

## 验证报告

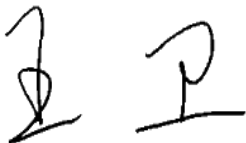
No. SHAEC1607293302

日期: 2016年04月27日 第1页,共8页

上海庆科信息技术有限公司  
上海市普陀区金沙江路2145弄5号9楼

样品名称: EMW3082  
SGS工作编号: SP16-012547 - SUZ  
测试基本型号: EMW3082  
客户参考信息: EMW3082A  
样品接收日期: 2016年04月14日  
验证周期: 2016年04月14日 - 2016年04月22日  
验证要求: 参考欧盟RoHS指令2002/95/EC的重订指令2011/65/EU。  
验证方法: 请参见后续页。  
验证结果: 请参见后续页。  
验证结论: 依据对所提供样品的相关验证, 铅、汞、镉、六价铬、多溴联苯(PBBs)、多溴二苯醚(PBDEs)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。  
备注: 本报告测试数据仅代表所测试样品的结果, 未经实验室书面授权, 不得部分复制本报告。

通标标准技术服务(上海)有限公司  
授权签名



Terry Wang 王卫  
批准签署人



SGS-CSTC (Shanghai) Technical Services (Shanghai) Co., Ltd.  
Testing Center-Chemical Laboratory

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## 验证报告

No. SHAEC1607293302

日期: 2016年04月27日 第2页,共8页

验证方法:

1. 参考IEC 62321-2:2013, 拆分申请者提供的成品。
2. 参考IEC 62321-1:2013, 仅对本报告照片中标识的样品进行了下列测试分析。
  - (1) 参考IEC 62321-3-1: 2013, 用能量色散型X射线荧光分析仪器进行筛选
  - (2) 湿法化学测试方法
    - a. 参考IEC 62321-5:2013, 用ICP-OES测定镉的含量
    - b. 参考IEC 62321-5:2013, 用ICP-OES测定铅的含量
    - c. 参考IEC 62321-4:2013, 用ICP-OES测定汞的含量
    - d. 参考IEC 62321-7-1:2015和IEC 62321:2008, 用紫外-可见分光光度计比色法测定六价格的含量
    - e. 参考IEC 62321-6:2015, 用GC-MS测定多溴联苯和多溴二苯醚的含量



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样品编号	样品描述	清单编号	限用物质	EDXRF测试结果(1)	化学测试结果(2) (mg/kg)	EU RoHS结论	样品提交/再次提交日期
1	PCB上白色塑料标签		Pb Cd Hg Cr(VI)▼ PBBs PBDEs	BL BL BL BL BL BL	--- --- --- --- --- ---	符合 符合 符合 符合 符合 符合	14 Apr 2016
2	PCB上银色金属保护盖		Pb Cd Hg Cr(VI)▼ PBBs PBDEs	BL BL BL IN --- ---	--- --- --- ND --- ---	符合 符合 符合 符合 --- ---	14 Apr 2016
3	PCB上银色晶振本体		Pb Cd Hg Cr(VI)▼ PBBs PBDEs	BL BL BL BL BL BL	--- --- --- --- --- ---	符合 符合 符合 符合 符合 符合	14 Apr 2016
4	PCB上灰色电容本体		Pb Cd Hg Cr(VI)▼ PBBs PBDEs	BL BL BL BL BL BL	--- --- --- --- --- ---	符合 符合 符合 符合 符合 符合	14 Apr 2016



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样品编号	样品描述	清单编号	限用物质	EDXRF测试结果(1)	化学测试结果(2) (mg/kg)	EU RoHS结论	样品提交/再次提交日期
5	PCB上黑色IC本体		Pb Cd Hg Cr(VI)▼ PBBs PBDEs	BL BL BL BL BL BL	--- --- --- --- --- ---	符合 符合 符合 符合 符合 符合	14 Apr 2016
6	PCB上银色金属焊锡		Pb Cd Hg Cr(VI)▼ PBBs PBDEs	BL BL BL BL --- ---	--- --- --- --- --- ---	符合 符合 符合 符合 --- ---	14 Apr 2016
7	蓝色PCB本体		Pb Cd Hg Cr(VI)▼ PBBs PBDEs	BL BL BL BL IN IN	--- --- --- --- ND ND	符合 符合 符合 符合 符合 符合	14 Apr 2016



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# 验证报告

No. SHAEC1607293302

日期: 2016年04月27日 第5页,共8页

## 备注:

- (1) (a) 对于限用物质是PBBs和PBDEs, 其结果显示的是总Br含量; 限用物质是Cr(VI), 其结果显示的是总Cr含量。
- (b) EDXRF所得的测试结果只作初步筛选, 如果EDXRF结果超出IEC62321-3-1:2013所规定的警戒范围, 我们建议客户用更精确的化学测试方法测试样品, 如用ICP-OES测试Cd, Pb, Hg; 用UV-Vis测试Cr(VI); 用GC-MS测试PBBs和PBDEs(单位: mg/kg)。

元素	聚合物	金属	复合材料
Cd	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$BL \leq (70-3\sigma) < X < (130+3\sigma) \leq OL$	$LOD < X < (150+3\sigma) \leq OL$
Pb	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Hg	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (700-3\sigma) < X < (1300+3\sigma) \leq OL$	$BL \leq (500-3\sigma) < X < (1500+3\sigma) \leq OL$
Br	$BL \leq (300-3\sigma) < X$	--	$BL \leq (250-3\sigma) < X$
Cr	$BL \leq (700-3\sigma) < X$	$BL \leq (700-3\sigma) < X$	$BL \leq (500-3\sigma) < X$

(c) BL = 低于限度, OL = 超出限度, IN = 不确定, LOD = 检测极限值, -- = 未规定。

(d) 对于复合材料, XRF筛选测试RoHS元素所得数据可能与样品中实际含量不同。

(2) (a) mg/kg = 0.0001%, MDL = 方法检测限, ND = 未检出 (低于MDL), --- = 未检测, - = 无清单编号。

(b) 化学测试方法的表达单位和方法检测限

测试项目	Pb	Cd	Hg
单位	mg/kg	mg/kg	mg/kg
方法检测限	10	10	10

任何一种PBBs和PBDEs的方法检测限是100mg/kg;  
 聚合物和复合材料样品中Cr(VI)的方法检测限是10mg/kg;  
 金属样品中Cr(VI)的方法检测限是0.10µg/cm²。

- (c) ▼ = 金属样品中
- 当六价格的浓度高于0.13 µg/cm²时, 样品为阳性, 即含有六价格;
  - 当六价格的浓度为ND (低于0.10 µg/cm²) 时, 样品为阴性, 即未检测到六价格;
  - 当六价格的浓度介于0.10 µg/cm²与0.13 µg/cm²之间时, 无法直接判定是否检测到六价格, 因不同个体的样品表面差异可能会影响测定结果;

由于未获知样品的存储条件和生产日期, 样品的六价格测试结果仅能代表测试时样品含六价格的状态。

IEC 62321系列等同于 EN 62321系列

<[http://www.cenelec.eu/dyn/www/?p=104:30:1742232870351101:::FSP\\_ORG\\_ID,FSP\\_LANG\\_ID:1258637\\_25](http://www.cenelec.eu/dyn/www/?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637_25)>



SGS-CSTC (Shanghai) Technical Services Co., Ltd.  
 Testing Center-Chenhai Laboratory

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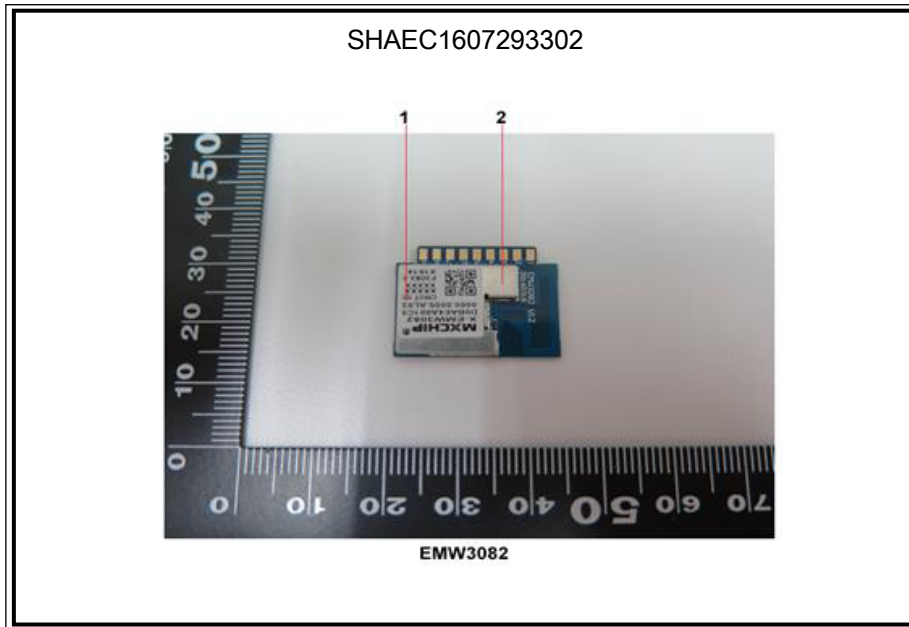
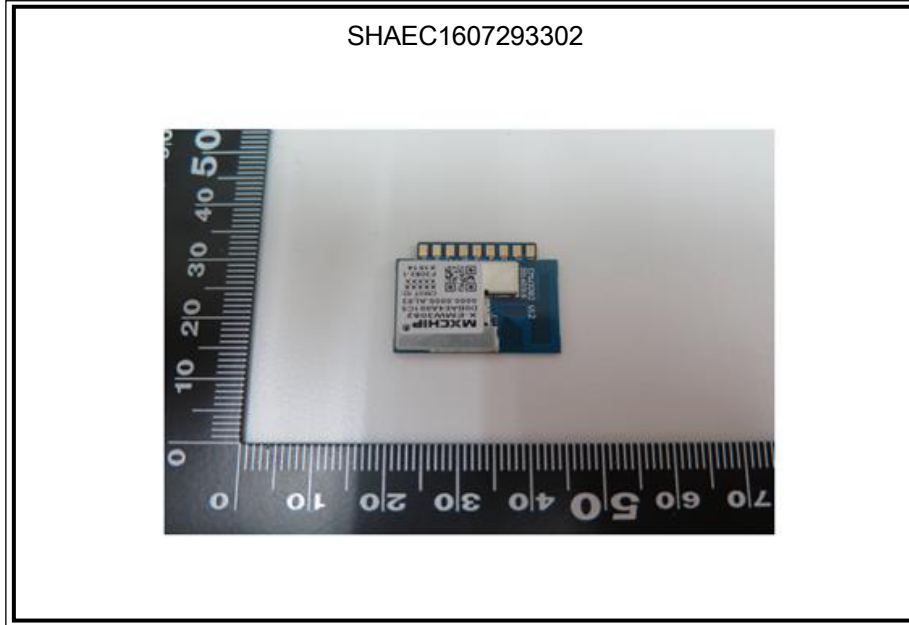
(3) 根据申请商申明, 型号“EMW3082”的材质与型号“EMW3082A”的相同, 其测试结果用于替代型号“EMW3082A”的测试结果。申请公司将承担所有的差异和风险。

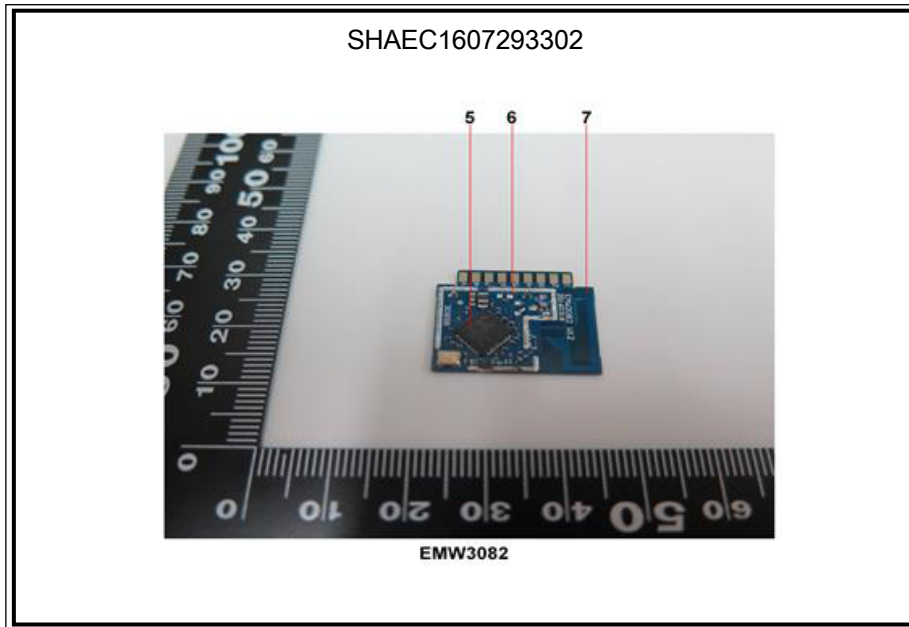
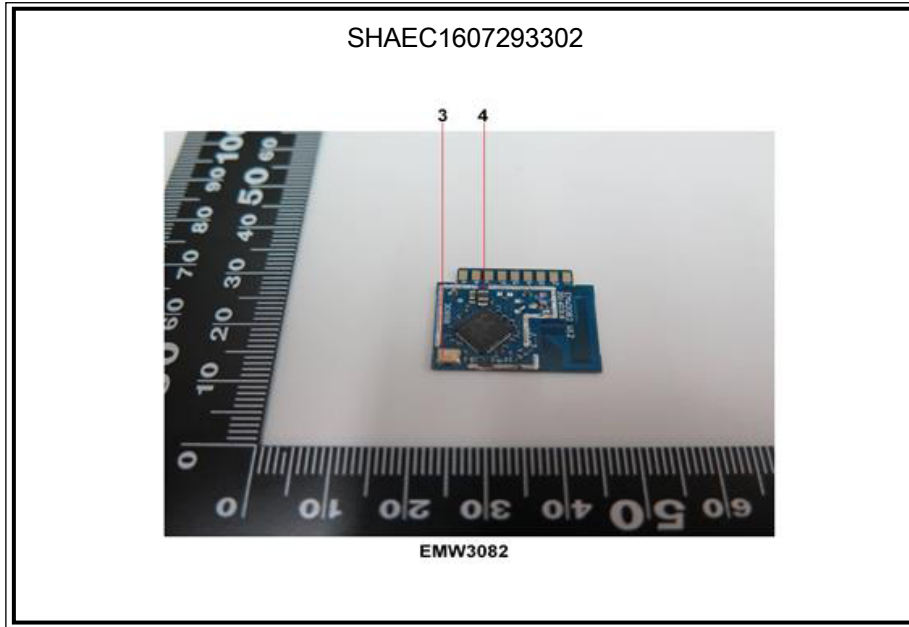


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