

测试报告

No. CANEC1304886401

日期: 2013年04月17日 第1页,共7页

深圳市龙腾电路科技有限公司

中国广东省深圳市宝安区松岗街道燕川北部工业园A5栋

以下测试之样品是由申请者所提供及确认: PCB 板

SGS工作编号: CP13-017094 - SZ

样品接收日期: 2013年04月10日

测试周期: 2013年04月10日 - 2013年04月17日

测试要求: 根据客户要求测试

测试方法: 请参见下一页

测试结果: 请参见下一页

结论: 基于所送样品进行的测试, 镉、铅、汞、六价铬、多溴联苯(PBB)、多溴二苯醚(PBDE)的测试结果符合欧盟RoHS指令2002/95/EC的重订指令2011/65/EU附录II的限值要求。

通标标准技术服务有限公司

授权签名



Almay Gao高志梅

批准签署人

备注: 根据客户申请, SGS出具了此中文报告, 英文版本可根据客户要求提供. (The Chinese test report is issued according to the applicant's request. The English version is available from SGS if further needed)

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测试结果:

测试样品描述:

| 样品编号 | SGS样品ID | 描述 |
|------|------------------|---------|
| 1 | CAN13-048864.001 | 绿色"PCB" |

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 方法检测限
- (3) ND = 未检出 (< MDL)
- (4) "-" = 未规定

RoHS指令2011/65/EU

测试方法:

参考IEC 62321:2008:

- (1) 用ICP-OES测定镉的含量
- (2) 用ICP-OES测定铅的含量
- (3) 用ICP-OES测定汞的含量
- (4) 用紫外-可见分光光度计比色法测定六价铬的含量
- (5) 用GC-MS测定PBBs(多溴联苯)和PBDEs(多溴二苯醚)的含量

| 测试项目 | 限值 | 单位 | MDL | 001 |
|----------------|-------|-------|-----|-----|
| 镉 (Cd) | 100 | mg/kg | 2 | ND |
| 铅 (Pb) | 1,000 | mg/kg | 2 | 20 |
| 汞 (Hg) | 1,000 | mg/kg | 2 | ND |
| 六价铬(Cr(VI)) | 1,000 | mg/kg | 2 | ND |
| 多溴联苯之和(PBBs) | 1,000 | mg/kg | - | ND |
| 一溴联苯 | - | mg/kg | 5 | ND |
| 二溴联苯 | - | mg/kg | 5 | ND |
| 三溴联苯 | - | mg/kg | 5 | ND |
| 四溴联苯 | - | mg/kg | 5 | ND |
| 五溴联苯 | - | mg/kg | 5 | ND |
| 六溴联苯 | - | mg/kg | 5 | ND |
| 七溴联苯 | - | mg/kg | 5 | ND |
| 八溴联苯 | - | mg/kg | 5 | ND |
| 九溴联苯 | - | mg/kg | 5 | ND |
| 十溴联苯 | - | mg/kg | 5 | ND |
| 多溴二苯醚之和(PBDEs) | 1,000 | mg/kg | - | ND |
| 一溴二苯醚 | - | mg/kg | 5 | ND |

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| 测试项目 | 限值 | 单位 | MDL | 001 |
|-------|----|-------|-----|-----|
| 二溴二苯醚 | - | mg/kg | 5 | ND |
| 三溴二苯醚 | - | mg/kg | 5 | ND |
| 四溴二苯醚 | - | mg/kg | 5 | ND |
| 五溴二苯醚 | - | mg/kg | 5 | ND |
| 六溴二苯醚 | - | mg/kg | 5 | ND |
| 七溴二苯醚 | - | mg/kg | 5 | ND |
| 八溴二苯醚 | - | mg/kg | 5 | ND |
| 九溴二苯醚 | - | mg/kg | 5 | ND |
| 十溴二苯醚 | - | mg/kg | 5 | ND |

备注:

(1) 最大允许极限值引用自指令2011/65/EU 附录II.

六溴环十二烷(HBCDD)

测试方法: 参考IEC 62321:2008, 用GC-MS分析。

| 测试项目 | 单位 | MDL | 001 |
|---------------|-------|-----|-----|
| 六溴环十二烷(HBCDD) | mg/kg | 10 | ND |

备注:

(1) 参考信息: RoHS指令2002/95/EC的重订指令2011/65/EU:
六溴环十二烷(HBCDD) 被列为需优先进行风险评估和考虑进行限制的物质。

邻苯二甲酸盐(或酯)

测试方法: 参考EN 14372: 2004的方法测定, 采用GC-MS进行分析。

| 测试项目 | 单位 | MDL | 001 |
|-----------------------|--------|-------|-----|
| 邻苯二甲酸二丁酯 (DBP) | %(w/w) | 0.003 | ND |
| 邻苯二甲酸丁酯苄酯 (BBP) | %(w/w) | 0.003 | ND |
| 邻苯二甲酸二(2-乙基己基) (DEHP) | %(w/w) | 0.003 | ND |

备注:

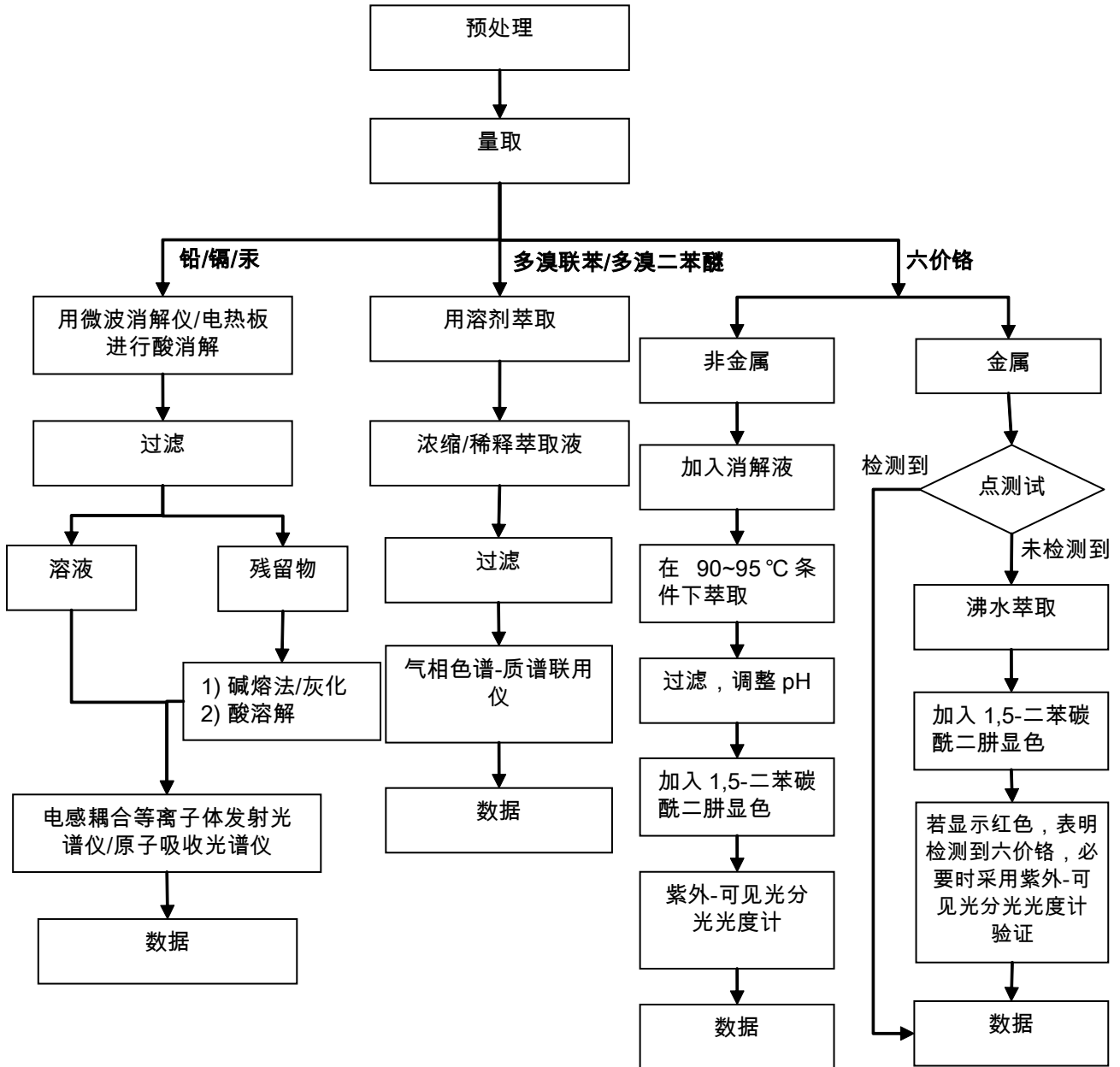
(1) 参考信息: RoHS指令2002/95/EC的重订指令2011/65/EU:
邻苯二甲酸二(2-乙基己基)酯(DEHP), 邻苯二甲酸丁酯苄酯(BBP)和邻苯二甲酸二丁酯(DBP) 被列为需优先进行风险评估和考虑进行限制的物质。

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附件

RoHS 测试流程图

- 1) 分析人员: 曹阳 / 余晓璐
- 2) 项目负责人: 余奕东 / 魏红
- 3) 样品按照下述流程被完全消解 (六价铬和多溴联苯/多溴二苯醚测试除外)。

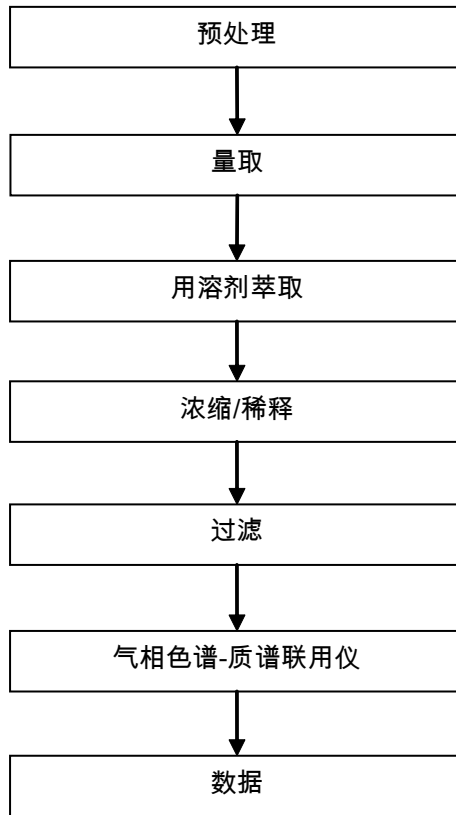


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附件

HBCDD 测试流程图

- 1) 分析人员: 余晓璐
- 2) 项目负责人: 魏红

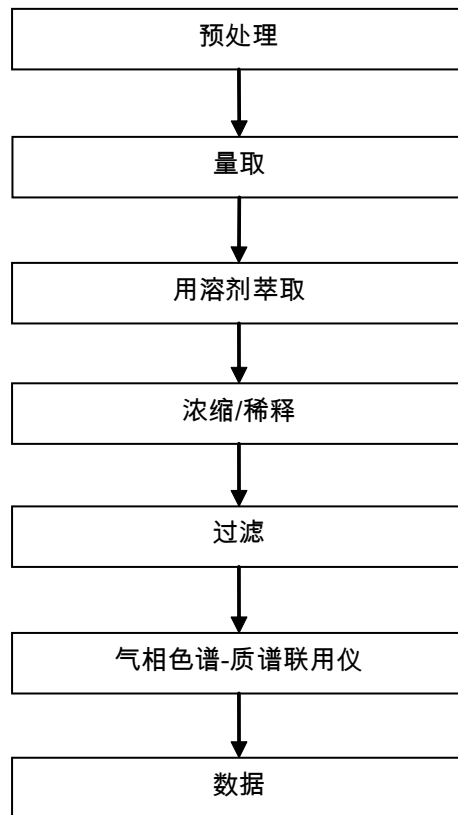


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附件

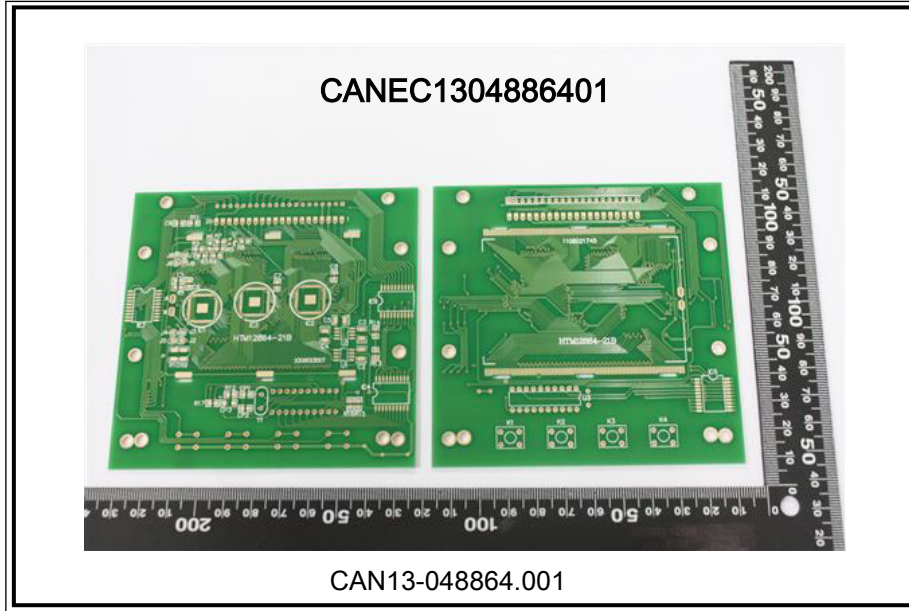
Phthalates 测试流程图

- 1) 分析人员: 刘琼
- 2) 项目负责人: 魏红



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*** 报告完 ***

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