文件编号 Document No.	ESP-00-2-007-03	文件名称 Document Name	产品/工艺变更通知 Product/Process Change Notice (PCN)
文件版本 Document Version	1.1	保存期限 Retention Period	3 年 3 years

乐鑫模组包装变更通知

Packaging Changes to Espressif Modules

PCN 编号 PCN No.	PCN-03-20190215	提出日期 Issue Date of PCN	2019-02-15
产品名称 Product Name	Espressif Modules	变更日期 Proposed Date of Change	2019-02-15
封装类型/尺寸 Package Type/Size	Module	首次出货日期 Proposed Date of First Shipment	According to FIFO, it's expected on March 8, 2019.

客户批准/Customer Consent：☐需要批准/Approval Required ☑通知，无需批准/Notification, Approval Not Required

变更等级/Classification of Change: ☐主要变更/Major ☑轻微变更/Minor

变更原因/Reason for Change:

1） 乐鑫信息科技（上海）有限公司更名为乐鑫信息科技（上海）股份有限公司，更新包装管理规范中涉及的相关内容，增大字体提升辨识度。The company name has been changed from "ESPRESSIF SYSTEMS (SHANGHAI) PTE., LTD." to "ESPRESSIF SYSTEMS (SHANGHAI) CO., LTD.", so the packaging information had to be updated accordingly. The changed part appears in bigger font for easy recognition.

2） 规范现有的包装方式，减少多余标签，依据标准增加 ESD 警示标识、ESD 警示语、MSL 等级标签。Espressif wanted to standardize the existing packaging methods, remove any redundant labels, add an ESD (Electrostatic-Sensitive Device) warning label and an MSL (Moisture Sensitivity Level) label, according to the current market standards.

3） 整合之前产品的分类标签，依据多国认证标准规范镭雕标签格式。应国家无线电委员会的要求，增加公司中文全名。Espressif wanted to integrate the previous product classification labels with the new ones, and standardize the format of the laser-engraving label, according to the multi-national certification standards. Espressif also had to add the company's full name in Chinese, at the request of the State Radio Regulatory Commission of the People's Republic of China.

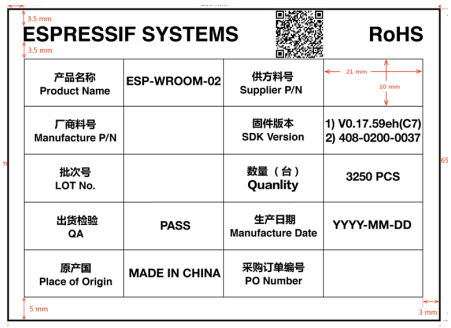
4） 规范 PCB 丝印。Standardized the PCB silkscreen printing.

5） 规范产品型号。Standardized the product models.

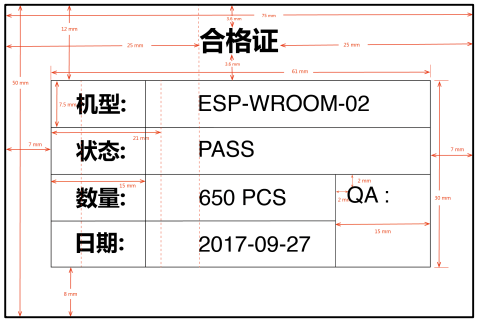
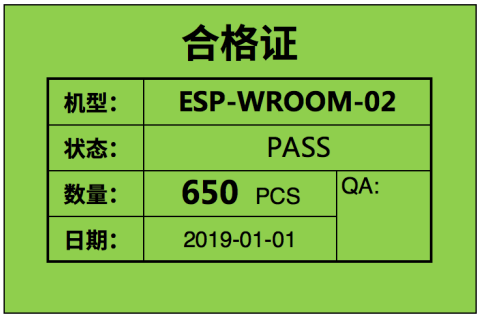
详情请见后续变更描述。Please, see the following in-depth description of the change to find out all the details.

变更描述/Description of Change:

1. 物料标识卡变更前后对比/Material Identification Card before and after the change:

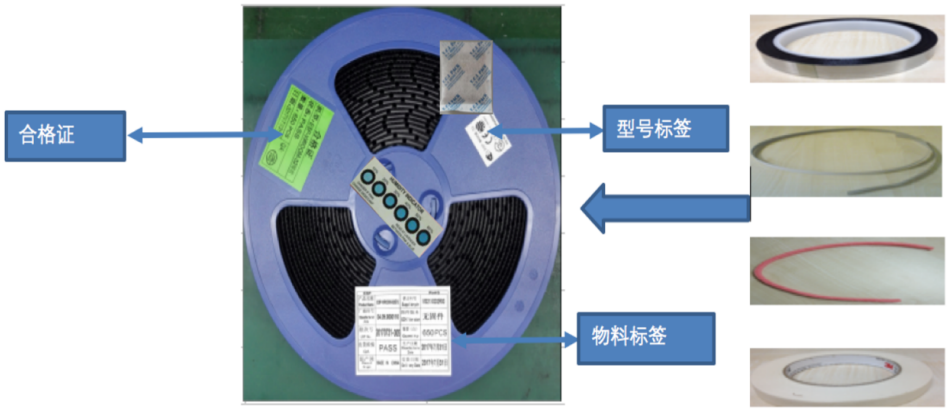
变更前/Before the Change (100mm*75mm)	变更后/After the Change (75mm*100mm)
	

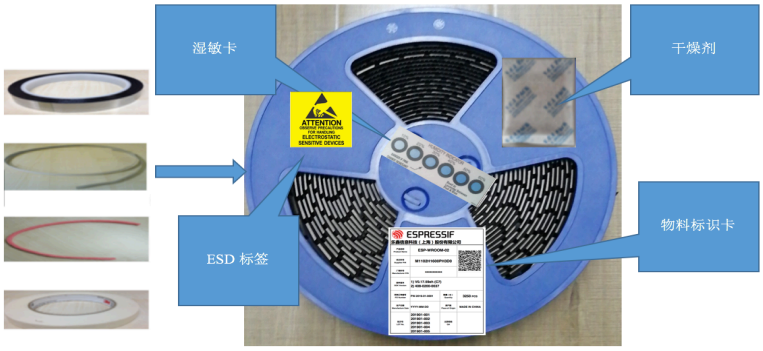
2. 合格证/Certificate：

变更前/Before the Change	变更后/After the Change
	

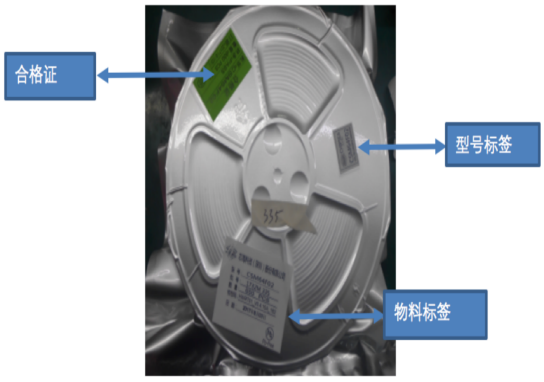
变更字体，增加辨识度。Changed the font size for easy recognition.

3. 包装方式变更/Package labeling before and after the change：

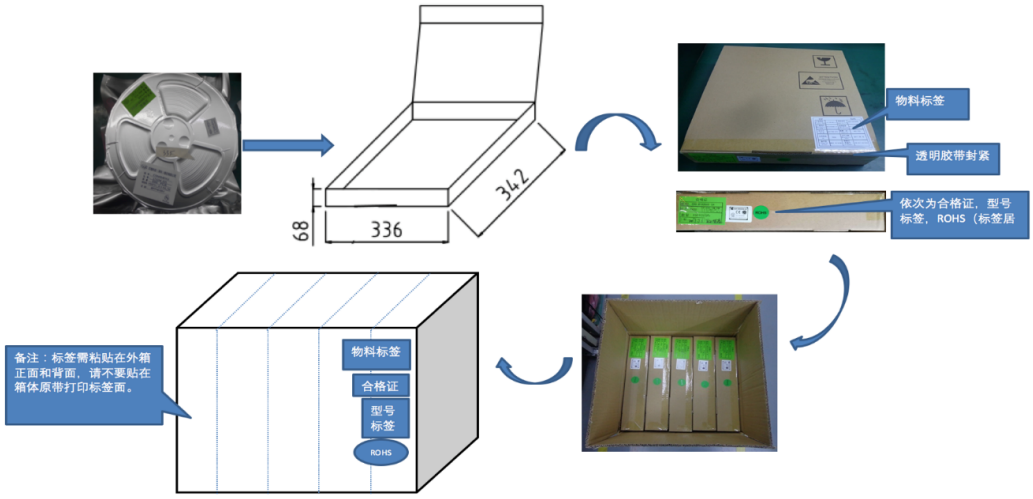
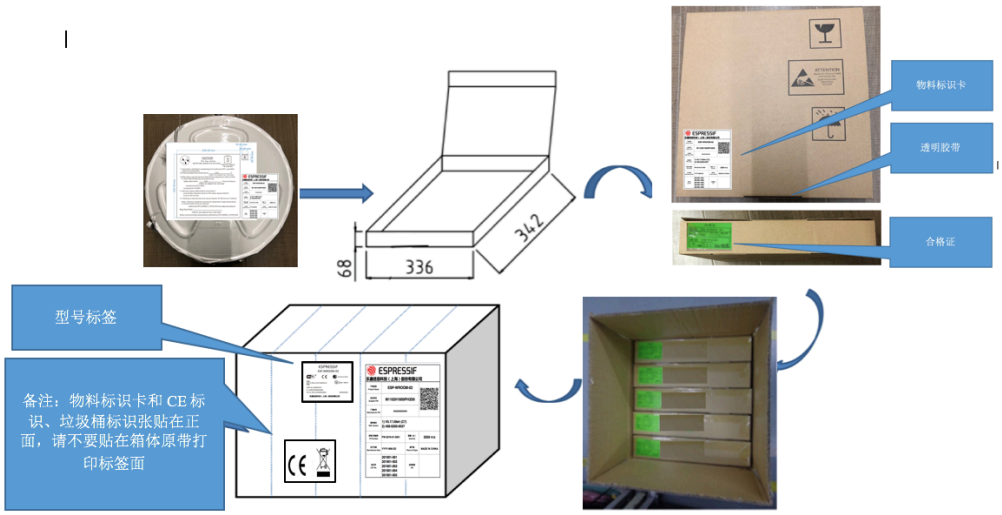
变更前/Before the Change


变更后/After the Change
 增加 ESD 标签以警示产品为 ESD 敏感器件。Added an ESD label to denote the product's susceptibility to electrostatic discharge.

4. 真空包装/Vacuum labeling before and after the change：

变更前/Before the Change	变更后/After the Change
	 1. 增加 ESD 警示语（含湿敏等级 MSL 3）Added an ESD warning label (including MSL 3) 2. 增加 ESD 标签，RoHS 标签 Added an ESD label and a RoHS label 3. 粘贴物料标识卡 Pasted the Marterial Identification Card 4. 不再张贴合格证、型号标签。Removed the certificate and model label. 形式：张贴标签或直接印刷在 ESD 袋上。 Form: the label is pasted or directly printed on the ESD bag.

5. 包装方式/Packaging:

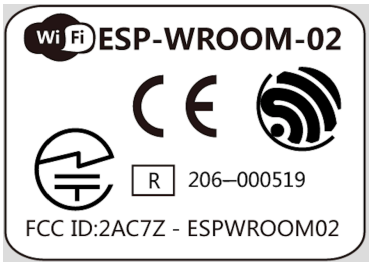
变更前/Before the Change

变更后/After the Change
 增加欧盟要求的 CE logo、垃圾桶标识、完整的型号标签。Added the CE logo, the crossed-out wheeled bin symbol, and completed the model label, according to the requirements of the European Union. 形式：张贴标签或印刷在外箱上。Form: the labels are pasted or printed on the outer box.

6. 出货检验报告将从原有的中文版本变更为中英文对照版本。

   The shipment inspection report will be changed from the current monolingual (Chinese-only) version to a bilingual version (Chinese and English).

7. 型号标签/Model Label:

7.1：ESP-WROOM-02

变更前/Before the Change	变更后/After the Change
国内版/For the Chinese Market： 国际版/For the international market：  	 ● 整合全部认证，增加公司变更后的中文全名。Integrated all certifications and added the full name of the company in Chinese. ● XXXXXXXXXX（10 位）：用于标记客户定制，固件版本。XXXXXXXXXX (10 digits): added a 10-digit number to indicate the customer customization and firmware version of the product.

7.2 ESP32-WROOM-32

变更前/Before the Change	变更后/After the Change
 	 ● 增加公司变更后的中文全名。Added the full name of the company in Chinese. ● XXXXXXXXXX（10 位）：用于标记客户定制，固件版本。XXXXXXXXXX (10 digits): added a 10-digit number to indicate the customer customization and firmware version of the product.

7.3 ESP32-WROVER（I）

变更前/Before the Change	变更后/After the Change
	 ● 增加公司变更后的中文全名。Added the full name of the company in Chinese. ● 补充认证 ID。Added the certification ID. ● 增加 XXXXXXXXXX（10 位）：用于标记客户定制固件版本。XXXXXXXXXX (10 digits): added a 10-digit number to indicate the customer customization and firmware version of the product.

7.4 ESP32-WROVER-B（IB）

变更前/Before the Change	变更后/After the Change
	 ● 增加变更后的中文全名。Added the full name of the company in Chinese. ● QR code 定义不变。The definition of the QR code remains unchanged.

7.5 ESP8089M16

变更前/Before the Change	变更后/After the Change
	 ● 增加变更后的中文全名。Added the full name of the company in Chinese. ● QR code 定义不变。The definition of the QR code remains unchanged.

7.6 ESP-WROOM-02D

变更前/Before the Change	变更后/After the Change
	 ● 增加变更后的公司中文全名 Added the full name of the company in Chinese. ● 规范证书 ID。Standardized the certificate ID. ● QR code 内容变更为：XX（两位预留位）+D/C（4 位）+**MAC 地址（12 位）** The content of the QR code is changed to: XX (two reserved digits) +D/C (4 digits) + MAC address (12 digits).

7.7 ESP-WROOM-02U

变更前/Before the Change	变更后/After the Change
	 ● 增加变更后的公司 ● 中文全名 Added the full name of the company in Chinese. ● 规范证书 ID。Standardized the certificate ID. ● QR code 内容变更为：XX（两位预留位）+D/C（4 位）+**MAC 地址（12 位）** The content of the QR code is changed to: XX (two reserved digits) +D/C (4 digits) + MAC address (12 digits).

7.8 ESP32-WROOM-32D

变更前/Before the Change	变更后/After the Change
	 ● 增加变更后的公司中文全名 Added the full name of the company in Chinese. ● QR code 内容变更为 ：XX（两位预留位）+D/C（4 位）+**MAC 地址（12 位）** The content of the QR code is changed to: XX (two reserved digits) +D/C (4 digits) + MAC address (12 digits).

7.9 ESP32-WROOM-32U

变更前/Before the Change	变更后/After the Change
	 ● 增加变更后的公司中文全名 Added the full name of the company in Chinese. ● 规范认证 logo&ID。Standardized the certification logo & ID. ● QR code 内容变更为：XX（两位预留位）+D/C（4 位）+**MAC 地址（12 位）** The content of the QR code is changed to: XX (two reserved digits) +D/C (4 digits) + MAC address (12 digits).

7.10 ESP32-SOLO-1

变更前/Before the Change	变更后/After the Change
	 ● 增加变更后的公司中文全名. Added the full name of the company in Chinese. ● 补充认证 logo。Added the certification logo. ● QR code 内容变更为 ：XX（两位预留位）

	+D/C（4 位）+**MAC 地址（12 位）** The content of the QR code is changed to: XX (two reserved digits) +D/C (4 digits) + MAC address (12 digits).

7.11 ESP32-PICO-KIT

变更前/Before the Change	变更后/After the Change
	 ● 更新变更后的公司英文全名 Updated the full name of the company in English. ● 补充认证 ID。Added the certification ID.

变更影响/Impact of Change:

1） 外观 Product appearance

2） 交付 Delivery

变更识别方式/ Change Identification Method:

外观检查 Appearance check

变更前后产品处理/:How to Deal with Products:

FIFO 方式，平稳过渡到新的包装规范中。工厂需要一定的备料和切换时间，该变更需要逐步切换。

The FIFO (first-in, first-out) method is adopted to ensure a smooth transition to the new packaging specifications. The factory needs time to prepare the materials for the packaging changes which should, therefore, be implemented on a step-by-step basis.

相关报告/Report(s) Attached:	
☑Related ECN No.:	E2019021501
☐Reliability Report or Plan:	N/A; without design changes
☐Function Test Report:	N/A; without design changes
☐RoHS/HF Test Report:	N/A; without material changes
☐Other Reports (Pls specify):	N/A

邮件订阅

Espressif Email Notifications

乐鑫为注册用户提供电子邮件通知服务，用户可通过乐鑫订阅系统接收技术文档更新、新闻通讯、PCN 等邮件通知。

Espressif sends email notifications of technical documentation changes, along with newsletters, PCNs and other valuable information, to subscribed customers only. If you wish to stay updated on our products and services, please subscribe here.

客户响应要求

Customer Response Requirements

客户须按照如下要求给予 Espressif PCN 反馈：

Customers are required to respond to Espressif, according to the following guidelines, and confirm receipt of the PCN:

主要变更/For Major Changes：

a) 客户须在乐鑫发出 PCN 后的 30 天内告知已收到 PCN。
Customers should confirm receipt of the PCN within 30 calendar days from the date Espressif sends it to them.

b) 如客户未在接收到 PCN 后的 30 天内告知已收到，则视为客户接受变更。
If customers do not confirm receipt of the PCN within 30 calendar days, they will be regarded as having accepted the proposed changes.

c) 客户告知确认收到 PCN 后，如未在 90 天内反馈其他要求，则视为客户接受变更。
After the customers confirm receipt of the PCN, the lack of any additional responses on their part within 90 calendar days constitutes acceptance of the proposed changes.

轻微变更/For Minor Changes：

a) 如客户未在接收到 PCN 后的 7 天内告知已收到，则视为客户接受变更。
If customers do not confirm receipt of the PCN within 7 calendar days, they will be regarded as having accepted the proposed changes.

请反馈至 pcn@espressif.com。

Please send feedback to pcn@espressif.com.

客户批准/确认信息 **Customer Approval/Acknowledgement and Remarks**			
客户公司全称： Customer's Company Name:			
PCN 评审结果/PCN Review Result：	☐批准/Approval ☐不批准/Disapproval ☐需要分析/Further Analysis Required		
客户意见/Comment:			
公司代表人姓名 Representative's Name:		公司代表人职责 Representative's Job Title:	
公司代表人签名 Representative's Signature:		日期 Date:	