



中国认可  
国际互认  
检测  
TESTING  
CNAS L13752



Access to the World

# Test Report

No.: EGZ2204260112C00101RM1

Date: May. 07, 2022

Page 1 of 8

**Applicant** : RENERGY MICRO-TECHNOLOGIES(SHENZHEN)CO.,LTD  
**委托单位** : 深圳市锐能微科技有限公司  
**Address** : ROOM 401、402,BUILDING5,SHENZHEN SOFTWARE INDUSTRY BASE,NO.13  
HAITIAN 1ST ROAD,NANSHAN DISTRICT,SHENZHEN  
**地 址** : 深圳市南山区深圳软件产业基地第 5 栋裙楼 401、402 室

**Sample Name** : Chip  
**样品名称** : 芯片  
**Model**  
**型号** : RN8207D

**Received Date** : Apr. 26, 2022  
**接收日期** : 2022 年 04 月 26 日  
**Test Period** : Apr. 26, 2022~ May. 05, 2022  
**检测日期** : 2022 年 04 月 26 日~2022 年 05 月 05 日  
**Revise Date** : May. 07, 2022  
**修订日期** : 2022 年 05 月 07 日

**Test Requested** : As requested by client, according to RoHS Directive(EU) 2015/863 amending Annex II to Directive 2011/65/EU, to determine:  
**检测要求**

根据客户要求, 依据欧盟 RoHS 指令 2011/65/EU 附录 II 的修订指令(EU) 2015/863, 检测以下项目:

- 1) the content of Lead(Pb), Cadmium (Cd) and Mercury(Hg) in the submitted sample;  
样品中的铅(Pb), 镉(Cd)和汞(Hg)的含量;
- 2) the content of Hexavalent Chromium(Cr(VI)) in the submitted sample;  
样品中的六价铬(Cr(VI))的含量;
- 3) the content of Polybrominated Biphenyls(PBBs) and Polybrominated Diphenyl-Ethers(PBDEs) in the submitted sample;  
样品中的多溴联苯(PBBs)以及多溴二苯醚(PBDEs)的含量;
- 4) the content of Bis(2-ethylhexyl)phthalate(DEHP), Dibutyl phthalate(DBP), Benzylbutyl phthalate(BBP), and Diisobutyl phthalate(DIBP) in the submitted sample.  
样品中的邻苯二甲酸二(2-乙基己)酯(DEHP)、邻苯二甲酸二丁酯(DBP)、邻苯二甲酸丁苯酯(BBP)和邻苯二甲酸二异丁酯(DIBP)的含量。

Test results are only responsible for delivered samples. This test report is issued by the company and is intended for your exclusive use. This test report includes all of the testes requested by you and the results thereof based upon the information that you provided. You have 30 days from data of issuance of this test report to notify us of any error or omission caused by our negligence. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



# Test Report

No.: EGZ2204260112C00101RM1

Date: May. 07, 2022

Page 2 of 8

**Test Results** : Please refer to next page (s).  
**检测结果** : 请参看随后页面。

**Executive Summary:**  
**执行测试总结:**

STANDARD 标准	CONCLUSION 结论
RoHS Directive(EU) 2015/863 amending Annex II to Directive 2011/65/EU 欧盟 RoHS 指令 2011/65/EU 附录 II 的修订指令(EU) 2015/863	PASS 合格



Signed for and on behalf of  
EMTEK(Guangzhou) Co., Ltd.

Prepared by: Lemon  
Yan Ruixuan, Lemon  
Assistant engineer

Reviewed by: Ethan  
Sun Wei, Ethan  
Technical supervisor

Approved by: Jay Yu  
Yu Chunhua, Jay Yu  
Authorized signatory  
May. 07, 2022



Test results are only responsible for delivered samples. This test report is issued by the company and is intended for your exclusive use. This test report includes all of the testes requested by you and the results thereof based upon the information that you provided. You have 30 days from data of issuance of this test report to notify us of any error or omission caused by our negligence. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



# Test Report

No.: EGZ2204260112C00101RM1

Date: May. 07, 2022

Page 3 of 8

## Test Sample List:

检测样品清单:

Sample No. 样品编号	Sample Description 样品描述
1	Black chip 黑色芯片

## Test Results:

检测结果:

Test Method :

检测方法:

- 1) to refer to IEC 62321-5: 2013, determine the Lead, Cadmium content by ICP-OES.  
参照 IEC 62321-5: 2013, 用 ICP-OES 测定铅、镉的含量。
- 2) to refer to IEC 62321-4: 2013+A1:2017, determine the Mercury content by ICP-OES.  
参照 IEC 62321-4: 2013+A1:2017, 用 ICP-OES 测定汞的含量。
- 3) to refer to IEC 62321-7-2:2017, determine the Hexavalent Chromium content by UV-VIS.  
参照 IEC 62321-7-2:2017, 用 UV-VIS 测定六价铬的含量。
- 4) to refer to IEC 62321-6: 2015, determine the Polybrominated Biphenyls(PBBs) and Polybrominated Diphenyl- Ethers(PBDEs) by GC-MS.  
参照 IEC 62321-6: 2015, 用 GC-MS 测定多溴联苯(PBBs)和多溴二苯醚(PBDEs)的含量。
- 5) to refer to IEC 62321-8:2017, determine the Bis(2-ethylhexyl)phthalate (DEHP), Dibutyl phthalate(DBP), Benzylbutyl phthalate(BBP) and Diisobutyl phthalate(DIBP) by GC-MS.  
参照 IEC 62321-8:2017, 用 GC-MS 测定邻苯二甲酸二(2-乙基己)酯(DEHP)、邻苯二甲酸二丁酯(DBP)、邻苯二甲酸丁苯酯(BBP)和邻苯二甲酸二异丁酯(DIBP)的含量。

Analyte 被分析物	Test Result (mg/kg) 检测结果	MDL (mg/kg)	Limit 限值 (mg/kg)
	1		
Lead (Pb) 铅 (Pb)	ND	2	1000
Cadmium (Cd) 镉 (Cd)	ND	2	100
Mercury (Hg) 汞 (Hg)	ND	2	1000
Hexavalent Chromium (Cr(VI)) 六价铬 (Cr(VI))	ND	8	1000

Test results are only responsible for delivered samples. This test report is issued by the company and is intended for your exclusive use. This test report includes all of the testes requested by you and the results thereof based upon the information that you provided. You have 30 days from data of issuance of this test report to notify us of any error or omission caused by our negligence. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



## Test Report

No.: EGZ2204260112C00101RM1

Date: May. 07, 2022

Page 4 of 8

Analyte 被分析物	Test Result (mg/kg) 检测结果	MDL (mg/kg)	Limit 限值 (mg/kg)
	1		
Polybrominated Biphenyls (Mono – Deca) (PBBs) 多溴联苯 (1 – 10) (PBBs)	ND	--	1000
Monobromobiphenyl 一溴联苯	ND	5	--
Dibromobiphenyl 二溴联苯	ND	5	--
Tribromobiphenyl 三溴联苯	ND	5	--
Tetrabromobiphenyl 四溴联苯	ND	5	--
Pentabromobiphenyl 五溴联苯	ND	5	--
Hexabromobiphenyl 六溴联苯	ND	5	--
Heptabromobiphenyl 七溴联苯	ND	5	--
Octabromobiphenyl 八溴联苯	ND	5	--
Nonabromobiphenyl 九溴联苯	ND	5	--
Decabromobiphenyl 十溴联苯	ND	5	--
Polybrominated Diphenylethers (Mono – Deca) (PBDEs) 多溴二苯醚 (1 – 10) (PBDEs)	ND	--	1000
Monobromodiphenyl ether 一溴二苯醚	ND	5	--
Dibromodiphenyl ether 二溴二苯醚	ND	5	--
Tribromodiphenyl ether 三溴二苯醚	ND	5	--
Tetrabromodiphenyl ether 四溴二苯醚	ND	5	--
Pentabromodiphenyl ether 五溴二苯醚	ND	5	--
Hexabromodiphenyl ether 六溴二苯醚	ND	5	--
Heptabromodiphenyl ether 七溴二苯醚	ND	5	--
Octabromodiphenyl ether 八溴二苯醚	ND	5	--
Nonabromodiphenyl ether 九溴二苯醚	ND	5	--
Decabromodiphenyl ether 十溴二苯醚	ND	5	--
Bis(2-ethylhexyl)phthalate(DEHP) 邻苯二甲酸二(2-乙基己)酯(DEHP)	ND	30	1000
Dibutyl phthalate(DBP) 邻苯二甲酸二丁酯(DBP)	ND	30	1000
Benzylbutyl phthalate(BBP) 邻苯二甲酸丁苄酯(BBP)	ND	30	1000
Diisobutyl phthalate (DIBP) 邻苯二甲酸二异丁酯(DIBP)	ND	30	1000

Test results are only responsible for delivered samples. This test report is issued by the company and is intended for your exclusive use. This test report includes all of the testes requested by you and the results thereof based upon the information that you provided. You have 30 days from data of issuance of this test report to notify us of any error or omission caused by our negligence. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



# Test Report

No.: EGZ2204260112C00101RM1

Date: May. 07, 2022

Page 5 of 8

Note: (1). mg/kg = milligram per kilogram = ppm MDL = Method Detection Limit  
备注: mg/kg = 毫克/千克 = 百万分之一 MDL = 方法检测限  
ND = Not Detected (Less than MDL)  
ND = 未检测到 (小于 MDL)  
(2). Specimens, which requested to determine Cadmium, Mercury and Lead Content, have been digested thoroughly.  
对于测试铅、镉、汞的样品已完全消解。

**Declaration: Report EGZ2204260112C00101R was repealed and replaced by Report EGZ2204260112C00101RM1.**

**声明: 报告 EGZ2204260112C00101R 作废, 由报告 EGZ2204260112C00101RM1 所取代。**

Test results are only responsible for delivered samples. This test report is issued by the company and is intended for your exclusive use. This test report includes all of the testes requested by you and the results thereof based upon the information that you provided. You have 30 days from data of issuance of this test report to notify us of any error or omission caused by our negligence. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



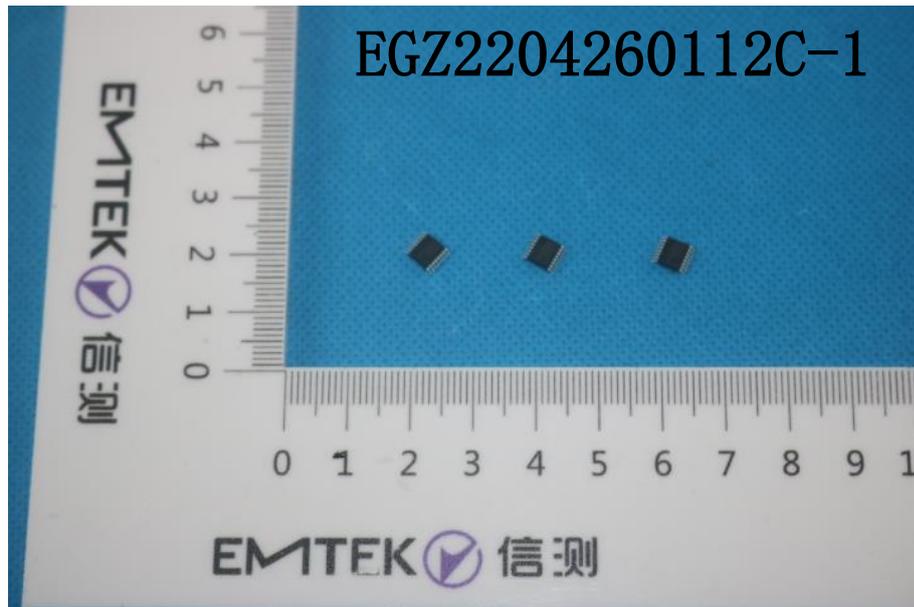
# Test Report

No.: EGZ2204260112C00101RM1

Date: May. 07, 2022

Page 6 of 8

**Sample Photo:**  
样品照片:



Test results are only responsible for delivered samples. This test report is issued by the company and is intended for your exclusive use. This test report includes all of the testes requested by you and the results thereof based upon the information that you provided. You have 30 days from data of issuance of this test report to notify us of any error or omission caused by our negligence. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



# Test Report

No.: EGZ2204260112C00101RM1

Date: May. 07, 2022

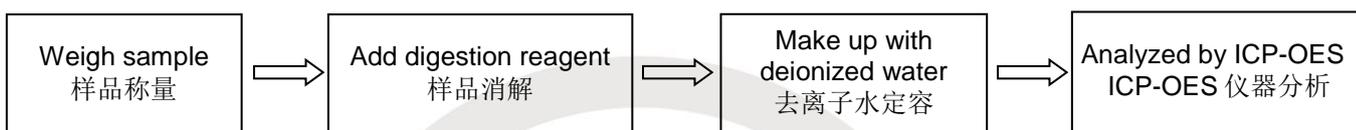
Page 7 of 8

## Test Flowchart:

### 检测流程图:

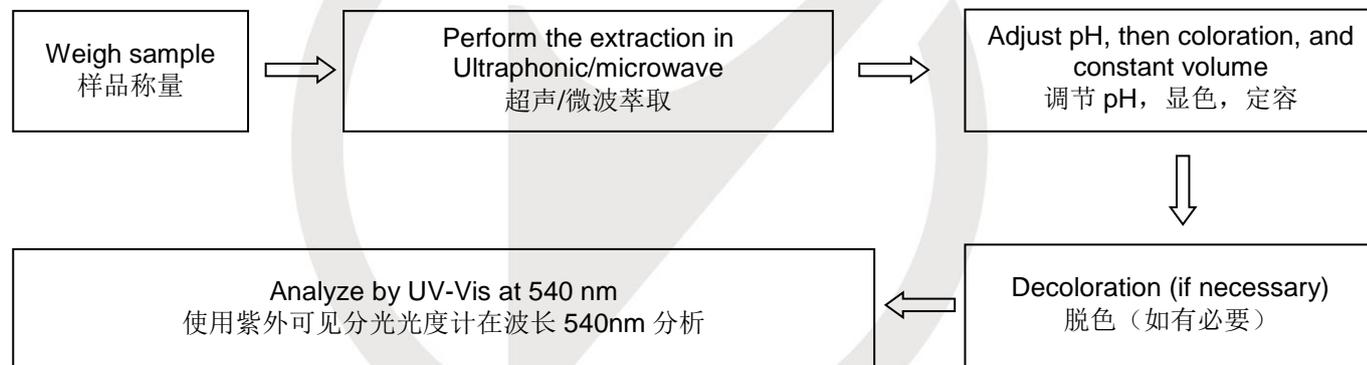
#### Pb/Cd/Hg Test Process :

#### Pb/Cd/Hg 检测流程:



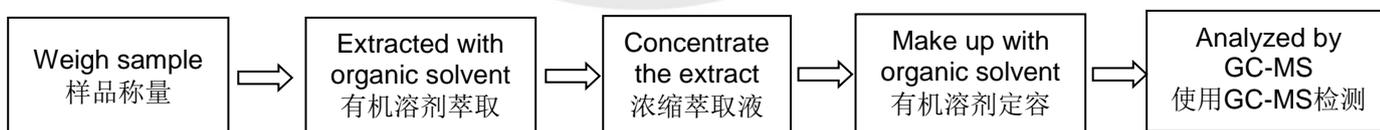
#### Cr(VI) Test Process:

#### Cr(VI) 检测流程:



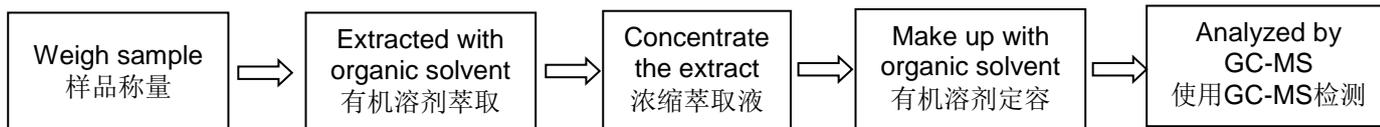
#### PBBs & PBDEs Test Process:

#### PBBs & PBDEs 检测流程:



#### DEHP, DBP, BBP, DIBP Test Process:

#### DEHP, DBP, BBP 和 DIBP 检测流程:



\*\*\* End of Report \*\*\*

\*\*\* 报告结束 \*\*\*

Test results are only responsible for delivered samples. This test report is issued by the company and is intended for your exclusive use. This test report includes all of the testes requested by you and the results thereof based upon the information that you provided. You have 30 days from data of issuance of this test report to notify us of any error or omission caused by our negligence. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



# Test Report

No.: EGZ2204260112C00101RM1

Date: May. 07, 2022

Page 8 of 8

## 声明 Statement

- 1.本检测报告首页所列信息中除样品来源、接样日期、检测日期、检测结果和检测结论外，均由委托方提供，委托方对样品的代表性和资料的真实性负责，本实验室不承担任何相关责任。  
The information as listed on the first page of this test report was all provided by the client except the sample from, date received, test period, test results and test conclusion. The client shall be responsible for the representativeness of sample and authenticity of materials, for which EMTEK shall bear no responsibilities.
- 2.本检测报告以实测值进行符合性判定，未考虑不确定度所带来的风险，特别约定、标准或规范中有明确规定的除外。此种判定方式所带来的风险由客户自行承担，本实验室不承担相关责任。  
The judgment method of determining the conformity in this test report is according to the measured value without considering the risk caused by uncertainty, unless otherwise clearly stipulated in special agreement, standard or specification. The client shall assume the risk caused by the judgment method, and EMTEK shall not bear related responsibilities.
3. 检测报告无批准人签字及“检验检测专用章”无效，未经本实验室书面同意，不得整体或部分复制本报告。  
The test report is effective only with both signature and specialized stamp. Without written approval of EMTEK, this report can't be reproduced in full or in part.
- 4.本检测报告的检测结果仅对送测样品负责，未加盖资质认定标志的检测报告不对社会具有公证证明作用，对于检测数据、结果的使用，所产生的直接或间接损失及一切法律后果，本实验室不承担任何经济和法律后果。  
This test data is only responsible for the tested sample. The data and results provided by the report without CMA accreditation are not to prove to the society, and EMTEK is not responsible for any economic and legal responsibility for the use of the test data, the direct or indirect losses resulting from the use of the test and all legal consequences.
- 5.本检测报告中检测项目标注有特殊符号则该项目不在本实验室资质认定能力范围内，该项目检测结果仅作为客户委托、科研、教学或内部质量控制等目的使用。  
The test items are marked with special symbols in the report is out of the scope of CMA accreditation. The test result only used for client's requirement, scientific researching ,teaching or internal quality control.
- 6.其它声明请查阅报告页脚及书面报告末页。  
For other statements, please refer to the footer of the report.

Test results are only responsible for delivered samples. This test report is issued by the company and is intended for your exclusive use. This test report includes all of the testes requested by you and the results thereof based upon the information that you provided. You have 30 days from data of issuance of this test report to notify us of any error or omission caused by our negligence. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



## 签发测试报告条款 Conditions of Issuance of Test Reports

1. 广州信测标准技术服务有限公司（以下简称[本公司]）为提供符合下述条款的测试和报告，而接受有关样品和货品。本公司基于下述条款提供服务，下述条款为本公司与申请服务的个人，企业或公司（以下简称[客户]）的协议。  
All samples and goods are accepted by the EMTEK(Guangzhou) Co., Ltd. (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the Company and any person, firm or company requesting its services (the "Clients").
2. 由此测试申请所发出的任何报告（以下简称[报告]），本公司会严格为客户保密。未经本公司的书面同意，报告的整体或部分不得复制，也不得用于广告或授权的其他用途。然而，客户可以将本公司印制的报告或认可的副本，向其客户、供货商或直接相关的其他人出示或提交。除非相关政府部门、法律或法规要求，否则未经客户同意，本公司不得将报告内容向任何第三方讨论或披露。  
Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
3. 除非相关政府部门、法律或法院要求，否则未经公司预先书面同意，本公司毋庸，也并无义务到法院对有关报告作证。  
The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
4. 如果本公司确定报告被不当地使用，本公司保留撤回报告的权利，并有权要求其它适当的额外赔偿。  
In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
5. 本公司接受样品进行测试的前提是，该测试报告不能作为针对本公司法律行动的依据。  
Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
6. 如因使用本公司中心任何报告内的资料，或任何传播信息所描述与之有关的测试或研究导致的任何损失或损害，本公司概不负责。  
The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
7. 若需要在法院审理程序或者仲裁过程中使用测试报告，客户必须在提交测试样品前将该意图告知本公司。  
Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
8. 该测试报告的支持数据和信息本公司保存 10 年。个别评审机构有特殊要求的，检测数据和报告的保存期可依情况变动。一旦超过上述提交的保存期限，数据和信息将被处理掉。任何情况下，本公司不必提供任何被处理的过期数据或信息。即使本公司事先被告知可能会发生相关的损害，本公司在任何情况下也不必承担任何损害，包括（但不限于）补偿性赔偿、利润损失、数据遗失、或任何形式的特殊损害、附带损害、间接损害、从属损害或任何违反约定、违反承诺、侵权（包括疏忽）、产品责任或其他原因的惩罚性损害。  
Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of ten years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

