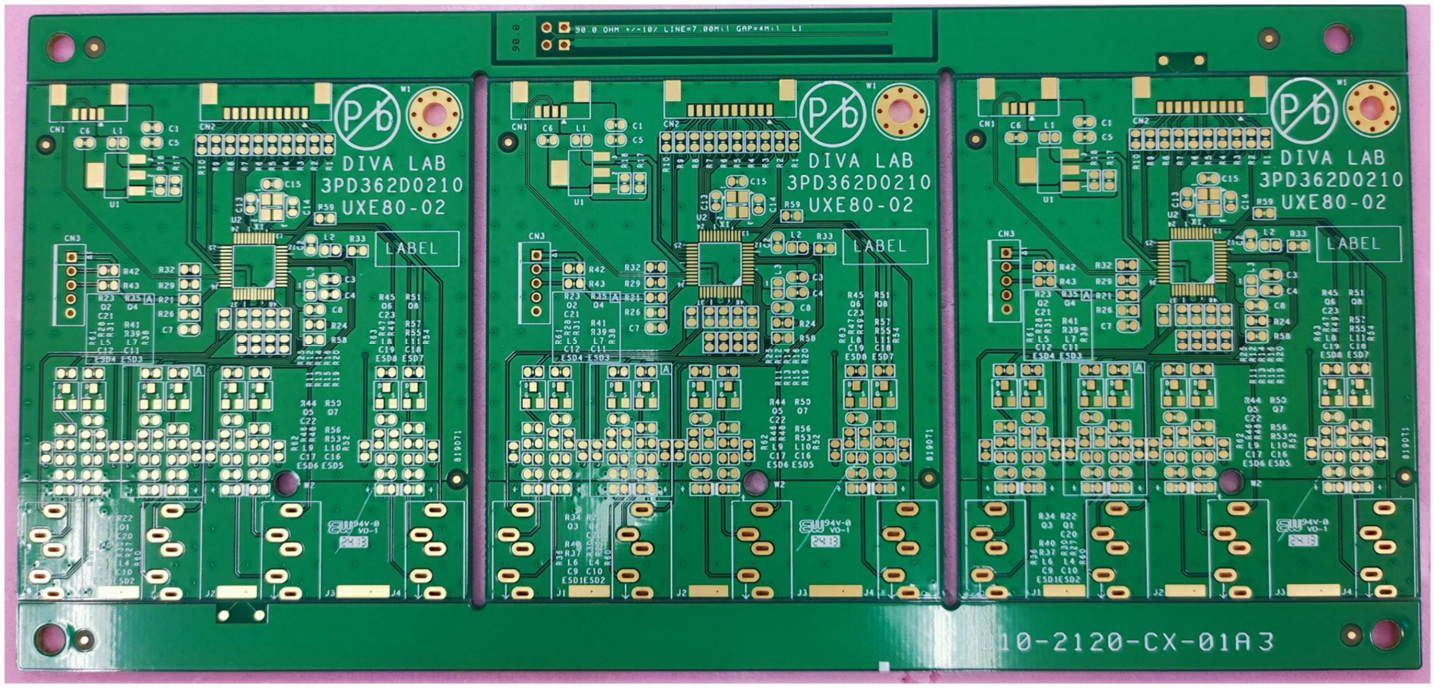
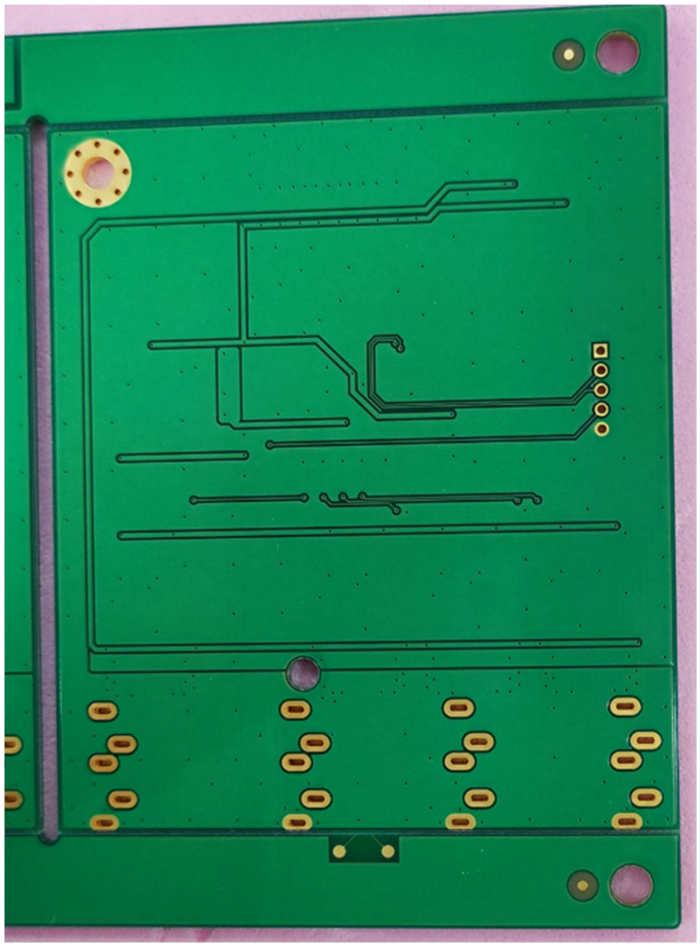
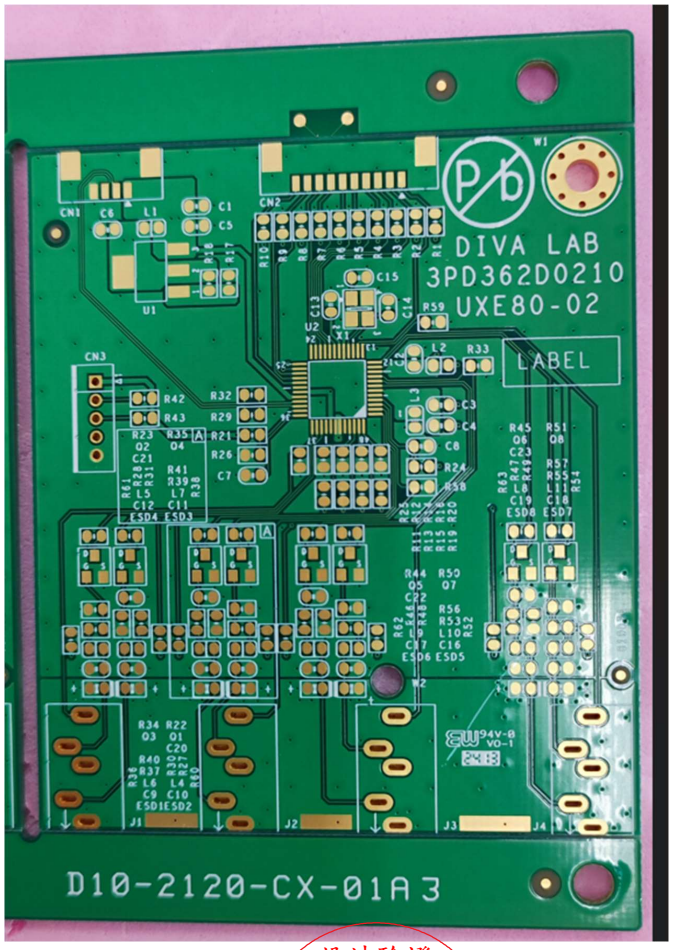




設計驗證
工程課
2024 -03- 28
發行





設計驗證
工程課
2024-03-28
發行
鈺緯科技開發股份有限公司

長鴻電子股份有限公司

EVERLAST WIN ELECTRONICS CO., LTD.

產品承認書

Approval Sheet

客戶名稱：　鈺緯科技開發股份有限公司

機種品名：　Medi RecoREMOTE BD

Parts No:　3PD362D0210 (P0330)

EW No:　D10-2120-CX

Approved By ：

Approved Date：

設計驗證
工程課
2024 -03- 28
發行
鈺緯科技開發股份有限公司

桃園市中壢區中壢工業區北園路30號

Tel：03-4335661 Fax：03-4610466

E-mail ： cam2@ewpcb.com.tw

製作日期：2018/11/22

EVERLAST WIN ELECTRONICS CO., LTD.

INSPECTION REPORT

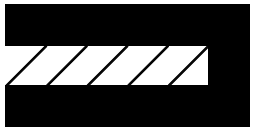
EW NO: D10-2120-CX P/N: 3PD362D0210 (P0330)

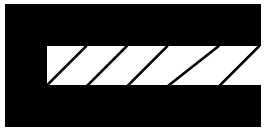
A.VISUAL INSPECTION					
ITEMS	REQUIREMENT	RESULTS	ITEMS	REQUIREMENT	RESULTS
Base Material	FR-4 2L H/H	ACC	UL Mark	EW-V0-1 94V-0	ACC
Line Width	0.005±20%	0.005"	Date Code	YYWW	ACC
Spacing	0.004±20%	0.004"	Gold Thickness	Min 2 u"	Min 2 u"
Annular Ring	Min 0.002"	0.003"	Chamfer of Finger	N/A	N/A
Solder Mask	GREEN	ACC	Board of Thickness	0.063"±0.0063"	0.061~0.065"
Peeling-off Test	3M TAPE	ACC	V-CUT	0.020"±0.004"	0.021"
Silkscreen	COMP WHITE	ACC			
B.SOLDERABILITY TEST:			D.DIMENSION INSP.(Unit:inch)		
ITEMS	REQUIREMENT	RESULTS	ITEMS	REQUIREMENT	RESULTS
	260℃±5℃ 3SEC	ACC	Length of the board	7.835±0.005	7.833~7.837
C.MICROSECTION RECORD:			Width of the board	3.720±0.005	3.718~3.722
ITEMS	REQUIREMENT	RESULTS	F.IMPEDANCE:		
Cu	≧0.8 mil	1.413mil	Width/Space		RESULTS
Sn/Pb	N/A	N/A	N/A	N/A	ACC
Ni	120u"	120u"	G.DIFFERENTIAL IMPEDANCE:		
E.OPEN-SHORT TESTED:			Width/Space	REQUIREMENT	RESULTS
Q'ty(pcs)	10PCS	RESULTS	0.007/0.004	90Ω ±10%	ACC
	100%	ACC			

長鴻電子股份有限公司
EVERLAST WIN ELECTRONICS CO.,LTD
切片檢驗報告(Cross-Section Report)

切片日期(Inspection Date)	11月 (M)22日(D) 2018年(Y)		週期 (Date Code)	1847	料號 (Part No)	D10-2120-CX	檢驗數量 (QTY)	1

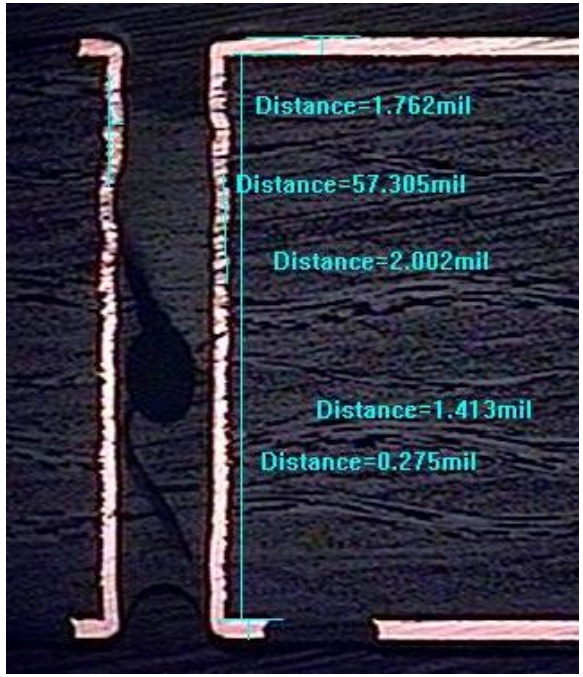
檢測項目 (Inspect Item)	要求(Requirement)	結果(Result)	判定(Judge)	備註	檢測項目 (Inspect Item)	要求(Requirement)	結果(Result)	判定(Judge)	備註
孔銅厚度 (Copper Thickness)	≧0.8mil	1.413mil	ACC		孔壁粗糙度 (Hole Roughness)	≦ 1.5 mil	0.275mil	ACC	
孔破(Void)或孔環破裂 (Ring Break	不允許	PASS	ACC		孔銅裂痕 (Crack)	不允許	PASS	ACC	
					孔銅與內層分離 (I. C. D.)	不允許	PASS	ACC	





	標準值		實際量測值	
H	oz	1.762	mil
59	mil	57.305	mil
H	oz	2.002	mil

切片照片 ：



審核 (Review) 詹錢富

製表 (Prepared)： 呂揚茜

長鴻電子股份有限公司

OPEN/SHORT 測試報告

日期: 2018/11/22

客戶料號: 3PD362D0210(P0330)

廠內料號: D10-2120-CX

週　　期: 1847

測試條件:

測試電壓: 250 伏特

絕緣阻值: 10M 歐姆

開路阻值: 50 歐姆

長鴻電子股份有限公司

IMPEDANCE REPORT

客戶料號:3PD362D0210(P0330)

廠內料號:D10-2120-CX

週　　期:1847

阻抗要求			差動阻抗										
PCS編號			1	2	3	4	5	6	7	8	9	10	
	阻抗值												AVG
規格標準	90	實測值	89.25	87.57	97.06	84.21	81.7	91.27	85.46	98.63	96.18	90.97	90.23
規格上限	99	MAX	99.00										
規格下限	81	MIN	81.00										

ONLINE CERTIFICATIONS DIRECTORY

ZPMV2.E216522
Wiring, Printed - Component

For enhanced search functionality, please visit UL's iQ™ Family of Databases.
Click on a product designation for complete information.

Page Bottom

Wiring, Printed - Component

See General Information for Wiring, Printed - Component

EVERLAST WIN ELECTRONICS CO LTD E216522
30 BEIYUAN RD
JHONGLI
TAOYUAN HSIEN, 320 TAIWAN

	Cond Width				Max			Max			
		Min	Cond	SS/	Area	Solder		Oper		Meets	C
	Min	Edge	Thk	DS/	Diam	Limits		Temp	Flame	UL796	T
Type	mm(in)	mm(in)	mic(mil)	DSO	mm(in)	C	sec	C	Class	DSR	I
Mass laminated (multilayered) printed wiring boards.											
V0-3	0.086 (0.003)	0.22 (0.009)	17 (0.67)	DS	76.2 (3.0)	260	10	130	V-0	All	-
Multi-layer printed wiring boards.											
RO-1	0.10 (0.004)	0.10 (0.004)	17 (0.67) Int:68	DS	76.2 (3.0)	260	10	105	V-0	All	-
V0-2	0.086 (0.003)	0.22 (0.009)	17 (0.67) Int:34	DS	76.2 (3.0)	260	10	130	V-0	All	-
V0-6	0.076 (0.003)	0.125 (0.005)	11 (0.43) Int:68	DS	76.2 (3.0)	288	20	130	V-0	All	-
V0-7	0.076 (0.003)	0.125 (0.005)	11 (0.43) Int:68	DS	25.4 (1.0)	288	20	130	V-0	All	3
Single layer printed wiring boards.											
V0-1	0.086 (0.003)	0.22 (0.009)	17 (0.67)	DS	76.2 (3.0)	260	10	130	V-0	All	-
V0-5	0.076 (0.003)	0.125 (0.005)	11 (0.43)	DS	76.2 (3.0)	288	20	130	V-0	All	3

Marking: Company name or trademark  or file number and type designation. May be followed by a suffix to denote factory identification or burning test classification.

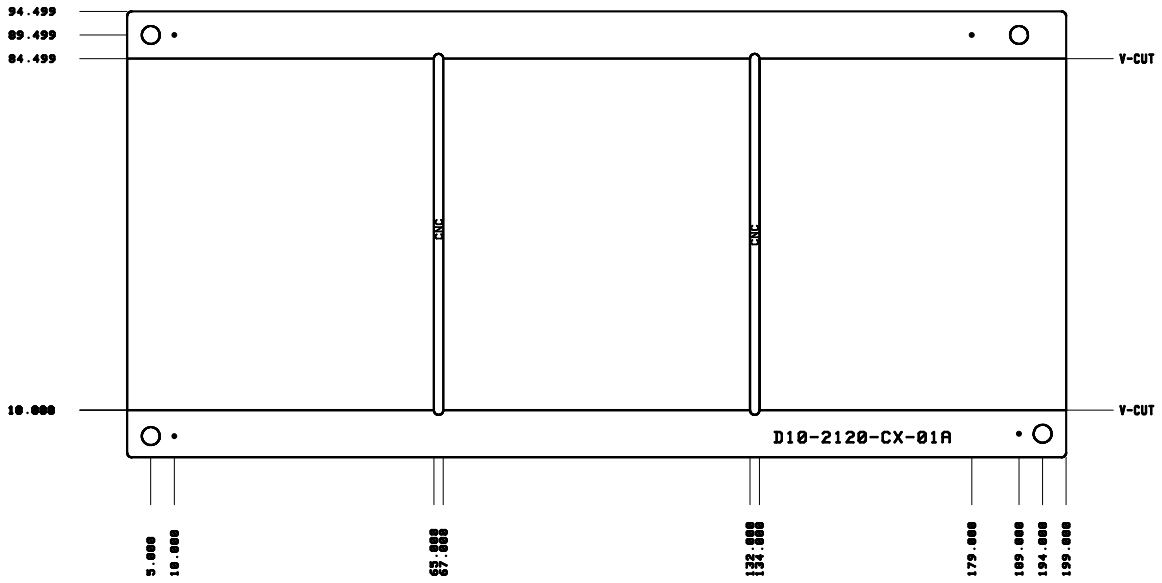
Last Updated on 2016-12-01

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Part Number : D10-2120-CX-01A
Unit: MM

成型公差:± 5 mil
V-CUT殘留:0.5mm±0.1
V-CUT刀數:2 刀
斜邊角度: 度X mil±
內槽: 2 個
開槽: 個
擴孔: 個

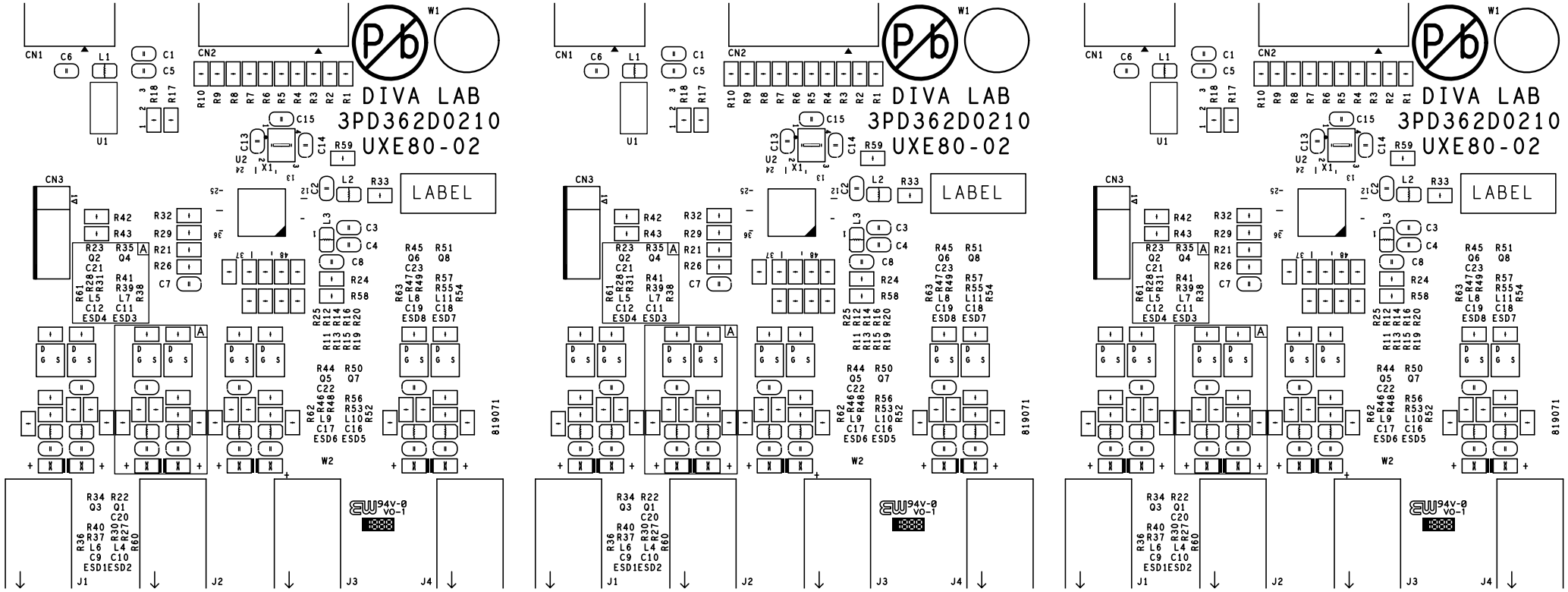
D10-21120-CX COMP

D10-21200-CX SOLD

D10-21200-CX CM

D10-21120-CX SM

90.0 OHM +/-10% LINE=7.00Mil GAP=4Mil L1



D10-2120-CX-01A

D10-2120-CX CS

D10-21220-CX MAP

檢測報告
Test Report

報告編號 ECL01J072559001ER1 第 1 頁 共 8 頁
Report No. ECL01J072559001ER1 Page 1 of 8

申請單位 長鴻電子股份有限公司
Applicant EVERLAST WIN ELECTRONICS CO., LTD.
地 址 中壢市工業區北園路 30 號
Address NO.30, BEIYUAN RD., ZHONGLI CITY, TAOYUAN COUNTY 320, TAIWAN (R.O.C)

以下測試之樣品及樣品信息由申請者提供並確認
The following sample(s)and sample information was/were submitted and identified by/on the behalf of the client

樣品名稱 Sample Name	化金+金手指 Immersion Ni/Au
樣品接收日期	2017.11.17
Sample Received Date	Nov. 17, 2017
樣品檢測日期	2017.11.17-2017.12.11
Testing Period	Nov. 17, 2017 to Dec. 11, 2017
檢測要求	根據客戶要求, 對所提交樣品中的鉛(Pb)，鎘(Cd)，汞(Hg)，六價鉻(Cr(VI))，多溴聯苯(PBBs)，多溴二苯醚(PBDEs)，鄰苯二甲酸酯(DBP, BBP, DEHP, DIBP)進行測試。
Test Requested	As specified by client, to test Lead (Pb), Cadmium (Cd), Mercury (Hg), Hexavalent Chromium(Cr(VI)), Polybrominated Biphenyls(PBBs), Polybrominated Diphenyl Ethers(PBDEs), Phthalates(DBP, BBP, DEHP, DIBP) in the submitted sample(s).
檢測依據和檢測結果	**請參見下頁**
Test Method &Test Result	**Please refer to following pages.**

主 檢 Tested by 審 核 Reviewed by 陶英

批 准 Approved by 日 期 Date 2017.12.12

蘇紅偉
實驗室高級經理 Senior Laboratory Manager

No. T172792683

上海華測品標檢測技術有限公司 上海市浦東新區新金橋路 1996 號
Centre Testing International Pinbiao(Shanghai) Co., Ltd. No.1996,Xinjinqiao Road, Pudong New District,Shanghai,China

檢測報告
Test Report

檢測依據 Test Method

測試項目 Tested Item(s)	測試方法 Test Method	測試儀器 Measured Equipment(s)
鉛(Pb) Lead (Pb)	IEC 62321-5:2013 Ed.1.0	ICP-OES
鎘(Cd) Cadmium (Cd)	IEC 62321-5:2013 Ed.1.0	ICP-OES
汞(Hg) Mercury (Hg)	IEC 62321-4:2013 Ed.1.0	ICP-OES
六價鉻(Cr(VI)) Hexavalent Chromium (Cr(VI))	IEC 62321-7-2:2017 和/或 IEC 62321-5:2013 Ed.1.0 測試總鉻含量 IEC 62321-7-2:2017 and/or determination of Total Chromium by IEC 62321-5:2013 Ed.1.0	UV-Vis/ICP-OES
多溴聯苯(PBBs) Polybrominated Biphenyls (PBBs)	IEC 62321-6:2015	GC-MS
多溴二苯醚(PBDEs) Polybrominated Diphenyl Ethers (PBDEs)	IEC 62321-6:2015	GC-MS
鄰苯二甲酸酯(DBP, BBP, DEHP, DIBP) Phthalates(DBP, BBP, DEHP, DIBP)	IEC 62321-8:2017	GC-MS

檢測報告
Test Report

檢測結果 Test Result

測試項目 Tested Item(s)	結果 Result	方法檢出限 MDL
鉛 Lead (Pb)	N.D.	2mg/kg
鎘 Cadmium (Cd)	N.D.	2mg/kg
汞 Mercury (Hg)	N.D.	2mg/kg
六價鉻 Hexavalent Chromium (Cr(VI))	N.D.	8mg/kg

測試項目 Tested Item(s)	結果 Result	方法檢出限 MDL
多溴聯苯 Polybrominated Biphenyls(PBBs)		
一溴聯苯 Monobromodiphenyl	N.D.	5mg/kg
二溴聯苯 Dibromobiphenyl	N.D.	5mg/kg
三溴聯苯 Tribromobiphenyl	N.D.	5mg/kg
四溴聯苯 Tetrabromobiphenyl	N.D.	5mg/kg
五溴聯苯 Pentabromobiphenyl	N.D.	5mg/kg
六溴聯苯 Hexabromobiphenyl	N.D.	5mg/kg
七溴聯苯 Heptabromobiphenyl	N.D.	5mg/kg
八溴聯苯 Octabromobiphenyl	N.D.	5mg/kg
九溴聯苯 Nonabromobiphenyl	N.D.	5mg/kg
十溴聯苯 Decabromobiphenyl	N.D.	5mg/kg
多溴二苯醚 Polybrominated Diphenyl Ethers(PBDEs)		
一溴二苯醚 Monobromodiphenyl ether	N.D.	5mg/kg
二溴二苯醚 Dibromobiphenyl ether	N.D.	5mg/kg
三溴二苯醚 Tribromobiphenyl ether	N.D.	5mg/kg
四溴二苯醚 Tetrabromobiphenyl ether	N.D.	5mg/kg
五溴二苯醚 Pentabromobiphenyl ether	N.D.	5mg/kg
六溴二苯醚 Hexabromobiphenyl ether	N.D.	5mg/kg
七溴二苯醚 Heptabromobiphenyl ether	N.D.	5mg/kg
八溴二苯醚 Octabromobiphenyl ether	N.D.	5mg/kg
九溴二苯醚 Nonabromobiphenyl ether	N.D.	5mg/kg
十溴二苯醚 Decabromobiphenyl ether	N.D.	5mg/kg

檢測報告
Test Report

測試項目 Tested Item(s)	結果 Result	方法檢出限 MDL
鄰苯二甲酸酯 Phthalates		
鄰苯二甲酸二正丁酯(DBP) Dibutyl phthalate(DBP) CAS#:84-74-2	N.D.	50 mg/kg
鄰苯二甲酸丁基苄酯(BBP) Benzylbutyl phthalate(BBP) CAS#:85-68-7	N.D.	50 mg/kg
鄰苯二甲酸二(2-乙基己基)酯(DEHP) Di-2-ethylhexyl phthalate(DEHP) CAS#:117-81-7	N.D.	50 mg/kg
鄰苯二甲酸二異丁酯(DIBP) Diisobutyl phthalate(DIBP) CAS#:84-69-5	N.D.	50 mg/kg

測試樣品/部位描述 PCB(整體測試)
Tested Sample/Part Description PCB (Tested as a whole)

備註: **對於檢測鉛，鎘，汞之樣品已完全溶解。**
-按照目前手段，樣品無法進一步拆分，樣品整體測試，測試結果不代表整體測試樣品中任何一種單一材質的含量。
-N.D. = 未檢出 (小於方法檢出限)
-mg/kg = ppm = 百萬分之一

Remark: **The sample(s) had been dissolved totally tested for Lead, Cadmium, Mercury.**
-The sample(s) was tested as a whole, because it's impossible to disassemble or separate it by current equipment and technology. The result(s) shown on this report may be different from the content of any homogeneous material.
-MDL = Method Detection Limit
-N.D. = Not Detected (<MDL)
-mg/kg = ppm = parts per million

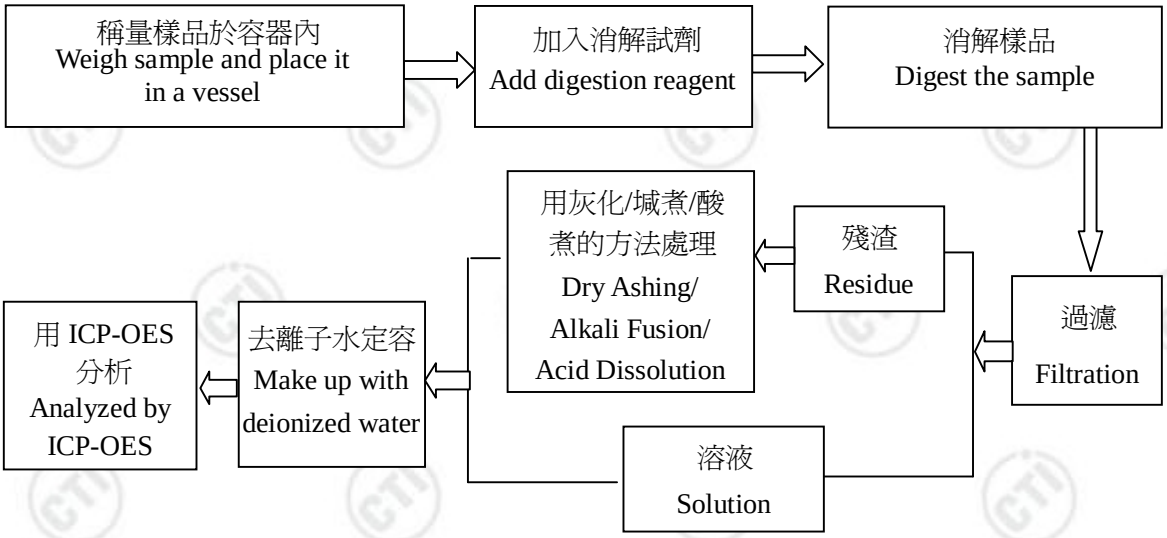
注釋： **本報告替換原報告 ECL01J072559001E，自本報告簽發之日起，原報告 ECL01J072559001E 作廢。**

Note: **This testing report displaces the original report of No. ECL01J072559001E, and the original one No. ECL01J072559001E was invalid since the date of this testing report released.**

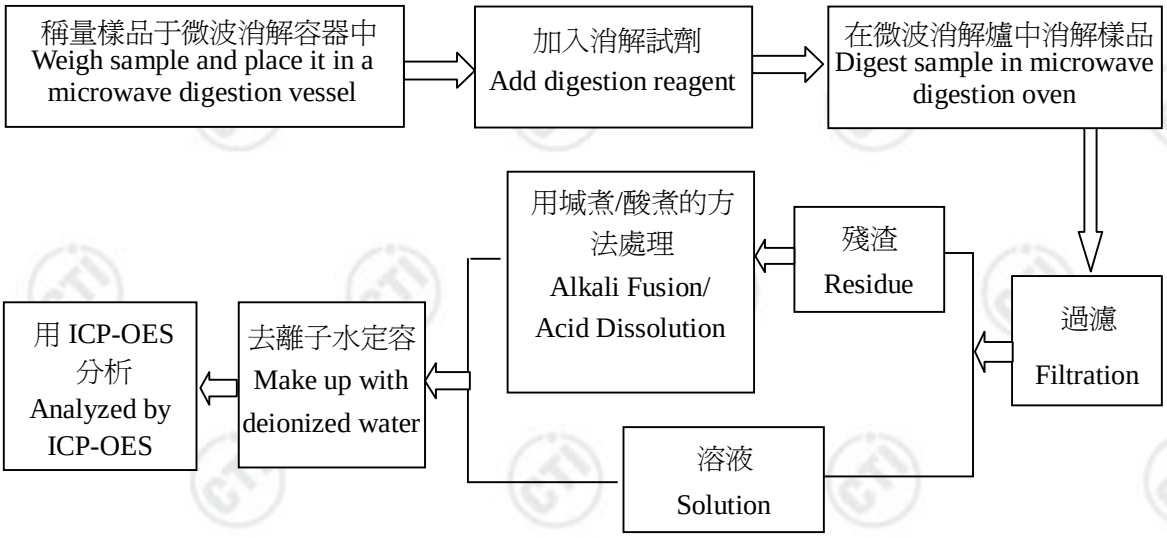
檢測報告
Test Report

檢測流程 Test Process

1. 鉛(Pb)，鎘(Cd)，鉻(Cr) Lead(Pb), Cadmium(Cd), Chromium(Cr)

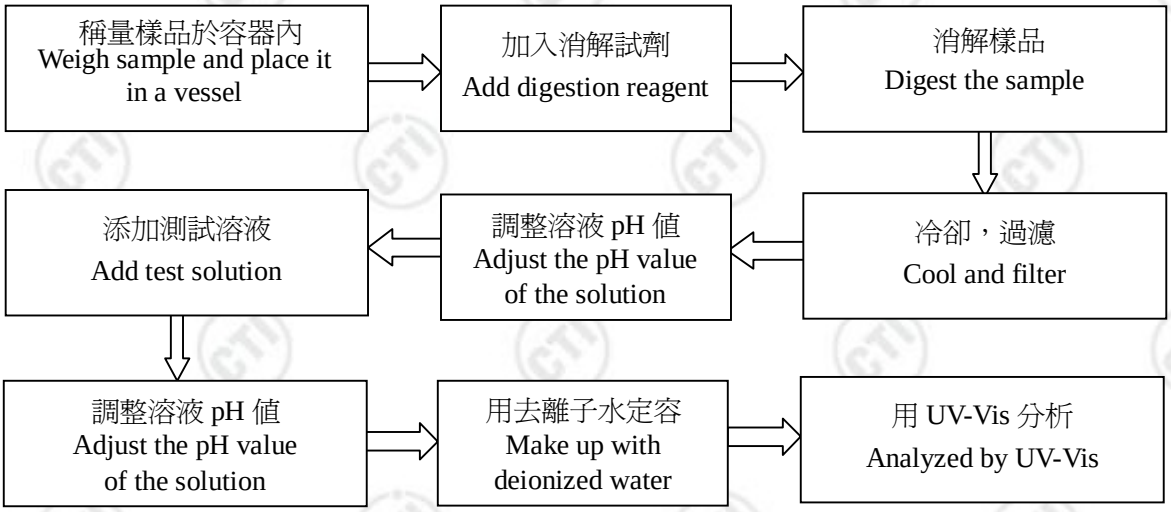


2. 汞(Hg) Mercury(Hg)

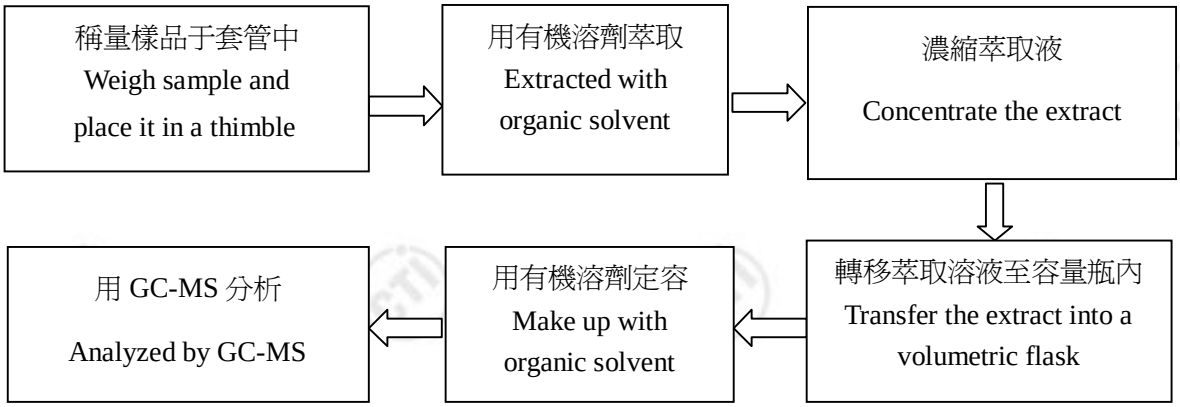


檢測報告
Test Report

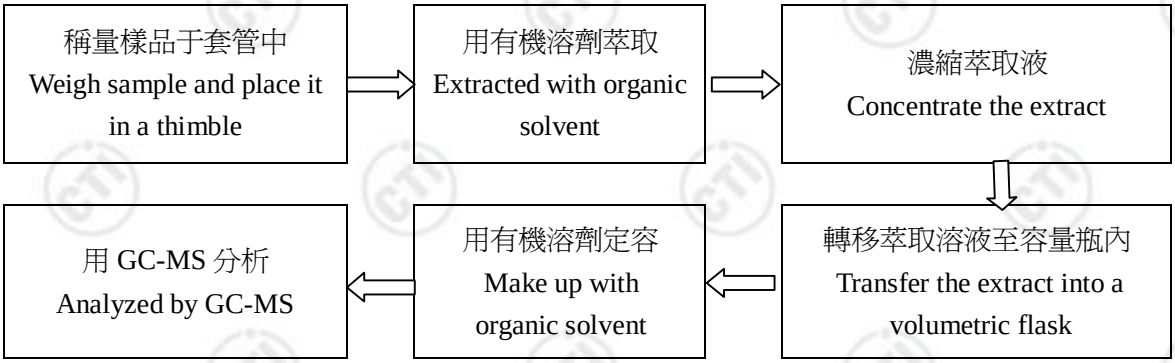
3. 六價鉻(Cr(VI)) Hexavalent Chromium (Cr(VI))



4. 多溴聯苯(PBBs)，多溴二苯醚(PBDEs)
Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs)

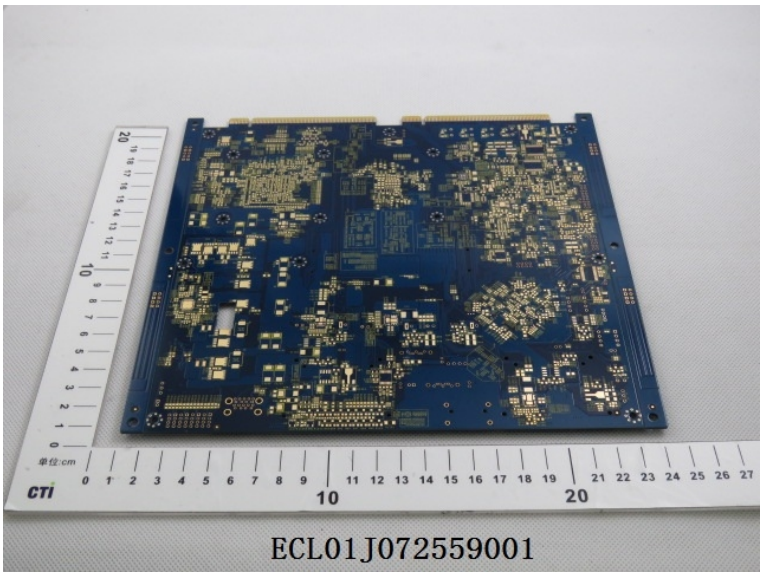


5. 鄰苯二甲酸酯 Phthalates



檢測報告
Test Report

樣品圖片
Photo(s) of the sample(s)



*** 報告結束 ***

***End of report ***

檢測報告無批准人簽字及加蓋公司報告章無效，本報告檢測結果僅對受測樣品負責。未經 CTI 書面同意，不得部分複製本報告。

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長鴻電子股份有限公司

EVERLAST WIN ELECTRONICS CO., LTD.

PCB之各種表面處理之特性及保存

★感謝貴司長久以來對EW的支持與愛護，請按照下述注意事項，使用敝司的PCB，以達最佳效果

項目	無鉛 噴錫	有鉛 噴錫	化錫(Tin)	化銀(IAG)	化金(ENIG)	OSP(有機保焊劑)
鍍層厚度	依客規	依客規	依客規	6~18μ"	依客規	0.2~0.5μm
建議儲存環境條件	A-溫度<30% B-濕度<60%RH C-無酸、無硫、無氯空氣環境下	A-溫度<30% B-濕度<60%RH C-無酸、無硫、無氯空氣環境下	A-溫度<30% B-濕度<60%RH C-無酸、無硫、無氯空氣環境下	A-溫度<30% B-濕度<60%RH C-無酸、無硫、無氯空氣環境下	A-溫度<30% B-濕度<60%RH C-無酸、無硫、無氯空氣環境下	A-溫度<30% B-濕度<60%RH C-無酸、無硫、無氯空氣環境下
包裝方式	敝司有二種包裝方式供客戶端選用，『熱縮膜』或『真空包裝』方式；『真空包裝』方式之保存效果較佳，但包材成本較高；					
依上述儲存條件下未拆封之儲齡（熱縮膜包裝）	包裝日起算3個月內	包裝日起算3個月內	包裝日起算3個月內	包裝日起算3個月內	包裝日起算3個月內	包裝日起算3個月內
依上述儲存條件下未拆封之儲齡（真空包裝）	包裝日起算6個月內	包裝日起算6個月內	包裝日起算6個月內	包裝日起算6個月內	包裝日起算6個月內	包裝日起算6個月內
重要注意事項	A-熱縮膜包裝方式：以PCB包裝日期計算，建議在三個月內執行上件，以達到最好之上件效果。 B-真空包裝方式：以PCB包裝日期計算，建議在六個月內執行上件，以達到最好之上件效果。 C-儲存環境：務必要在無酸、無硫、無氯空氣環境下，以避免影響PCB之可靠度。 D-無論使用『熱縮膜』或『真空包裝袋』方式，依PCB製造之週期計算如果超過12個月，不建議使用，有『層間分離&銲錫性不佳』之高風險。 E-無鉛銲錫製程，選用板材時建議依照IPC-4101B定義，以杜絕下述之風險。1-層間分離(爆板)、2-PTH CRACK、3-焊墊翹起、4-孔壁樹脂內縮(孔破) 導致Barrel CRACK(箇中孔與內層斷裂)。 F 如因為超過儲存期限(最佳上件時限：熱縮膜包裝方式三個月內，真空包裝袋方式六個月內)，上件前執行烘烤除濕之PCB板，組裝過程中仍舊有極低之機率發生層間分離(爆板)異常；此部份敝司無法予以負責。					
包裝拆封後→SMT&DIP	A-為保持PCB良好之『銲錫性』，建議在包裝拆封後72Hrs內(三天)，完成SMT(正、反面)及DIP。 B-化銀板、化錫板在包裝拆封後，在上述溫濕度之儲存條件下，儲存期限<三日。 C-化金板、噴錫板、OSP在包裝拆封後，在上述溫濕度之儲存條件下，儲存期限<七日。 D-化金板&噴錫板儲存超過三個月時(以PCB生產週期計算)，SMT前必須進行烘烤作業，以降低層間分離(爆板)之風險；建議烘烤溫度125度+/-5度；烘烤時間2~4Hrs。					
隔紙型式	NA	NA	NA	以無硫無氯紙進行保護	NA	NA
溫濕度管制卡	依客戶要求，費用另計	依客戶要求，費用另計	依客戶要求，費用另計	依客戶要求，費用另計	依客戶要求，費用另計	依客戶要求，費用另計
乾燥劑	依客戶要求，費用另計	依客戶要求，費用另計	依客戶要求，費用另計	依客戶要求，費用另計	依客戶要求，費用另計	依客戶要求，費用另計

品保部
Quality Section

已批准

長鴻電子股份有限公司

EVERLAST WIN ELECTRONICS CO.,LTD

OUTGOING QUALITY INSPECTION REPORT

CUSTOMER (客戶名稱)	鈺緯科技開發股份有限公司	DATE (出貨日期)	2018/11/22
CUSTOMER P/N (客戶料號)	3PD362D0210	LOT SIZE (出貨數量）	
EW NO (廠內料號) (P0330)	D10-2120-CX	SAMPLE SIZE (抽樣數量）	

MIL-STD-105E，General inspection levels II

NO	ITEM (項目）	SPEC&TOL (規格)	RESULT(結果)	REMARK(備註)
1	MATL（材質）	FR-4 TG-140	OK	
2	FLAMMABILITY (燃性等級）	94V-0	OK	
3	UL CODE (UL編號）	E216522	OK	
4	BOARD THK（板厚）	63.0±6.3mil	62.70mil	
5	MIN CONDUCTOR WIDTH（線寬）	5.0mil±20%	4.79mil	
6	MIN SPACING (間距）	4.0mil±20%	4.18mil	
7	ANNULAR RING WIDTH(孔環寬度）	≧ 2mil	2.43mil	
8	CU THK（孔銅厚度）	≧0.8mil	1.413mil	
9	SOLDER MASK THK (綠漆厚度)	0.5mil~1mil	0.67mil	
10	G/F BEVELLING (金手指斜邊)	N/A	N/A	
11	MIN AU THK PAD/G/F/化金（金手指）厚度	>2μ"	2.369μ"	
12	MIN NI THK PAD/G/F (鎳厚度)	>120μ"	148.3μ"	
13	V-CUT DEPTH (切割殘厚)	0.5±0.1 mm	0.49mm	
14	100% O/S TEST (電性測試)	250 V,10 M Ω,50 Ω	OK	
15	S/M，TAPE PEELING TEST(綠漆拉力實驗)	NO PEELING	OK	
16	SOLDERABILITY TEST(焊錫性實驗)	260±5ºC 3 sec	OK	
17	THERMAL STRESS TEST(熱應力試驗)	288±5ºC 10 sec	OK	
18	WARP & TWIST (板翹數據)	≦0.75%	OK	
19	COLOR OF S/M (防焊顏色)	GREEN	OK	
20	COLOR OF LEGEND (文字顏色)	WHITE	OK	
21	IMPEDANCE TEST (阻抗測試）	90Ω ±10%	90.23 Ω	
22	APPEARANCE(FI / OQC)(外觀抽樣)	————	OK	
23	DATE CODE (週期）	YYWW	1847	

APPROVED BY： 詹錢富　　**INSPECTED BY：** 呂揚茜