MILLIOHM MAX.
6. OPERATING TEMPERATURE:-25°C to +85°C
7. TERMINAL MATERIAL:PHOSPHOR BRONZE
8. HOUSING MATERIAL:PA9T (UL94V-0)
9. APPLICABLE WIRE:AWG 28~32

ORDERING INFORMATION

WB 100 2 U R - XX T 5
(1) (2) (3)(4) (5)(6)(7)

1. SERIES NO.
   WB: WIRE TO BOARD CONNECTOR
2. WAFER PITCH TYPE
   100: 1.00mm PITCH CONNECTOR
3. TAIL CONSTRUCTION TYPE
   U: SMD TYPE
4. MALE AND FEMALE MATING TYPE
   S: STRAIGHT R: RIGHT ANGLE
5. NUMBER OF PIN
   XX: XX POSITIONS
6. CONTACT PLATING
   T: TIN PLATING
7. HOUSING MATERIAL
   5: WHITE PA9T

Poles	DIM.A	DIM.B	DIM.C
2P	1.0	4.5	2.6
3P	2.0	5.5	3.6
4P	3.0	6.5	4.6
5P	4.0	7.5	5.6
6P	5.0	8.5	6.6
7P	6.0	9.5	7.6
8P	7.0	10.5	8.6
9P	8.0	11.5	9.6
10P	9.0	12.5	10.6
11P	10.0	13.5	11.6
12P	11.0	14.5	12.6
13P	12.0	15.5	13.6
14P	13.0	16.5	14.6
15P	14.0	17.5	15.6
16P	15.0	18.5	16.6
17P	16.0	19.5	17.6
18P	17.0	20.5	18.6
19P	18.0	21.5	19.6
20P	19.0	22.5	20.6

NO.	DATE	DESCRIPTION	APPROVAL
5			
4			
3			
2			
1			

DRAWING: Yang Jie

CHECKED: Match

APPROVAL: Match

GENERAL TOLERANCE
.X:=±0.25 .X°:=±2°
.XX:=±0.15 .XX°:=±1°
.XXX:=±0.05 .XXX°:=±0.5°

UNIT: MM

PROJECTION:

SCALE: 1/1

SHEET: 1/1

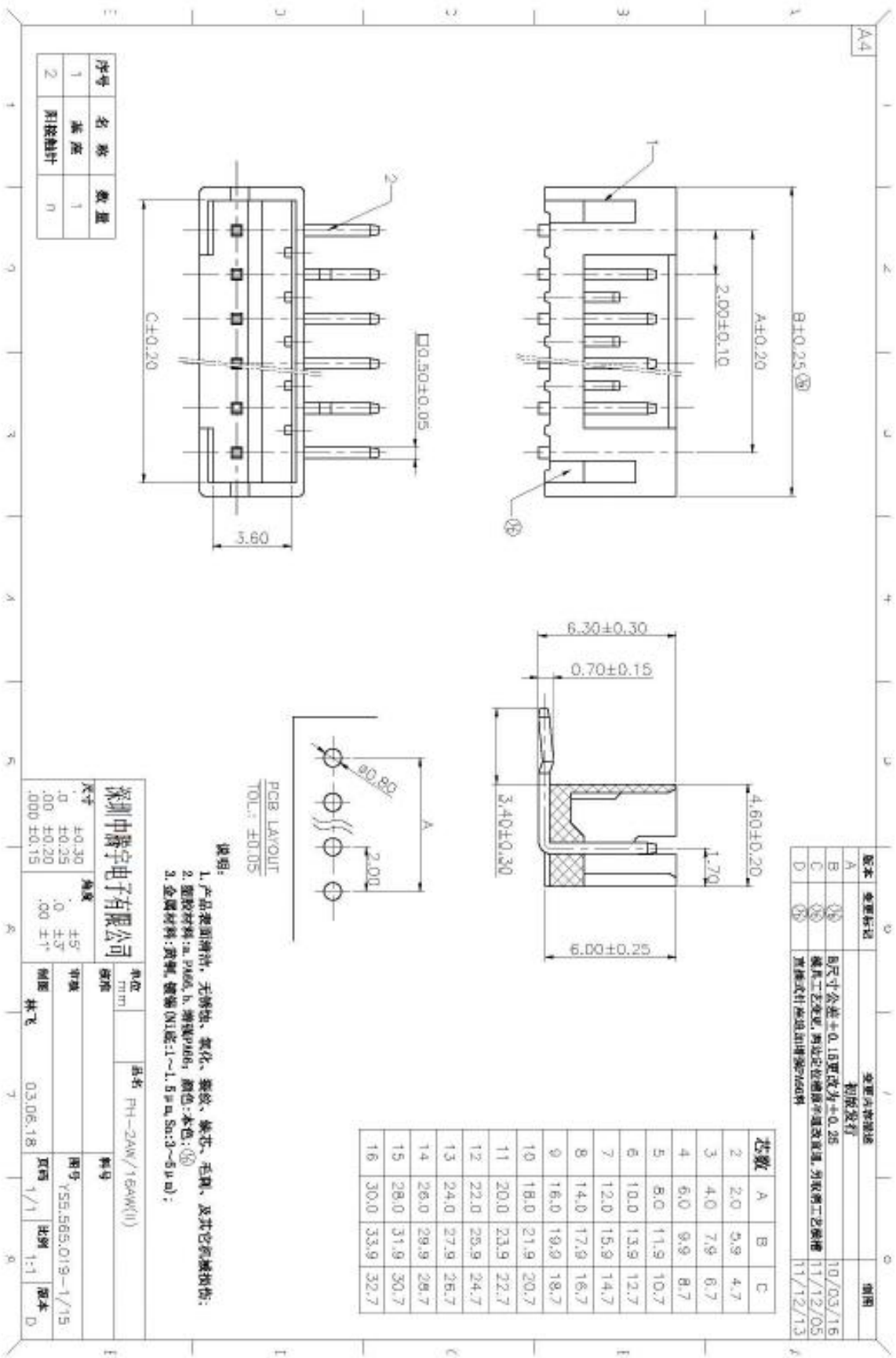
CHIN-BAN
electronics (H.K) co., ltd

DESCRIPTION:
1.00mm PITCH 90° WAFER SMT TYPE

PART NO: WB1002UR-XXT5 REV: 1.0

DRAWING NO: SIZE: A4

连接器 Connector（J3）



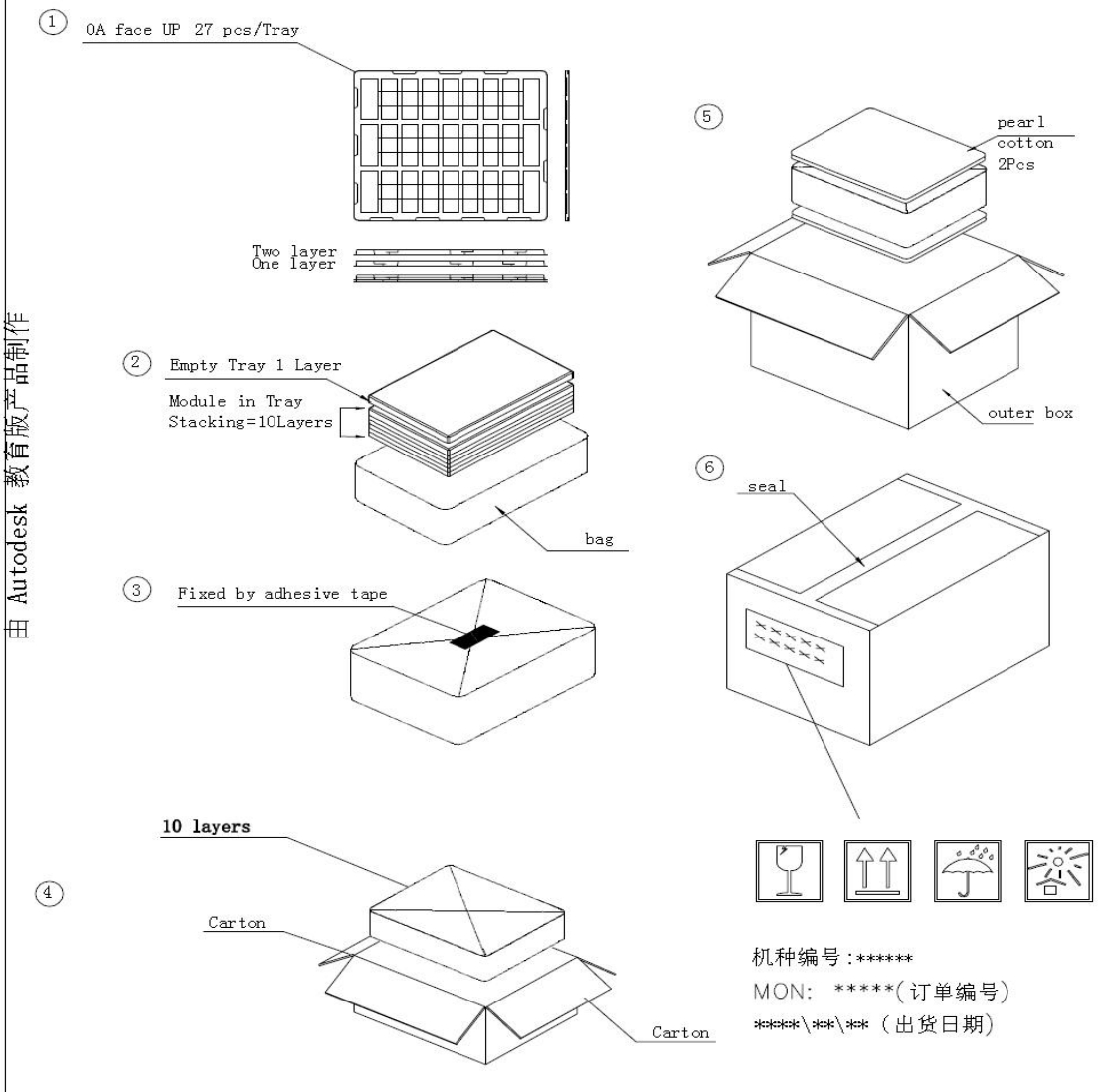
芯数	A	B	C
2	2.0	5.9	4.7
3	4.0	7.9	6.7
4	6.0	9.9	8.7
5	8.0	11.9	10.7
6	10.0	13.9	12.7
7	12.0	15.9	14.7
8	14.0	17.9	16.7
9	16.0	19.9	18.7
10	18.0	21.9	20.7
11	20.0	23.9	22.7
12	22.0	25.9	24.7
13	24.0	27.9	26.7
14	26.0	29.9	28.7
15	28.0	31.9	30.7
16	30.0	33.9	32.7

5. 包装Packaging

5.1 包装流程图Packing Flow Diagram

由 Autodesk 教育版产品制作

Model Number	Check



由 Autodesk 教育版产品制作