

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

ESP8285N08 及 ESP8285H08 Flash 和 DAF 变更
Flash and DAF Change for ESP8285N08 and ESP8285H08

PCN 编号 PCN No.	PCN-03-20191017	提出日期 Issue Date of PCN	2019/10/17
产品名称 Product Name	ESP8285N08 ESP8285H08	变更日期 Proposed Date of Change	2019/11/17
封装类型/尺寸 Package Type/Size	QFN 5X5	首次出货日期 Proposed Date of First Shipment	2019/12/17

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/Objectives for Change:

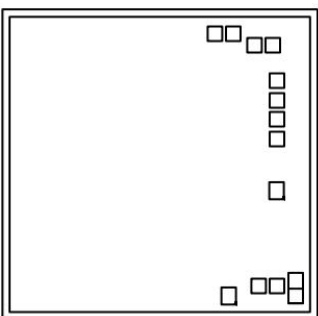
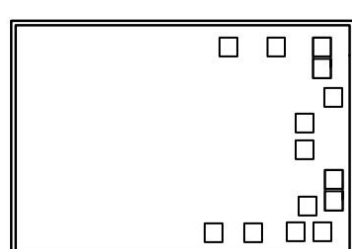
Item	Objectives for Change
Flash	供应商 (Giga Device) 升级 ESP8285N08 和 ESP8285H08 中所采用的 Flash。Flash 晶圆厂从 XMC 改至 HLMC。 Supplier (Giga Device) upgraded the flash used in ESP8285N08 and ESP8285H08. Flash wafer factory is changed from XMC to HLMC.
DAF	为丰富 ESP8285N08 和 ESP8285H08 所使用的 DAF 材料供应商，故增加 DAF 备选材料供应商。 To diversify the supply chain of DAF material used in ESP8285N08 and ESP8285H08, a new DAF supplier has been added to Espressif's supplier list.

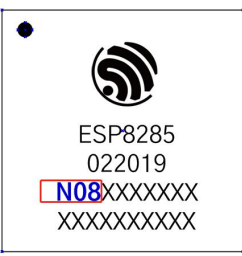
影响产品/Affected Products

ESP8285N08: flash temperature 85℃, 8 Mbit
ESP8285H08: flash temperature 105℃, 8 Mbit

变更内容/Proposed Change:

Flash Change		
Item	Before Change	After Change
Wafer foundry	XMC	HLMC
Process technology	90 nm	65 nm
Die size	1.270 mm x 1.294 mm	0.838 mm x 1.195 mm

Pad layout		
Form, fit, function and reliability	The upgraded flash is designed and tested to be fully compatible with the original one.	
DAF Change		
Item	Before Change	After Change
RoHS 2.0, REACH, MSDS, halogen and other relevant environmental protection requirements.	变更前后的材料均可满足相关环保要求。 The materials before and after the change meet the relevant environmental requirements.	
Material name	EM710	EM-350L2-P
ESP8285N08 and ESP8285H08 Assembly Process Change		
Flash 打线引出脚的功能未发生变化，仅线弧和线长发生变化，整个产品的外围引脚设置未发生改变，产品可向前兼容。 There are no changes to the flash wire bonding besides the line arc and the line length. Therefore, the peripheral pins of the whole product remain the same, which provides the products with forward-compatibility.		
Appearance Change		
Please refer to “Change Identification Method” for details.		
Efuse Identification Bit Change		
Please refer to “Change Identification Method” for details.		
变更影响/Impact of Change: 无需改变对 ESP8285N08 和 ESP8285H08 的设计更改，变更前后的产品具有相同的功能和产品名称。 No change is required for the previous design to adopt the new ESP8285N08 and ESP8285H08. The products before and after change have identical functionality and device name.		
变更识别方式/ Change Identification Method: 通过产品本体丝印和 eFuse 标识位可区分变更前后的产品，见如下表格描述。 Through the product top marking and eFuse identification bit, the products before and after the change can be distinguished, as described in the table below.		
Item	Before Change	After Change

Top Marking for ESP8285N08 (85℃)		
Top Marking for ESP8285H08 (105℃)	No change 	
EFUSE_DATA_OUT0[14:13]	Espressif 预留位，默认为 00。 Reserved by Espressif (default value: 00).	用于标识产品变化，针对 ESP8285N08 (85℃) 和 ESP8285H08 (105℃) 此次的 flash 变化，该比特位设置为 01。 These bits are used to indicate product changes. Now, they are set to 01 to indicate that upgraded flash is used in ESP8285N08 (85℃) and ESP8285H08 (105℃), as described in this PCN.
EFUSE_DATA_OUT0[5]	This bit is used to identify the maximum operating temperature. ESP8285N08 (85℃): 0 ESP8285H08 (105℃): 1	

变更前后产品处理/How to Deal with Products:

如客户需要样品进行验证或有其他要求，请联系 pcn@espressif.com。

If the customer needs samples for verification or has other requirements, please send request to pcn@espressif.com.

相关报告/Report(s) Attached:

☒ Related ECN No.: ECN-03-20191010

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 14 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 14 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:

☐ 批准/Approval

PCN 评审结果/PCN Review Result: ☐ 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: